

Excited Delirium & Agitated

Chaotic Events™

Train-the-Trainer Lesson Guide

Version 6.0

IPICD

**INSTITUTE FOR THE PREVENTION
OF IN-CUSTODY DEATHS, INC.**

John G. Peters, Jr., Ph.D., CTC, CLS

&

A. David Berman, M.S., CLS

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and
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GRADING RUBRIC

To successfully complete this instructor program and be awarded an Institute for the Prevention of In-Custody Deaths, Inc. (IPICD) certificate, you must achieve a minimum of **212 activity points** from the following Table:

| ACTIVITY | POINTS |
|-------------------------------|---|
| Attendance: | 160 (10 points per hour) |
| Cognitive Domain Assessment | 43 |
| Affective Domain Assessment | 16 (1 point for each hour in the classroom) |
| Participation | 16 |
| Total available points | 235 |

LESSON CATEGORIES

Lessons are divided into three (3) categories: *Pre-Incident*, *Incident*, and *Post-Incident*. Developed by Institute president John G. Peters, Jr., Ph.D. to help analyze use-of-force events, *Pre-Incident* is anything that takes place prior to the event (e.g., training, lesson plan development, etc.). *Incident* focuses on the event (e.g., confrontation, arrest-related or in-custody death). *Post-Incident* refers to everything that happens after the event (e.g., autopsy, documentation, etc.).

This instructor lesson guide has its lessons categorized by *Pre-Incident*, *Incident*, and *Post-Incident* to help you to better understand where each topic is best located on a sequential event timeline.

INSTITUTE HISTORY and ADMINISTRATION

The Institute for the Prevention of In-Custody Deaths, Inc. (IPICD) was founded during the first quarter of 2015 by internationally-recognized defensive tactics and impact tool instructor, John G. Peters, Jr., Ph.D. Within a few weeks, A. David Berman, M.S. was appointed IPICD vice president, and has served in that capacity, in addition to teaching and developing many of the IPICD PowerPoint® presentations. Both John and David had been teaching about excited delirium and arrest-related deaths since the mid-1990s, and previously both taught a number of physical skills programs for the Defensive Tactics Institute, Inc. (DTI) that was based in Albuquerque, New Mexico.

Since its founding, the IPICD has developed several Train-the-Trainer programs including but not limited to:

- Use-of-Force by the Numbers: 4,8, 14;
- Wheelchair: Contact and Control Instructor;
- Excited Delirium & Agitated Chaotic Events™ Instructor;
- Total Appendage Restraint Instructor; Searching Individuals wearing Medical Appliances/Prosthetics Instructor;
- Vision Impaired Instructor;
- Service Animal Instructor;
- Arrest-Related and In-Custody Deaths Investigative Specialist;
- Arrest-Related Death Forensic Analyst;
- Developing Defendable Psychomotor Skills Performance Measures;
- and in conjunction with the DTI, Tactical Handcuffing and Restraint Instructor and Detained Subject Searching Instructor.

In 2006, the IPICD held its first international conference about excited delirium and arrest-related deaths. The latest legal, medical, and scientific updates about excited delirium, arrest-related and in-custody deaths were presented by world-class researchers such as Deborah Mash, Ph.D., Steven Karch, M.D., Vincent DiMaio, M.D., Gary Vilke, M.D., Charles Wilhite, J.D., Ph.D., and many others. The IPICD conference is held every fall in Las Vegas, Nevada.

The IPICD has also developed and hosted various symposia including the first international Body-Worn Camera symposium in 2015. Other symposia have included Suicide Prevention and Management, Legal Constraints on Human Restraints, and Special Needs Populations. In 2017, the IPICD began developing programs that focused on arrest-related and in-custody deaths that involved disabled individuals who may be covered by the Americans With Disabilities Act. Since that time, the IPICD has developed or is developing more programs to assist First Responders who interact with disabled individuals.

In 2018, the IPICD developed its Public Safety Disability Specialist™ certification that can be earned by First Responders, attorneys, and others. Its primary purpose is to educate public

safety personnel and others on how to legally and safely contact disabled individuals covered by the Americans With Disabilities Act.

Progressive and developing cutting-edge scientifically- and legally-based programs, the IPICD developed launched its “IPICD Online Training Center” in the summer of 2014. Innovative, cost-effective, instructive, and requiring no travel or per diem costs, IPICD online programs provide the information needed for IPICD instructor graduates to update and maintain their instructor status, and for others to be trained in arrest-related and sudden in-custody death topics. Seeing the need to educate First Responders and others about breathing issues, the IPICD uploaded its User-Level agonal breathing program (co-developed with Sergeant Brian Casey) and has had over 6,000 individuals successfully complete it.

The IPICD has funded primary research through grants to the University of Miami and the University of California, San Diego School of Medicine. It has also conducted research on *The WRAP Restraint System* and is currently completed a study on public safety lesson plans.

IPICD Vision Statement

As criminal justice administrators, trainers, officers, risk managers, health care and mental-health professionals, attorneys, select criminal justice manufacturers, affected families, and communities have experienced sudden- and in-custody death events, the Institute for the Prevention of In-Custody Deaths, Inc. (IPICD) was created to be the clearinghouse and training provider for sudden- and in-custody deaths, investigating such deaths, and related information. The IPICD operates with fiscal prudence as it effectively manages its resources, while providing the highest level of information, training, operational guidance, and other services with both internal and external professionalism and reliability, while responding to the needs of these diverse communities.



IPICD Mission Statement

The Institute for the Prevention of In-Custody Deaths, Inc. (IPICD) is a clearinghouse, resource center, and training provider dedicated to providing interested parties with objective, timely, accurate, qualitative, and quantitative information, training, and operational guidance for the prevention and management of sudden- and in-custody deaths.

IPICD Staff Instructors

JOHN G. PETERS, JR., Ph.D., CLS, CTC serves as the President and Chief Learning Officer of the Institute for the Prevention and Management of In-Custody Deaths, Inc. A former *Training Advisor* to the AMTRAK® Police Department, he is a former member of the United States Secret Service Defensive Tactics Advisory Panel. Dr. Peters, former training advisor to the El Paso County (CO) Sheriff's Department, the Routt County (CO) Sheriff's Department, the Pulaski County (AR) Sheriff's Department, and the Fairbanks (AK) Police Department, most recently, was retained by a large Texas Sheriff's Department to serve as a monitor of a U.S. Department of Justice Civil Rights Investigation of its large jail facility.

A former police officer and deputy sheriff, he was also the Staff Executive (civilian equivalent of Deputy Chief) of a mid-sized police department, where he headed the Administrative Bureau (seven divisions) and directed the Planning and Research unit. Dr. Peters also conducted internal investigations, handled media relations, and reviewed and wrote agency policies.

Educationally, he was awarded an Associate in Applied Science degree (police science) and a Certificate in Corrections, both *Cum Laude*, from the Northern Virginia Community College; a Bachelor of Science degree (criminal justice), *Summa Cum Laude*, from the University of Baltimore; a Master of Science degree (public relations) from Boston University; a Master of Business Administration degree, *With Distinction*, from Babson College; and, the Doctor of Philosophy degree (applied management and decision sciences, with an emphasis in criminal justice) from Walden University. He is also a *Certified Online Instructor* and has taken several postgraduate courses. Dr. Peters earned his CLEAR California Teaching Credential in “Designated Subjects Career Technical Education: Public Service at California State University, San Bernardino—Palm Desert Campus, and his Master of Arts in Education: Career and Technical Education in June 2013.

In 2006, Dr. Peters earned the *Certified Litigation Specialist (CLS)* designation of the Americans for Effective Law Enforcement (AELE) and is one of very few professionals who completed the requirements for CLS in each AELE category: Police Liability; Corrections Liability; and, Public Sector Employment Liability. In 2009 Dr. Peters maintains these CLS designations, and in 2010 he completed the CLS for Campus Law Enforcement.

Dr. Peters has taught instructional design, instructor development, statistics, research methods, quantitative methods, public relations, and business subjects at both the undergraduate and graduate levels. He has served on several doctoral- and master-degree committees and has been a faculty advisor to both doctoral- and master-level psychology learners. He is also faculty for *Americans for Effective Law Enforcement* seminars. Dr. Peters was a faculty member at the University of Phoenix, School of Criminal Justice and Security, and College of Business, Las Vegas.

In addition to teaching statistics and research methods, Dr. Peters has conducted statistical analyses on excited delirium incidents, TASER® electronic control device deployments, racial profiling, sexual harassment, The WRAP Restraint, and other law enforcement data. Dr. Peters has also authored, “Science and Logic Meet the Law”, in *Conducted Electrical Weapons: Physiology, Pathology, and the Law* (2009, Springer).

As the senior trainer and instructional designer for, and president of, the internationally-recognized training firm, Defensive Tactics Institute, Inc., he has over 26 years of experience teaching tactics, impact tools, defensive tactics, and courses providing operational guidance to criminal justice agencies across the United States, Canada, and England. He has taught Instructor-Trainer and/or Basic courses in oleoresin capsicum (OC)sprays, tactical handcuffing, expandable baton, Pneu-Gun Ballistic Baton, electronic restraints, defensive tactics, side-handle baton, Kubotan®, tactical flashlight™, tactical rope and rescue, firearm retention, use of force, policy development, prevention and management of sexual harassment, and managing use-of-force issues. Dr. Peters is also a graduate of several TASER® electronic control device (ECD) Instructor and specialized programs (i.e., the TASER Armorer program, the TASER Evidence Collection and Analysis Training program, the X3™ ECD, the XREP™, the AXON™, and Evidence.com™) and has experienced a five-second TASER ECD exposure.

Dr. Peters has written over 200 publications that include articles, book chapters, lesson guides, and books, informational videos, and has developed several online courses for universities. Several of his excited delirium articles have been referenced in law enforcement texts and studies (see Williams, *TASER Electronic Control Devices and Sudden In-Custody Death: Separating Evidence from Conjecture* (2008), and Rostker, et al., *Evaluation of the New York City Police Department and Firearms Training and Firearms-Discharge Review Process*, 2008 [Rand® Corporation]).

Dr. Peters also consults and testifies as an expert witness and has also been judicially qualified as a law enforcement practices and products expert in international (China), federal, and state courts in more than 350 cases. Many of these cases focused upon training-related issues, competency testing, sudden death, excited delirium, alleged excessive use of force, positional asphyxia, jail suicide, policy issues, handcuffing, sexual harassment, restraint asphyxia, product warnings, pepper spray, etc.

A. DAVID BERMAN, M.S., CLS is a current Pennsylvania commissioned Constable, a former patrol officer, instructor, and member of the Emergency Services Unit for a northeastern Pennsylvania police department. A nationally-recognized defensive tactics and impact tool instructor, David has taught non-lethal and less-lethal instructor and basic courses to police, correctional, military, and security officers across the United States. A National Rifle Association-qualified firearms instructor, he has the street experience to separate theory from reality.

Educationally, David graduated from Bowling Green State University (Ohio) with a Master of Science degree in criminal justice and obtained his Bachelor of Science degree in education from Wilkes University. A graduate of the Commonwealth of Pennsylvania Basic Police Training Course and has also completed several specialized criminal justice courses.

In 2006 and 2007, David completed the requirements and earned the *Certified Litigation Specialist: Police Liability* designation in January 2008, awarded through the Americans for Effective Law Enforcement (AELE). In 2011 he completed the CLS requirement for Campus Law Enforcement. David was the second IPICD staff member to have earned this distinguished certification.

Co-developer of the Defensive Tactics Institute, Inc. Tactical Glove® Instructor Course, he is also co-author of the *Tactical Glove Review Poster* with John G. Peters, Jr. He has served as a script consultant for several informational videos, including *Defensive Tactics with Chemical Aerosol Sprays*, *Personal Protection with Chemical Aerosol Sprays*, *Stop Exposing Yourself*, *Reducing Personal Risk Through Leather Gloves*, and *Prevention and Management of Sudden In-Custody Death* with John G. Peters, Jr. He was a featured presenter in the latter two videos, and also made an appearance in another video, *Pneu-Gun Ballistic Baton*.

A lively and energetic instructor, David had taught in the Pennsylvania Act 120 program, Basic Municipal Police Continuing Education program for Pennsylvania Constables. He is also an Instructor-Trainer for Combined Tactical systems (CTS) and Stinger Spike Systems and has over 20 years of experience in police equipment and gear. He has also served as an Expert Witness in several cases where it was alleged that police officers used excessive force. David is the co-author of the text *Prevention and Management of In-Custody Death*, with John G. Peters, Jr. David has also published on PoliceOne.com and in other professional publications. He is currently writing articles that focus on keeping officers safe on the street and in the courtroom.

MICHAEL COLEMAN is currently a sworn peace officer with a Nevada police department, where he teaches in the academy and is an ADA Coordinator. A highly-qualified instructor, Michael is co-developed of the Wheelchair: Contact and Control Instructor program (with John G. Peters, Jr., Ph.D.) and speaks at Autism conference across Nevada and the United States. Michael has a son with Autism, and his father is confined to a wheelchair, which makes him eminently-qualified to teach both subjects.

BRIAN CASEY, co-author of the Institute’s “One Breath . . .” online program is a law enforcement officer with a Minnesota metropolitan law enforcement agency. Sergeant Casey earned a degree in Health Education from the University of Minnesota and has over thirty years’ experience working as a paramedic, EMS educator, and police officer.

JASON PETERS serves as Director of the Institute’s Center for Digital Strategy and is the IPICD Informational Technology Specialist. A graduate of ITT—Las Vegas, Jason has consulted with several Las Vegas-based businesses on information technology issues. Jason developed the IPICD mobile app, m.ipicd.com .

CHARLES WILHITE, J.D., Ph.D. serves as the Director of the Institute’s Center for Excellence in Event Reconstruction (CEER). Dr. Wilhite also teaches use-of-force programs for the IPICD and consults on many of its programs and topics that involve psychological and/or legal issues. He is also an IPICD Board of Director.

CHRISTOPHER J. LORETZ serves as Graphic Designer for the IPICD. A graphic arts graduate of Millersville University, “Chris” designed the IPICD workbook covers, print media, and many training aids for the IPICD.

The IPICD also has a very active and professional Board of Directors. Current Board members are:

KEN WALLENTINE, J.D. is a Special Agent with the Utah Attorney General’s Office, where he served as “Chief” prior to retiring and then returning. The pull of public service was too strong for Ken to ignore. He had worked for Lexipol Senior Vice President and has a lot of experience prosecuting cases and is known for his knowledge of canine law.

CHARLES WILHITE, J.D., Ph.D. serves as the Director of the Institute’s Center for Excellence in Event Reconstruction (CEER). Prior to retirement, Captain Wilhite served with the Riverside County Sheriff’s Department. A member of the IPICD Board of Directors, Dr. Wilhite manages its Litigation Assistance Center.

CHIEF TOMMY BURNS, M.A. (Ret.), has extensive gaming security experience, and has been judicially-qualified as an expert witness in security and police practices, and is a faculty member in the School of Criminal Justice and Security at the University of Phoenix, Las Vegas.

DONALD L. LEACH, II, Ph.D. is a retired correctional administrator who does training and consulting work across the United States. Dr. Leach has extensive experience in jail management and in developing objective jail classification systems, and as a Public Information Officer. An expert witness on correctional issues, Dr. Leach resides in Utah.

JOHN DOMINGO is a Lieutenant with a Southern California police agency where he is a Use-of-Force Coordinator and developer of the P.E.P. Program, with over 20 years as an arrest and control/use-of-force instructor. He has also served as a SWAT and Negotiations Commander with training in trauma support. He has trained hundreds of peace officers throughout Southern California and is a highly sought-after presenter and trainer by other agencies. One of his most recent publications is “Capture! Not Combat” (with John G. Peters, Jr., Ph.D.).

Lesson #1

Instructor: IPICD-Qualified Instructor **Time required:** 15 minutes (approximately)

Subject: Disclaimers & Institute Overview

Goals: To provide information about the Institute for the Institute for the Prevention of In-custody Deaths, Inc. (IPICD).

Student Performance Objective: By the end of the lesson the learner will be able to recall the primary reason for not relying on the information presented forever.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to recall why (s)he should not rely on the information presented for an extended period of time with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

- 1.1 Learners will be evaluated on SPO#1 by having them repeat aloud that research, scientific research, and evidence-based practices are constantly changing.
- 1.2 Learners will be evaluated on SPO#1 through observation by the instructor. For example, when the instructor asks if learners should rely on the information presented for an unreasonable time, they will verbally explain at least 3 reasons why information may change.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you want to be known for teaching outdated and/or incorrect information?”

Instructional Components: (Include type of lesson and major concepts to be covered)

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Type of lesson: Lecture: 15 minutes (will vary depending upon class size)

- 1.3 Welcome to the Institute for the Prevention of In-Custody Deaths, Inc. (IPICD) *Excited Delirium and ACE™* Version 6.0, two-day Train-the-Trainer program. I am pleased that you have enrolled in this contemporary, research- and experientially-based program.
- 1.4 **DISCLAIMER:** The information contained in this program was current when the presentation was developed. No one should rely on the information contained in this program for an unreasonable period of time, because scientific research, legal opinions, and best practices are constantly evolving. To verify the accuracy of the legal and other information, please contact a professional who is qualified to provide you with answers. To verify the accuracy of other information, please contact the IPICD.
- 1.5 None of the presenters is offering legal, psychiatric, and/or medical advice. For specific issues and questions on one or more of these topics, please seek competent local and qualified professionals.
- 1.6 **MISSION STATEMENT:** The Institute for the Prevention of In-Custody Deaths, Inc., (IPICD) is a clearinghouse, resource center, and training provider dedicated to providing interested parties with objective, timely, accurate, qualitative, and quantitative information, training, and operational guidance for the prevention and management of sudden- and in-custody deaths.
- 1.7 **CONTACT INFORMATION:** The IPICD can be contacted as follows: IPICD, 209 South Stephanie Street, Suite B249, Henderson, Nevada USA 89012; phone (toll-free): 866.944.4723; email: staff@ipicd.com; Website: www.ipicd.com

1.8 WEBSITE: Located on the IPICD Website are many items to assist you and/or your agency.

1.9 TRAINING PROGRAMS: The IPICD offers many training programs, in addition to an annual international conference on arrest-related and sudden, in-custody deaths, or its annual international conference.

1.10 ARTICLES: On the IPICD Website are several articles that may be of assistance.

1.11 IPICD CENTER for EXCELLENCE in EVENT RECONSTRUCTION: Directed by Charles Wilhite, J.D., Ph.D., CEER was founded in 2015. More information is available about this Center on the Website.

1.12 IPICD ONLINE TRAINING CENTER: Various online training programs are available through the IPICD Online Training Center. Visit this Website often as new programs are being developed and will be added as they become available. The Website address is: www.ipicdtc.com

1.13 IPICD CENTER for DIGITAL STRATEGY: This Center is directed by Jason Peters. Mobile apps and all digital media and online training programs are administered through this Center. Of particular importance is the following address that can be accessed with any digital device: m.ipicd.com This address will show you and/or your learners the behavioral cues of most Agitated Chaotic Events™, which includes excited delirium.

1.14 IPICD STAFF: Dr. John G. Peters, Jr., Ph.D., CTC, CLS serves as president and chief learning officer of the Institute. A former police administrator and officer, he has a very diverse educational background, and is prolific author.

1.15 A. David Berman, M.S., CLS serves as vice president of the Institute, and is also a former police officer. He has served as an expert witness and teaches in a local Pennsylvania police academy.

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1.16 Charles Wilhite, J.D., Ph.D. was a Captain with a large California sheriff's department and is a California-licensed attorney. Director of the IPICD CEER, he is an experienced police officer and drug investigator.

1.17 Jason W. Peters, A.A.S. is Director of the Center for Digital Strategy. A computer programmer, he has consulted with several organizations and individuals about computer-related issues.

1.18 Seth Coleman is co-developer of the exclusive IPICD wheelchair program, and co-author of the text, *Wheelchair Officers' Field Guide*. A Nevada peace officer, Seth has been a presenter for various groups, and volunteers for several charities that focus on people who have Special Needs.

1.19 INTRODUCTIONS: Please briefly interview the person sitting next to you, and then when called upon tell us about them.

1.20 QUESTIONS: Does anyone have a question about the IPICD, its programs, or how to access information? If not, we will now proceed to Lesson #2: Classroom Guidelines and Introductions.

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Lesson #2

Instructor: IPICD-Qualified Instructor **Time required:** 10-30 minutes (approximately)

Subject: Excited Delirium & ACE™: Welcome, Class Rules, and Introductions

Goals: To welcome all participants; To discuss classroom rules; To have each person introduce another person.

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Student Performance Objective: By the end of the lesson the student will be able to recite, explain, and demonstrate classroom guidelines 1 through 13.

SPO #1: Given an Excited Delirium & ACE™ lesson guide: V.6, a pen, and instruction, the learner will be able to repeat aloud and explain the first thirteen (13) classroom guidelines with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium & ACE™ workbook: V.6, a pen, and instruction, the learner will be able to demonstrate the classroom guidelines 1 through 13 with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

- 2.1 Learners will be evaluated on SPO#1 by having them repeat aloud and in unison each of the first 13 classroom guidelines after it is covered by the instructor.
- 2.2 Learners will be evaluated on SPO#2 through observation by the instructor. For example, if a learner asks the instructor question(s), this demonstrates that (s)he understood the classroom guideline of “asking questions”.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you want to be removed from this program and sent back to your agency for failing to follow the classroom guidelines?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 10-30 minutes (will vary depending upon class size)

2.3 Welcome to the Institute for the Prevention of In-Custody Deaths, Inc. (IPICD) *Excited Delirium & ACE™* Version 6.0, Train-the-Trainer two-day program. I am pleased that you have enrolled in this contemporary, research- and experientially-based program.

2.4 During the next two days of instruction, there are a few classroom guidelines that will facilitate your participation in the training program. Failure to comply with these guidelines may result in your being removed from the program and/or premises and notifying your employer. After the 14 classroom guidelines are reviewed, you will be asked to repeat each one aloud, and ask clarifying questions about each specific guideline.

2.5 Class Rules

1. **If you cannot hear or see, please sit closer to the speaker or to the screen.** Some of you may be seated too far away from the speaker and/or the screen. If so, please move closer.
2. **No smoking in the classroom or other non-smoking areas.** You may only smoke in designated smoking areas. You must obey all Academy rules and regulations.
3. **No tardiness.** You must be in class and ready to work at the scheduled start time.
4. **No racial, ethnic, sexist, etc. remarks,** unless they are used in role playing situations, and the class has been informed about the role-playing situation.
5. **No horseplay.** Injuries can occur when people clown around inside or outside the training

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Review satchel material.

classroom and/or facility. Therefore, no horseplay will be tolerated.

6. **Ask questions.** You have heard that the only “stupid question” is the one that is not asked. It is true. This is an instructor program, so please ask questions about those topics, concepts, issues, etc. that are not clearly understood by you. The training room is the only safe place to make mistakes.
7. **If you see a dangerous situation, immediately tell someone.** Do not ignore a dangerous or potentially dangerous situation . . . TELL SOMEONE. For example, if you see broken glass, a broken chair, water on the floor, or another type of danger, tell the instructor and warn others who are in the immediate area. Control the area.
8. **Don't get your blood pressure up about something that you can control.** At times, the presenter or another person may make a statement or claim that does not parallel with what you were previously taught, heard, or understood. Instead of getting frustrated, ask a question about it. Possibly the presenter or other person is misinformed, or the information presented is more current than what you had received in a previous training program.
9. **Notify an instructor or someone else in the class if you get injured, sick, or if a family emergency arises.** If you think that you may have been injured from a fall or other activity or if you get sick during the program, please immediately notify the presenter or another person. Professional medical attention will be summoned.
10. **Emergencies.** If a family member is expecting a child, an imminent death in the family, or any other foreseeable crisis, please notify an instructor or another person in the program. Make sure that you call home and provide someone with the local telephone number, and/or your cellular telephone number so you can be reached in a timely manner.

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11. **Handle firearms appropriately and safely.** People always get shot with the “unloaded” weapon; therefore, always handle firearms appropriately and safely. This applies to electronic control devices, too. No horseplay will be tolerated.
12. **Bring all material needed to work.** You must bring the program workbook and pen needed to take notes and to complete assignments.
13. **Enjoy coffee, tea, and water.** Only coffee, tea, and water are permitted in the classroom. You are not permitted to bring anything else into the classroom to eat.
14. **Enjoy the program.** Learning should be fun. To that end, you will be treated as a professional and not like an academy recruit.

Check for Understanding and/or Guided Practice and Independent Practice: 4 minutes

2.6 Require all learners, in unison, to speak aloud each classroom guideline. After they read aloud each classroom guideline, they may ask clarifying questions.

2.7 **Independent Practice:** 2 days. Each learner will demonstrate his or her understanding of the classroom guidelines by demonstrating his or her ability to follow each guideline. For example, during the three-day course of instruction, learners will demonstrate “No smoking in the classroom or other non-smoking areas” (Classroom guideline #1), and/or demonstrate they can “Ask Questions” (Classroom guideline #4).

2.8 **Closure:** 1 minute. Remind the learners of the importance of obeying the classroom guidelines. Also, remind them these are the Affective Performance Objectives, and that they can be removed from the program for violating one or more of the classroom guidelines. In some cases, it will be the host agency that will enforce one or more specific classroom guidelines.

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NOTES**Materials Needed:**

2.9 Each learner will be provided a lesson guide, pen, zippered bag, and case studies. Here is a list of what each learner will receive, and what materials are needed to teach this program:

- *Excited Delirium & ACE™* Version 6.0 lesson guide (1 per learner);
- Laptop computer;
- Digital projector;
- Projector screen;
- IPICD *Excited Delirium & ACE™* PowerPoint® presentation (version 6.0);
- Classroom and/or large open area;
- Tables (2 or 3 learners per table depending upon table length);
- Chairs (1 per learner);
- Pen (1 per learner);
- Zippered bag (1 per learner);
- IPICD Mini-Poster (1 per learner);
- White Board (optional); and
- Dry erase marker (black color); and
- “One More Thing” (1 per learner).

California Career Technical Educational Model**Curriculum Standards:**

The applicable California curriculum standards are located within the “Public Services Industry Sector”. For this lesson, the following model curriculum standards are applicable:

“2.0 Communication

Students understand the principles of effective oral, written, and multimedia communication in a variety of formats and contexts (p. 329).”

“2.4 *Listening and Speaking* (p. 331).”

“(2.5) Deliver persuasive arguments (including evaluation and analysis of problems and solutions and causes and effects):

- a. Structure ideas and arguments in a coherent, logical fashion.
- b. Use rhetorical devices to support assertions (e.g., by appeal to logic through reasoning; by appeal to emotion or ethical belief; by use of personal anecdote, case study, or analogy).
- c. Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, expressions of commonly accepted beliefs, and logical reasoning.
- d. Anticipate and address the listener’s concerns and counterarguments (p. 322).”

“(2.14). Deliver descriptive presentations:

- a. Establish clearly the speaker’s point of view on the subject of the presentation.
- b. Establish clearly the speaker’s relationship with the subject (e.g., dispassionate observation, personal involvement).
- c. Use effective, factual descriptions of appearance, concrete images, shifting perspectives and vantage points, and sensory details (p. 332).”

“4.0 Technology

Students know how to use contemporary and emerging technological resources in diverse and changing personal, community, and workplace environments:

- 4.1 Understand past, present, and future technological advances as they relate to a chosen pathway.
- 4.2 Understand the use of technological resources to gain access to, manipulate, and produce information, products, and services.

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- 4.4 Know the various technologies available and the sources for gaining technical skills.
- 4.5 Use technologies to analyze and interpret information (p. 333).”

“5.0 Problem Solving and Critical Thinking

Students understand how to create alternative solutions by using critical and creating thinking skills, such as logical reasoning, analytical thinking, and problem-solving techniques.

- 5.1 Apply appropriate problem-solving strategies and critical thinking skills to work-related issues and tasks.
- 5.2 Understand the systematic problem-solving models that incorporate input, process, outcome, and feedback components.
- 5.3 Use critical thinking skills to make informed decisions and solve problems (p. 333).”

“6.0 Health and Safety

Students understand health and safety policies, procedures, regulations, and practices, including the use of equipment and handling of hazardous materials:

- 6.1 Know the policies, procedures, and regulations regarding health and safety in the constitute a positive and professional work demean workplace, including employers’ and employees’ responsibilities.
- 6.2 Know how to identify possible hazards in a variety of work environments (p. 333).”

7.0 Responsibility and Flexibility Understand the importance of accountability.

- 7.0 Understand the qualities and behaviors that Understand the need to adapt to varied roles and responsibilities.
- 7.1 Understand that individual actions can affect the larger community (p. 334
Students know the behaviors associated with the demonstration of responsibility and flexibility in personal, workplace, and community settings:

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Lesson #3

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: IPICD Quayquoin™

Goals: To define a lesson plan; and, To identify and discuss the IPICD Quayquoins.

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Student Performance Objective: By the end of the lesson the learner will be able to correctly answer a multiple-choice question by correctly identifying the IPICD Quayquoin™ with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the correct the IPICD Quayquoin™ with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

3.1 Learners will be evaluated on SPO#1 by having them correctly identify the IPICD Quayquoin on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you know what these corners of the building are called?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

3.2 In 2018, the IPICD developed the program instructional concept of Quayquoin™ for its programs.

3.3 Quayquoin, pronounced keycoin, has its roots in architecture and when implemented, builds strength (Craven, 2017).

3.4 The four IPICD Quayquoin™ are:

- **Organizational culture,**
- **Training and competency-based testing,**
- **Technology, and**
- **Documentation.**

3.5 *Organizational culture* includes developing contemporary policy about arrest-related and sudden, in-custody deaths, identifying Unwritten Ground Rules (UGR), conducting contemporary training in core tasks, using technology, conducting timely investigations, and emphasizing documentation.

3.6 *Unwritten Ground Rules* (UGR) according to Dourado, often times produce the “actual” culture of the organizational unit and/or the organization. Many of us have experienced UGRs when we were told by experienced officers, “Hey, kid, forget what they told you at the academy. I’ll show you how to do real police work” (Peters, Wilhite, & LaRochelle, 2015). As a trainer, make sure you emphasize to your learners that they perform how they are trained in excited delirium and Agitated Chaotic Event™ (ACE) situations.

3.7 Conducting *training* in learner’s core tasks and then *competency-based testing* of what they have learned is important to provide them with feedback about how much they have learned, how it worked, and also how you objectively documented their measurement of information and/or skills.

3.8 The adoption and appropriate use of *technology*, such as video, is important to community transparency, organizational accountability, and litigation defense. For example, if your agency has adopted body-worn cameras, re-emphasize to your learners how important it is to record the entire transaction with the individual.

3.9 Conducting timely *investigations* into arrest-related and/or sudden, in-custody deaths is critical so potential

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evidence does not get destroyed, lost, or misplaced. Witness information, too, is important to gather, because if law enforcement investigators fail to identify and interview witnesses, counsel for plaintiff in a civil lawsuit or the prosecutor in a criminal matter may identify and interview them. Also, by having an outside agency conduct a criminal investigation projects transparency and non-bias; however, seldom will outside agencies conduct administrative or internal investigations to identify policy violations, training failures, etc. Make sure internal investigations are always conducted in arrest-related and/or sudden, in-custody death events.

3.10 *Documentation* must be identified, reviewed, with findings shared to the appropriate and authorized employees. For example, officer reports are a critical variable to help explain what happened and/or what was first observed. The reports should also provide insight into what de-escalation and defensive strategies were attempted, were used, and were abandoned. Appropriate information must then be shared with trainers, administrators, and others so changes in policy, training, and/or other areas may be considered or acted upon.

3.11 Remember the four IPICD Quayquoin™ will help eliminate public and/or other criticism of organizational, training, testing, investigative, and documentation and strengthen overall operations. Share the acronym **OTTD** with your learners and impress upon them the importance to always act professionally, following training, and write a complete and timely report.

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Lesson #4

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: Proven or Evidence-Based Practices vs. Best practices

Goals: To define knowledge management; To define best practices; To define proven practices; To define evidence-based practices; and To compare and contrast them.

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Student Performance Objective: By the end of the lesson the learner will be able to identify why Proven Practices are more accurate than Best Practices with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V. 6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the correct definition of Proven Practices with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

4.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of Proven Practices on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “What is the difference between Best Practices and Proven Practices?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

4.2 Many organizations, including governmental entities and law enforcement agencies, are often quick to adopt what

has been labeled “Best Practices” to help resolve issues and concerns.

4.3 *Knowledge management* will often incorporate “Best Practices” to assist with agency problem-solving specifically where there are reusable issues.

4.4 “*Information* is often data that are easily transferrable, *knowledge* is the combination of information and personal experience” (Peters, 2012).

4.5 Rumizen (2002) defined *knowledge management* as “the systematic processes by which knowledge needed for an organization to succeed is created, captured, shared, and leveraged” (p. 9).

4.6 Enter *Best Practices*. “A best practice begins with an idea that **there is a technique, process, method or activity that can be more effective at delivering a desired outcome** than any other approach and with fewer problems and unforeseen complications” (Kerzner, 2013).

4.7 “A best practice is something that has been shown to be effective in one place that could be effective in another” (Rumizen, 2002, p. 102). So-called *best practices* have real and perceived replication and application quantification and equivalence. Consider using *proven practices*.

4.8 Scrutiny of *Best Practices* includes but is not limited to: (1) the suggestion that there “is one and only one way of accomplishing a task”; (2) that “an ideal has been achieved”; and (3) in the past, officers and/or the agency has performed “some activities incorrectly” (Kerzner, 2013; Garfield, 2017).

4.9 *Proven Practices*, in contrast, “have been demonstrated to be effective and lend themselves to replication to other groups, organizations, and contexts” (Garfield, 2017). Example: The administration of Ketamine by paramedics to calm an excited delirium patient.

4.10 When independent and scientifically rigorous evaluations are needed, as in the administration of Ketamine to calm an excited delirium patient, *Evidence-Based Practices* are often adopted.

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4.11 For a *practice* to be accepted as *evidence-based*, the following criteria must be met: “(1) It has been studied using appropriate scientific methodology; (2) Been replicated in more than one geographic or practice setting, with consistent results; (3) Been recognized in scientific journals by one or more published articles; (4) There is an implementation manual to follow; (5) Produces specific outcomes (Campos, 2011).

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Lesson #5

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Coroners and Medical Examiners

Goals: To define Medical Examiner; To define Coroner; To define an in-custody death; To define an arrest-related death; To define forensic autopsy; To discuss the primary duties of a Medical Examiner.

Student Performance Objective: By the end of the lesson the learner will be able to correctly identify three primary duties of a Medical Examiner on a multiple-choice test question with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify three primary duties of a Medical Examiner on a multiple-choice test question with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

5.1 Learners will be evaluated on SPO#1 by having them correctly identify three primary duties of a Medical Examiner on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Why is it important for you to understand the three primary duties of a Medical Examiner when evaluating a sudden in-custody death or an arrest-related death?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

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5.2 An *arrest-related death* may be defined as the death of any person who is in the process of being arrested (*Death In Custody Reporting Act 2000*).

5.3 An *in-custody death* may be defined as “the death of any person who is enroute to be incarcerated; or is incarcerated at a municipal or county jail, state prison, or other local or State correctional facility (including juvenile facility)” (*Death In Custody Reporting Act 2000*).

5.4 Most sudden in-custody and arrest-related deaths are investigated by Coroners and/or Medical Examiners per the “Model Postmortem Examinations Act” passed in 1954, and state statutes (Hanzlick, 2018; Hanzlick, 2003; Bucholtz, 2015; Centers for Disease Control and Prevention, 2003; Lyle, 2008).

5.5 Because the definition of death is not straightforward a Coroner and/or Medical Examiner must investigate the death and determine its *cause*, *manner*, and *mechanism* (Lyle, 2008; Centers for Disease Control and Prevention, 2003). This process is part of the medicolegal death investigation system (Hanzlick, 2003).

5.6 The Coroner and/or Medical Examiner will determine the “scope and course of a death investigation” (Hanzlick, 2003). The medicolegal death investigation includes but is not limited to: interviewing witnesses; reviewing law enforcement officer reports; performing an autopsy; ordering toxicology tests; ordering other clinical tests (Hanzlick, 2003).

5.7 Although autopsies were performed as early as 304-250 B.C., a more accurate term is *necropsy* that means “to look at death” compared to the term *autopsy*, “to view one’s self” (Lyle, 2008, p. 42). There is no national standard for the performing of autopsies.

5.8 According to the Centers for Disease Control and Prevention (2003), the primary responsibility of the Medical Examiner or Coroner is certifying the cause of death.

5.9 Generally, Medical Examiners are physicians, pathologists, or forensic pathologists, whereas Coroners are elected or appointed officials and often are not physicians or have extensive medical training (Hanzlick, 2003).

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5.10 Autopsies can be of two types: *Forensic* or *psychological* (Lyle, 2008).

5.11 *Forensic autopsies* are performed to generally answer four questions: What is the *cause, mechanism, manner* and *time* of death? (Lyle, 2008).

5.12 A *psychological autopsy* generally uses a forensic psychologist who will investigate the person's history, including mental history, and may attempt to recreate the person's life for a defined period of time (e.g., 24 hours) (Lyle, 2008).

5.13 *Cause of death* determines how a death came to happen. What thing happened at a particular time to bring an end to an individual's life (Downs, 2007).

5.14 *Mechanism of death* is how the cause of death worked to be incompatible with life.

5.15 *Manner of death* is an American invention (1910), and is circumstance-dependent, not autopsy dependent (National Association of Medical Examiners, 2002; Marker, 2010). *Manners of death* is the "root cause of the sequence of events that leads to death" (Lyle, 2008).

5.16 *Manners of death* are: Natural, such as dying from old age or from a heart attack; Accidental, such as drowning, automobile or motorcycle accident, falling, etc.; Suicide, taking one's own life, including drug overdoses in some cases; Homicide, in short, death at the hands of another (suspect dies after being shot with an electronic control weapon, or after a knee is placed on the back); Undetermined, where the Medical Examiner or Coroner cannot identify information that points to a specific manner of death; and in some instances, Pending investigation, where more information is needed (Centers for Disease Control, 2003; Lyle, 2008).

5.17 A *Medicolegal Death Investigation* often includes a history of the event, the circumstances surrounding the event, witness accounts of what they perceived, the decedent's medical and/or psychological history, investigation of the scene, toxicology testing, and/or autopsy (Lyle, 2008).

5.18 Medical Examiners and/or Coroners sometimes fail to examine the small details, or simply do not have the

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expertise to support their findings. *Negative autopsies* are also not uncommon in arrest-related or sudden, in-custody deaths.

5.19 If there is disagreement with the *cause, manner, or mechanism* of death, politely challenge the findings. Be prepared to provide evidence to support resistance to the findings.

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Lesson #6

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Causation

Goals: To identify the categories of causation; and To define correlations.

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Student Performance Objective: By the end of the lesson the learner will be able to correctly identify three categories of causation and a statistical technique that is used to measure relational strength of two or more variables with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question, three categories of causation with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question, a statistical technique that is used to measure relational strength of two of more variables with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

6.1 Learners will be evaluated on SPO#1 by having them correctly identify three categories of causation on a multiple-choice question.

6.2 Learners will be evaluated on SPO#2 by having them correctly identify a statistical technique that is used to measure relational strength of two of more variables on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “The focus of medicolegal forensic investigations is to identify what caused the death of the individual.”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

6.3 In 2016, a Georgia law enforcement officer was sentenced to life in prison for the death of a suspect after allegedly drive stunning him with a TASER® electronic control weapon (ECW) several times (Hidell, 2016).

6.4 The jurors must have believed the actions of the officer and the ECW *caused* the suspect’s death.

6.5 Generally, there are three types of causation: *scientific*, *medical*, and *legal*.

6.6 Scientific studies that are conducted to identify *causation* generally use *experimental research designs* and are often known as cause-and-effect studies.

6.7 Cause (independent variable) is defined as *what* produces an effect or an outcome (dependent variable).

6.8 Medical causation theories are often found in an autopsy report and should require valid scientific proof. However, Brave (2017) suggested cause of death findings by Medical Examiners and Coroners are not always based in scientific rigor.

6.9 Medical causation has two types of causation: *singularity* or *general* (Rizzi & Pedersen, 1992). *Singular causality* focuses on the relationship “between a concrete sequence of causally linked events” (p.233). *General causation* “means various categories of causal relations between event types” (p.233).

6.10 Legal causation seeks to identify a “reasonable connection between the misfeasance, malfeasance, or

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nonfeasance of the defendant and the injury or damage suffered by the plaintiff” (Mosby’s Medical Dictionary, 2009).

6.11 Causation can be broken into two steps: *general* and *specific* causation. *General causation* must first be identified and is defined as “the capacity of a product [or technique] to cause injury” (Dillingham, Hagan, & Salas, n.d.).

6.12 *Specific causation* “. . . involves a variety of factors including duration and proximity to exposure also known as ‘dose’ which tend to show that the person’s alleged exposure, in fact, *caused* his or her condition” (Dillingham, Hagan, & Salas, n.d.).

6.13 This is one reason why epidemiological studies play a crucial role in deciding causation (Haack, 2009, p. 258).

6.14 How likely the evidence makes that claim true depends on 3 factors:

- How strong the connection is between the evidence and the conclusion—*supportiveness*;
- How solid the evidence itself is, independent of the conclusion—*independent security*;
- How much of the relevant evidence the evidence includes—*comprehensiveness* (Haack, 2009, pp. 263-264).

6.15 For example, if there was a general claim that being placed into a prone position sometimes causes or promotes injury or death to the specific claim that it was the subject’s being placed into a prone position that caused or promoted the subject’s injury or death (Haack, 2009, p. 283).

6.16 Wright (1985) noted “causation is *not* equivalent to responsibility” (p. 1741).

6.17 “The causal inquiry determines whether the defendant’s conduct was a *cause* of the injury. The tortious-conduct and proximate-cause inquiries determine whether the defendant’s conduct was ‘the cause’ of the injury (Wright, 1985, p. 1744).

6.18 In one or more arrest-related and/or sudden, in-custody deaths events, Medical Examiners and others have confused *causation* with other non-causal theories.

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- 6.19 *Temporality* is sometimes substitutes for causation.
- 6.20 *Temporality* focuses upon time and is often improperly applied to a situation (usually a death) and argued as causation. In short “A” happened before “B”.
- 6.21 *Correlation* is often substituted for causation.
- 6.22 *Correlation* is a statistical technique that is used to measure the relational strength of two or more variables and does not equal causation (Minimum, King, & Bear, 1993; Gravetter & Wallnau, 1999).
- 6.23 Regardless of how strong the relationship is between the variables, correlation does not necessarily imply a cause-and-effect relationship; however, it may point in that direction.
- 6.24 *Association* may also be confused with causation.
- 6.25 *Association* is different than correlation because it focuses on how the cause (independent variable) provides information about the outcome (e.g., death) (Rubin, 1983). Example: Most arrest-related death individuals are handcuffed by law enforcement officers. Handcuffs were *associated* with the deaths.
- 6.26 When data are used to support findings, make sure the methodology is sound, the analysis is sound, the sample size is sufficient, and the research findings are reliable and valid.
- 6.27 *Post-mortem clinical reasoning* may be substituted for causation. For example, language such as *prone restraint could not be ruled out, so it had to be ruled in as a contributory factor in the death* raise a serious question about the scientific basis for the opinion. According to one California Medical Examiner, such language indicates guessing.
- 6.28 If an autopsy report contains causative opinions that do not have a medical or scientific basis, or are not causation, politely speak to the Medical Examiner or appropriate person about your concerns and challenge the causative findings.
- 6.29 It is also important to have the autopsy findings modified or changed based upon specific challenges to the

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causative opinions when the opinions cannot be scientifically or objectively supported.

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Lesson #7

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Training in Core Tasks

Goals: To define core tasks and To define essential skills.

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Student Performance Objective: By the end of the lesson the learner will be able to identify the U. S. Supreme Court case requiring municipalities to train police officers in core tasks with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the U.S. Supreme Court case requiring municipalities to train police officers in core tasks with a minimum performance level of 100%.

7.1 Learners will be evaluated on SPO#1 by having them correctly identify what United States Supreme Court case that said municipalities have a duty to train employees in core tasks, on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you know how Title II of the ADA impact your job?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

7.2 **Training in Core Tasks: Canton v. Harris, 489 U.S. 378 (1989)**

7.3 The Supreme Court of the United States (SCOTUS) held that municipalities have an affirmative duty to train employees in *core tasks*.

7.4 SCOTUS noted that a failure to train amounts to deliberate indifference “. . . when the need for more of different training is so obvious, and the inadequacy so likely to result in the violation of constitutional rights, that the policymakers of the city can reasonably be said to have been deliberately indifferent to the need” (Spector, 2006).

7.5 Plaintiff will most likely argue that training LEOs to safely communicate, seize, and transport disabled individuals who are wheelchair users are *core tasks*.

7.6 There are many documented events where LEOs were not properly trained on how to safely interact with wheelchair users that resulted in injury and in rare instances death.

7.7 **Essential Skills Testing: Griggs v. Duke Power Co.**, 401 U.S. 424 (1971).

7.8 The testing of “essential skills” by employers is often misapplied to *City of Canton, Ohio v. Harris* (1989). Referencing the Equal Employment Opportunity Commission (EEOC) *Guidelines and Employment Testing Procedures* issued August 24, 1966, the SCOTUS quoted:

- *The Commission accordingly interprets ‘professionally developed ability tests’ to mean a test which fairly measures the knowledge or skills required by the particular job or class of jobs which the applicant seeks . . . These guidelines demand that employers using tests have available data demonstrating that the test is predictive of or significantly correlated with important elements of work behavior which comprise or are relevant to the job or jobs* (Footnote 9).

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Lesson #8

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Competency-Based Testing

Goals: To define career and technical education; To define unit of instruction; To define measurement; To define and discuss the informational doctrine; To discuss the need for competency-based testing.

Student Performance Objective: By the end of the lesson the learner will be able to correctly answer a multiple-choice question by correctly identifying the definition of lesson plan with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the correct definition of lesson plan with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

8.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of Proven Practices on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “What is the difference between Best Practices and Proven Practices?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

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8.2 “Criminal justice involves the training and educating of employees, whether they are pre-service or in-service workers” (Peters, 2013, p. 19).

8.3 Criminal justice training, at the academy and in-service levels, is considered Career and Technical Education(CTE).

8.4 Career and Technical Education is defined by the 2006 Perkins’ Act as:

“Organized educational activities that offer a sequence of courses that provides Individuals with coherent and rigorous content aligned with challenging academic Standards and relevant technical knowledge and skills needed to prepare for further Education and careers in current or emerging professions; provides technical skills proficiency, an industry-recognized credential, a certificate, or an associate degree; and may include prerequisite courses that meet the requirements of this subparagraph; and include **competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills**, and knowledge of all aspects of an industry, including entrepreneurship, of an individual [emphasis added] (Carl D. Perkins, 2006, p. 1; Threton, 2007, p. 3).

8.5 “Prior to any instruction a *unit plan* or *daily lesson plan* must be prepared by the instructional designer and/or instructor” (Peters, 2013, p. 28).

8.6 “A *unit of instruction* ‘is a well-defined portion of the total instructional program, centering around a single topic or cluster of occupational competencies’” (The Center for Vocational Education, 1977, p. 7; Peters, 2013, p. 29).

8.7 “The lesson plan is the instructional prescription, the blueprint that describes the activities the student may engage in to reach the objectives of the course” (Mager & Beach, 1967, p. 62).

8.8 “Lesson plans are not topical outlines, because topical outlines do not contain what information will be taught during a particular unit of instruction.

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8.9 “Documentation of what was taught is important to those who may inquire (e.g., lawyers, courts, accreditation members, etc.) about the information presented on a particular topic.

8.10 “According to the *informational doctrine*, if it was not written down, one cannot testify or prove what was taught” (see Whitley v. Warden, State Penitentiary of Wyoming; Peters, 2013, pp. 29-30).

8.11 “Instructional objectives must be *measurable* otherwise there is no way to know if the student passed the performance objective” (Peters, 2013, p. 33).

8.12 “*Measurement* is a process of determining the extent of some characteristic associated with an object or person” (p. 8). Examples include, but are not limited to: length of a room, weight of a car, size of a classroom, etc. Testing students is a form of measurement.

8.13 “An objective is a description of a performance you want learners to be able to exhibit before you consider them competent” (Mager, 1975, p. 5).

8.14 “Instructional or performance objectives “describe the kind of performance that will be expected at the end of the course” (Mager & Beach, 1967, p. 29). Performance objectives are *very precise*” (Peters, 2013, p. 33).

8.15 Competency-based testing is performed by a qualified instructor who follows a quantitative rubric to measure a learner’s knowledge or skill about the topic.

8.16 As the architect of your Academy and/or in-service User-Level training program on this subject, please make sure you place copy of the lessons and information taught into a file and maintain it. Also, please make sure you objectively assess the learner to avoid controversy surrounding the competency of your program graduates.

8.17 Remember: If it isn’t written down you will be challenged about whether or not you taught it. Document! Document! Document!

8.18 Maintain copies of all handouts and videos used in your training program, even after you have updated your

program. This information applies to all programs you and others teach within your agency.

8.19 Attendance in a program does not equal competency.

8.20 If you or another instructor did not quantitatively measure the learning and/or skills that show the learner knew the information presented and/or correctly learned the skills demonstrated, no one can say the learner was “competent.”

NOTES

Lesson #9

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Americans With Disabilities Act

Goals: To define disability; To discuss the Americans with Disabilities Act; and To identify reasonable accommodations.

NOTES

Student Performance Objective: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test a reasonable accommodation with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test a reasonable accommodation, with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

9.1 Learners will be evaluated on SPO#1 by having them correctly identify a reasonable accommodation on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you can tell me the criteria for being disabled?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

9.2 The **Americans with Disabilities Act of 1990 (ADA)**, and the **ADA Amendments Act of 2008 (ADAAA)**, considered by many to be the second most important *civil rights* legislation to be passed by the United States Congress.

9.4 The ADA and the ADAAA defines the term *disability* for people as:

- A physical or mental impairment that substantially limits one or more major life activities of such individual;
- A record of such an impairment; or
- Being regarded as having such an impairment (24 U.S.C. §12012(1)).

9.5 If any *one* of these criteria apply to a wheelchair user, (s)he may then be considered as having a disability and is protected by federal law.

9.6 If (s)he is considered to be *disabled* under federal law, Title II of the ADA makes it illegal for a public entity, such as a law enforcement agency, to exclude the person “from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity” (42 U.S.C. §12132). This may include anyone with special needs, such as epilepsy, hearing or vision impaired, dyslexia, etc.

9.7 **Section 1630.2(h) Physical or Mental Impairment**

- Any physiological disorder, or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special senses organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitor-urinary, hemic and lymphatic, skin, and endocrine; or
- Any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities.

9.8 The terms disability and qualified individual with a disability do not include individuals currently engaging in the illegal use of drugs, when the covered entity acts on the basis of such use.

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- Drug means a controlled substance, as defined in schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C 812).
- Illegal use of drugs means the use of drugs, the possession or distribution of which is unlawful under the Controlled Substances Act, as periodically updated by the Food and Drug Administration. This term does not include the use of a drug taken under the supervision of a licensed health care professional, or other uses authorized by the Controlled Substances Act or other provisions of Federal law.

9.9 **The Rehabilitation Act of 1973:**

- Prohibits any organization, such as municipalities and federal agencies, which get funding from the federal government from discriminating against disabled people (Barnes v. Gorman, 2002).

9.10 Officers must quickly factor into their decision-making whether or not the person may be disabled. If so, they may be required to make *reasonable accommodations* for them such as handcuffing the arms in the front, or transporting them prone and on a stretcher, by ambulance rather than in a police car.

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Lesson #10

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Disability Categories and Making Reasonable Accommodations

Goals: To define reasonable accommodations; and To describe reasonable accommodations in select law enforcement settings.

NOTES

Student Performance Objective: By the end of the lesson the learner will be able to identify two options a LEO may use to avoid causing injury or indignity to a seized person who has disabilities, with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test two options a LEO may use to avoid causing injury or indignity to a seized person with disabilities, with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

10.1 Learners will be evaluated on SPO#1 by having them correctly identify two options a LEO may use to avoid causing injury or indignity to a seized person with disabilities, on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “What reasonable accommodations or modifications have you been taught by your employer that you can use when interacting with a disabled individual?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

10.2 Reasonable accommodation defined by the ADA include but are not limited to:

- Directions from employers to make modifications or adjustments to a job application process that enabled a qualified applicant with a disability to be considered for the position such qualified applicant desires (Gallaher Bassett Services, Inc., n.d.).
- Directions from employers to make modifications or adjustments to the work environment, or to the manner or circumstances under which the position held or desired is customarily performed (Gallaher Bassett Services, Inc., n.d.).
- Directions from employers to make modifications or adjustments to a covered entity's employee with a disability to enjoy equal benefits and privileges of employment as are enjoyed by other similarly situated employees without disabilities (Gallaher Bassett Services, Inc., n.d.).

10.3 Reasonable accommodation and/or modifications for LEOs and governmental entities:

- LEOs must make reasonable accommodations and/or modifications when making arrests so that the arrestee does not “suffer greater injury or indignity than other arrestees” (Gohier v. Enright, 1999; Gorman v. Bartch 8th Cir., 1998).

10.4 A reasonable accommodation may involve a:

- “flexible interactive process”
- Essentially having dialogue with the suspect and/or prisoner to determine what kind(s) of accommodation(s) or modification(s) to your procedures might be effective and practical.

10.5 Subject to your agency's disability policy and training, a reasonable accommodation(s) or modification(s) may include, but are not limited to:

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- Requesting an American Sign Language interpreter [NOTE: Your municipality must pay for such services.]
- Obtaining a telephone for the deaf (TDD) or text telephone (TT),
- Obtaining a wheelchair or other mobile assistive device,
- Providing a cane or a walker,
- Transporting the individual in a special van or ambulance,
- Providing physical assistance,
- Using hand signals,
- Asking another person to write down information for the individual,
- Handcuffing the person in the front
- Using multiple sets of handcuffs to handcuff the person in the rear,
- Using flexible restraints, and/or
- Using no restraints.

10.6 **Remember: At issue is whether you caused the arrested person to suffer greater injury or indignity than other arrestees who were not disabled.**

10.7 **DOCUMENT** what you did or did not do, and **WHY** in your report.

10.8 Consult your local legal counsel or other qualified individual for answers to specific questions you may have about making reasonable accommodations or modifications for seized individuals.

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Lesson #11

Instructor: IPICD-Qualified Instructor

Time required: 120 minutes

Subject: Pre-Incident: Arrest-Related & Sudden, In-Custody Death Theories

Goal: To identify and discuss selected arrest-related and sudden, in-custody death theories.

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Student Performance Objective: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four physiological theories of asphyxia, be able to identify how many volts per pulse enters the human body from a TASER electronic control device, be able to define a black box warning, and be able to select the four parts of hogtying with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test four physiological theories of asphyxia with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test how many volts per pulse enter the human body from a TASER electronic control device with a minimum performance level of 100%.

SPO #3: Given an Excited Delirium and ACE lesson guide: V6, a pen, and instruction, the learner will be able to correctly define on a multiple-choice test a black box warning, with a minimum performance level of 100%.

SPO #4: Given an Excited Delirium and ACE lesson guide: V6, a pen, and instruction, the learner will be able to correctly select the four parts of hogtying with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

11.1 Learners will be evaluated on SPO#1 by having them correctly identify four physiological theories of asphyxia on a multiple-choice question.

11.2 Learners will be evaluated on SPO#2 by having them correctly identify how many volts per pulse enter the human body from a TASER electronic control device on a multiple-choice question.

11.3 Learners will be evaluated on SPO#3 by having them correctly define a black box warning on a multiple-choice question.

11.4 Learners will be evaluated on SPO#4 by having them correctly select the four parts of hogtying on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Can a shock from a TASER ECW kill you?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 120 minutes

11.5 The question I just asked you falls under one of the contemporary theories about arrest-related, and sudden, in-custody deaths.

11.6 The four categories are: (1) psychological; (2) pharmacological; (3) physiological; and (4) environmental. Let’s begin with the psychological category.

11.7 Psychological: **Voodoo Death**

- Voodoo death has long been recognized (Cannon, 1942);
- Death is thought to be a result of psychological disturbances;
- Voodoo death focuses upon the use of “fear” and works on the “physiological response systems involved in linking emotions, such as fear, with illness” (Sternberg, 2002, p. 1564);
- Fear can produce a “persistent and profound emotional state [that] may cause a disastrous

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fall in blood pressure, ending in death” (Cannon, 1942, p. 1596);

- The focus is upon the “sympatho-adrenal” division of the nervous system (Sternberg, 2002, p. 1564); and,
- Possible causes of voodoo death include: “the role of hypothalamic CRH released after signals from the amygdale, the brain’s fear center, reached the hypothalamus”; “cross-talk between the brain stem adrenaline centers involved in initiation of the sympathetic response could coordinate with hormones released from the brain’s hypothalamic stress center to cause a massive release of both adrenaline-like nerve chemicals and stress hormones” (p. 1565).
- *Nocebo response*: opposite of a placebo; individual is told (s)he “will have a negative health outcome and [(s)he] actually [has] that outcome” (Bowling & House, n.d.).

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11.8 Psychological: **Psychogenic Death**

- There are eight categories of psychogenic death (Engle, 2917);
- Upon notice of the collapse of a close friend;
- During severe grief;
- When threatened with the loss of a close friend;
- When mourning the passing of a friend;
- Upon the anniversary of the person’s death;
- Loss of individual status or self-esteem;
- Termination of perceived danger; and,
- Where there is a reunion, celebration, or victory over a real or perceived threat or dangerous situation (Engle, 1971).

11.9 Pharmacological: **Cocaine-related** sudden deaths were reported in the medical literature in the 1980s and continue today (Wetli & Fishbain, 1985; Wetli, 1987; Wetli, Mash, & Karch, 1996; Wetli, 2005; Karch 2007; Karch & Drummer, 2016).

- Illicit drugs and their impact on the dopaminergic system;
- Chronic cocaine abusers;
- Cocaine with alcohol;

- Prescription drugs [e.g., antidepressants] (Peters, 2007b).

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11.10 There is no safe dose of cocaine, as even a small dose can cause death (Fishbain & Wetli, 1981; Mittleman & Wetli, 1984; Mittleman & Wetli, 1987; Wetli, 1987; Wetli & Fishbain, 1985; Gawin & Ellinwood, 1988; Gold & Verebey, 1984; Granfield, Onnen, & Petty, 1994; Michandani, Rorke, Sekula-Perlman, & Hood, 1993; New York State Commission on Correction's Medical Review Board, 1995; Reak, 1996; Williams, 1997; Henry, 2000; Karch, 2002; Di Maio & Di Maio, 2006; Karch, 2007; Karch & Drummer, 2016).

11.11 According to one research study, when cocaine and alcohol are mixed, the risk of death is increased between 18 and 24 times.

11.12 Cocaine is cardio toxic, in other words it poisons the heart (Karch, 2002; Karch 2007; Karch & Drummer, 2016).

11.13 Chronic use of cocaine is also associated with cardiac injury (Di Maio & Di Maio, 2006; Karch, 2002; Karch 2007; Karch & Drummer, 2016).

11.14 The individual will often develop hyperthermia.

11.15 People who are chronic abusers of cocaine and are at a higher risk for both excited delirium, arrest-related, or sudden, in-custody death.

11.16 Death from cocaine overdose and excited delirium are not the same.

11.17 The person suffering from excited delirium may demonstrate bizarre, violent, and/or psychotic behavior.

11.18 The person exhibiting excited delirium behavioral cues is usually excited, agitated, and often engaged in bizarre and violent behavior.

11.19 The person may also have incredible strength, seemingly endless endurance, be insensitive to pain, be sweating profusely (hyperthermia), disrobing, showing aggression (especially toward glass and reflective objects), and extreme paranoia.

11.20 Cocaine interferes with the reuptake of dopamine in the brain (Di Maio & Di Maio, 2006, p. 57).

11.21 Dopamine is a principal catecholamine (natural stimulant) in the brain (Di Maio & Di Maio, 2006, p. 47).

11.22 The elevated levels of dopamine are what produces the “high” from the use of cocaine (Di Maio & Di Maio, 2006, p. 57).

11.23 Many people who have died from excited delirium were found to have a decrease in the number of D2 receptors in the brain (Di Maio & Di Maio, 2006).

11.24 The D2 receptors help regulate human body temperature (Mash, 2007; Di Maio & Di Maio, 2006).

11.25 Roberts (2007) wrote that excited delirium deaths in cocaine abusers “accounts for 15 to 20 percent of cocaine-related deaths” (p. 18).

11.26 Pharmacological: Ecstasy (MDMA) is an illicit drug that has psychoactive effects, “which include amphetamine-like stimulant actions, coupled with the feeling of increased emotional sensitivity and closeness to others” (Karch, 2007, p. 536).

11.27 Acute MDMA side effects include, but are not limited to: cardiac arrhythmias, hypertension, hyperthermia, serotonin syndrome, seizures, coma, and in some rare cases, death (Karch, 2007, p. 536). There is an increased number of deaths being reported that are associated with using MDMA (Karch & Drummer, 2016, p. 367).

11.28 Chronic use of MDMA has been associated with cognitive impairments and mood disturbances (Karch, 2007, p. 536).

11.29 The reported half-life of MDMA is between 4 hours and 7 hours (Karch & Drummer, 2016, p. 388).

11.30 According to Karch and Drummer (2016), “the most feared complications of MDMA use are serotonin syndrome (now increasingly referred to as *serotone toxicity*), hyperthermia with rhabdomyolysis, and hyponatremic encephalopathy” (p. 389).

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11.31 In its severe form, serotonin syndrome “leads to hyperthermia, rhabdomyolysis, multisystem failure, and death” (Karch & Drummer, 2016, p. 389).

11.32 Pharmacological: **Methamphetamine** is neurotoxic (highly toxic to the central nervous system and also affects the heart) (Karch, 2002; Karch, 2007) and a stimulant.

11.33 Methamphetamine can be ingested into the body through oral administration, intranasal (snorting), intravenously, and by smoking (shrooms).

11.34 Methamphetamine is a synthetic stimulant that is highly addictive.

11.35 Frequent methamphetamine usage can produce severe psychiatric disturbances in humans (Karch, 2007; Karch & Drummer, 2016).

11.36 Methamphetamine, like cocaine, affects dopamine reuptake and also serotonin (5-HT) (Di Maio & Di Maio, 2006; Karch, 2007; Karch & Drummer, 2016).

11.37 Methamphetamine is also known as “meth”.

11.38 Pharmacological: **Nutmeg** is a spice that has been used as a hallucinogen going back to the Middle Ages (Karch & Drummer, 2016, p. 390).

11.39 Nutmeg intoxication reports are rare, but deaths have been reported (Karch & Drummer, 2016).

11.40 Nutmeg intoxication “produces a typical anticholinergic syndrome” that can cause “hallucinations, palpitations, and feeling of impending doom” (Karch & Drummer, 2016, p. 380).

11.41 Pharmacological: **Opioids** are “Natural or synthetic chemicals that interact with opioid receptors on nerve cells in the body and brain and reduce the intensity of pain signals and feelings of pain. This class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain medications available legally by prescription, such as oxycodone, hydrocodone, codeine, morphine, and many others” (Centers for Disease Control and Prevention,

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Commonly Used Terms, Retrieved from
<https://www.cdc.gov/drugoverdose/opioids/terms.html>).

11.42 Opioid analgesics are “commonly referred to as prescription opioids, medications that have been used to treat moderate to severe pain in some patients. Categories of opioids for mortality data include: Natural opioid analgesics, including morphine and codeine; Semi-synthetic opioid analgesics, including drugs such as oxycodone, hydrocodone, hydromorphone, and oxymorphone; Methadone, a synthetic opioid; Synthetic opioid analgesics other than methadone, including drugs such as tramadol and fentanyl” (Centers for Disease Control and Prevention, Commonly Used Terms, Retrieved from
<https://www.cdc.gov/drugoverdose/opioids/terms.html>).

11.43 The National Institute on Drug Abuse (NIDA) reported in March 2018 that “more than 115 people in the United States die after overdosing on opioids” (Opioid Overdose Crisis, p. 1).

11.44 NIDA also reported that approximately 21-29 percent of patients prescribed opioids for chronic pain will misuse them (Opioid Overdose Crisis, p. 1).

11.45 Pharmacological: **Unintentional Poisoning** deaths per 100,000 population for 2015 were 14.8 and surpassed motor vehicle traffic deaths as shown below:

Motor vehicle traffic deaths

- Number of deaths: 37,757
- Deaths per 100,000 population: 11.7

Unintentional poisoning death:

- Number of deaths: 47,478
- Deaths per 100,000 population: 14.8

Retrieved from <https://www.cdc.gov/nchs/fastats/accidental-injury.htm>

11.46 According to the National Center for Health Statistics, “Poisoning is the leading cause of injury death in the United States. Drugs—both pharmaceutical and illicit—cause the vast majority of poisoning deaths” (NCHS Data on Drug-Poisoning Deaths, Retrieved from

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https://www.cdc.gov/nchs/data/factsheets/factsheet_drug_poisoning.pdf).

11.47 Select findings from 2010 to 2015, show the percentage of drug overdose deaths “involving heroin tripled from 8% in 2010 to 25% in 2015; synthetic opioids other than methadone, which include drugs such as fentanyl (pharmaceutical and illicit) and tramadol, increased from 8% in 2010 to 18% in 2015; cocaine increased from 11% in 2010 to 13% in 2015; psychostimulants with abuse potential, which include drugs such as methamphetamine and Ritalin, increased from 5% in 2010 to 11% in 2015” (NCHS Data on Drug-Poisoning Deaths, Retrieved from https://www.cdc.gov/nchs/data/factsheets/factsheet_drug_poisoning.pdf).

11.48 According to Mercola (2014), annually approximately 15,000 people die from taking aspirin and other NSAIDs.

11.49 **Pharmacology: Ritalin** (Methylphenidate) is an FDA-approved prescription drug for the treatment of Attention Deficit hyperactivity Disorder (ADHD) (Peters, 2007, p. 14; Karch & Drummer, 2016).

11.50 Karch and Drummer (2016) noted there were “twelve methylphenidate deaths were reported in the medical examiner’s component of the 1999 DAWN report (0.01%) of all drug-related deaths . . .” (pp. 318-319).

11.51 In one study, long-term use of Ritalin was found to produce similar effects on the brain as long-term use of cocaine.

11.52 **Pharmacology: Select Serotonin Reuptake Inhibitors** (SSRIs) and other Antidepressant drugs are known to have caused sudden cardiac death, sometimes when suddenly stopped, and other times when prescribed and taken (Serge & Antzelevitch, 2008; Ray, Murray, Hall, & Stein, 2009; Mercola, 2011).

11.53 Mercola (2011) reported that antidepressants increase the risk of heart disease, while Serge and Antzelevitch (2008) reported this category of drugs were known to increase both sudden death and increase the risk of ventricular arrhythmias.

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11.54 Sudden death may occur in some individuals who suddenly stop taking their antidepressants or cause aggression.

11.55 Should a person suddenly die during the process of arrest, intake, or incarceration, make sure that investigators attempt to identify if the individual was taking any prescription or over-the-counter medications that may have had contraindications or “black box” warnings. Black box warnings will be discussed in Lesson 29.

11.56 Pharmaceuticals: **Synthetic Drugs** (e.g., bath salts) have appeared with great frequency, and with fatal results (Penders, Gestring, & Vilensky, 2012; Healy, 2012; CBS News, 2012; Prosser & Nelson, 2012; Peters, 2012c).

11.57 Synthetic drugs (e.g., bath salts) are appearing with great frequency, and with fatal results (Penders, Gestring, & Vilensky, 2012; Healy, 2012; CBS News, 2012; Prosser & Nelson, 2012; Peters, 2012c).

11.58 After smoking an illegal brand of synthetic “weed” 3 teenagers in Texas suffered heart attacks (Alvarez, 2011).

11.59 Cathinone (cath-a-known) derivatives (e.g., methylmethcathinone [mephedrone]) have been known to “produce a substance-induced psychosis marked by vivid hallucinations with congruent paranoid delusions” (Penders, Gestring, & Vilensky, 2012, p. 1).

11.60 In some instances “the offending synthetic cathinone derivative has been analytically proven to be methylenedioxypropylamphetamine (MDPV)” (Penders, Gestring, & Vilensky, 2012, p. 1). MDPV is “more potent than mephedrone” (p. 1).

11.61 Synthetic cathinone derivatives include, but are not limited to: MDPV, “mephedrone, and methylone (methylenedioxymethcathinone” (Penders, Gestring, & Vilensky, 2012, p. 2).

11.62 On November 30, 2011 in the United States the 3 synthetic cathinone derivatives mentioned in 11.60 were “categorized as Schedule I substances by the Drug Enforcement Administration” (Penders, Gestring, & Vilensky, 2012, p. 2).

11.63 According to Prosser and Nelson (2012) “Synthetic cathinones have recently emerged and grown to be popular drugs of abuse” even though they have been around since the 1920s (pp. 33-34).

11.64 “Methcathinone was synthesized in 1928 and mephedrone in 1929” (Prosser and Nelson, 2012, p. 34).

11.65 According to Prosser and Nelson (2012) Methcathinone “was used in Russia as an antidepressant in the 1930s and 1940s” (p. 34).

11.66 Prosser and Nelson (2012) also noted that another derivative, “pyrovalerone” has been used “as a prescription drug to treat chronic fatigue, lethargy, and obesity but was withdrawn due to abuse and dependency in users” (p. 34).

11.67 According to the American Association of Poison Control Centers, as of May 2011, 2,324 calls about the harmful effects of “incense” had been received. At that rate the call volume will double the previous year’s calls up from just 14 calls in 2009 (Paynter, 2011).

11.68 “Bath Salts” is another new highly hallucinogenic potentially deadly synthetic drug.

11.69 Bath salts were compared to the “very worst” effects of LSD, Ecstasy and PCP for their hallucinogenic-delusional properties of superhuman strength, aggressiveness and combativeness by Mark Ryan of the Louisiana Poison Center (Gardner, 2011).

11.70 “Methylone was found to be equally as potent as methamphetamine and MDMA at inhibiting reuptake of norepinephrine and dopamine in human platelets due to inhibition of monoamine uptake transporters” (Prosser & Nelson, 2012, p. 39).

11.71 Studies have shown that Mephedrone “caused a greater increase in dopamine” while “Pyrovalerone has inhibitory effects on both norepinephrine and dopamine reuptake” (Prosser and Nelson, 2012, p. 39).

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11.72 Some bath salt products may be white, brown or tan, odorless, fine grained powders resembling baby powder or flour (U.S. Department of Justice, 2010).

11.73 In April 2011 Tampa police responded to a report of a man in an intersection pounding on cars. After allegedly lunging at officers and ECD was deployed and Jairious McGhee, 23, was taken into custody, taken to Tampa General Hospital with a 105-degree temperature. Officers believed McGhee was mentally ill (Velde, 2011).

11.74 Headlines in the St. Petersburg Times (April 6, 2011) reported “Tampa police learn man shocked with Taser [sic] was in final throes of viral meningitis” (Velde, 2011).

11.75 Jairious McGhee was the first person, according to the Hillsborough County Medical Examiner to die in the county after ingesting “bath salts” (Poltilove, 2011).

11.76 The cause of death was listed as “intoxication by methylene” an ingredient in the designer drug sold as bath salts (Poltilove, 2011).

11.77 “Bath salts” are marketed with unusual names: Spice; K2; Foot Powder; Bath Salts; Blaze; Red X Dawn (Alvarez, 2011, p. 1; Healy, 2012, p.1).

11.78 Officers and others need to be informed that synthetic drugs, including Bath Salts, can produce many of the same behavioral cues and symptoms of cocaine, methamphetamine, and MDMA (Prosser & Nelson, 2012; Penders, Gestring, & Vilensky, 2012)

11.79 People who have taken Bath Salts or other synthetic drugs are in a state of medical emergency and need to be taken to the hospital because some individuals have died who have ingested such substances (Healy, 2012, p.1; Prosser & Nelson, 2012; Penders, Gestring, & Vilensky, 2012; Alvarez, 2011, p. 1).

11.80 Behavioral cues and symptoms include (clinical effects), but are not limited to:

- heart palpitations
- shortness of breath
- chest pain

- dry mouth
- nasal pain
- “nose burns”
- tinnitus
- abdominal pain
- anorexia
- nausea
- vomiting
- erectile dysfunction
- increased libido
- skin discoloration
- skin coldness
- numbness
- tingling
- muscular tension
- cramping
- aggressiveness
- dizziness
- headache
- lightheadedness
- memory loss
- tremor
- seizures
- blurred vision
- anger
- anxiety
- auditory and visual hallucinations
- depression
- dysphoria
- empathy
- euphoria
- fatigue
- fornication
- increased energy
- increased and decreased concentration
- panic
- paranoia
- perceptual distortions
- restlessness
- loquaciousness
- body odor
- fever
- insomnia

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- nightmares
- skin rash (Prosser & Nelson, 2012, p. 36)
- hypertension
- myocarditis
- tachycardia
- tongue disorder
- abnormal liver function tests
- liver failure
- elevated creatinine kinase
- peripheral vasoconstriction
- rhabdomyolysis
- altered mental status
- tachypnea
- abnormal renal function
- acute renal failure (Prosser & Nelson, 2012, p. 37).

11.81 American Poison Control Centers reported the following calls related to “bath salts”:

- 2010 = 303 calls
- 2011 = 2,371 calls (Prosser & Nelson, 2012, p. 35).

11.82 Administration pathways include, but are not limited to:

- “Bombing”: “mephedrone power is wrapped in cigarette paper and swallowed”
- “Keying”: dipping the powder and then “insufflating”
- rectally
- gingival
- inhalation
- intramuscular
- intravenous (Prosser & Nelson, 2012, p. 35).

11.83 Users of mephedrone who have reported having a bad or adverse effect: 20% (Prosser & Nelson, 2012, p. 36).

11.84 Users of mephedrone reported the effects lasting 60% - 75% longer than cocaine (Prosser & Nelson, 2012, p. 36).

11.85 Officers must write an accurate and inclusive report that describes all behaviors observed, actions attempted, those that were successful and any that were not. Include details identifying all persons present at the scene, involved in transport and treatment at and enroute to a medical facility.

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11.86 Karch and Drummer (2016) reported that at the end of 2011 a couple of deaths had been attributed to K2 ingestion (p. 824).

11.87 Physiological. **Asphyxia** is often claimed to be the cause of death by a person who died following law enforcement officers holding a person in the prone position, kneeling on him or her, or following restraint.

11.88 There are categories of asphyxia: positional; postural; mechanical; compressional; and restraint.

11.89 **Positional asphyxia** refers to when a person's body position (e.g., lying prone) interferes with respiration, resulting in asphyxia (Reay, et al., 1992).

11.90 **Postural asphyxia** refers to when a person's body position interferes with respiration, resulting in asphyxia.

11.91 **Mechanical asphyxia** was defined by Neuman (2006) as being "associated with the use of a vest, jacket, or even posey restraints . . . asphyxiation occurs when these restraints accidentally wrap around the necks of individuals and the result is simple strangulation" (p. 43). It has also been associated with neck holds (Vilke, 2006).

11.92 **Compressional asphyxia** refers to when there is too much weight applied to a person's back or chest area that interferes with respiration, resulting in asphyxia.

11.93 **Restraint asphyxia** refers to "certain restraint positions [that] prevent adequate chest wall, abdominal, and diaphragmatic movement, impairing normal function and breathing" (Roberts, 2007b, p. 29).

11.94 Please read the IPICD Update in the Appendices: **Update on Positional & Compressional Asphyxia.**

11.95 The IPICD funded the *first* scientific research study on the safety of placing a person into a restraint chair. In June 2011 the findings were published. In short, "[i]n healthy subjects, placement in a restraint chair resulted in a small decrease in MVV but did not result in any changes in O₂sat or PETCO₂" (Vilke, Sloane, Castillo, Klokhurst, Neuman, & Chan, 2011).

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11.96 In 2011 the IPICD completed the first scientific research study on The WRAP Restraint device (N = 128). The retrospective study was completed, and data showed:

- no one had died after being placed into The WRAP Restraint;
- that there were no associated additional injuries caused by The WRAP application; and
- a mode of 3 officers were present when it was applied.

11.97 There were 3 anecdotal reports of suspects dying after The WRAP Restraint had been applied but further investigation disproved the reports (Peters, 2012c).

11.98 Physiological. **Choke holds** have been associated with arrest-related and restraint deaths when used by law enforcement officers.

11.99 Derived from *shime-waza* in the sport of Judo, there are generally two types of choke holds: blood and air.

11.100 Blood chokes are often labeled carotid chokes, because pressure is applied against one carotid artery that is located on each side of the neck by an officers' forearm.

11.101 "If the carotid artery hold is properly applied, unconsciousness occurs in approximately 10 seconds (8-14 seconds). After release, the subject regains consciousness spontaneously in 10-20 seconds" (Koiwai, 2018, 1968).

11.102 Forearm pressure to occlude the carotid artery is approximately 250 mm of Hg (Koiwai, 2018).

11.103 In contrast, to collapse the airway, it takes approximately six times that amount of pressure (Koiwai, 2018).

11.104 Vilke (2006) reported that "Deaths caused by neck holds are typically related to specific anatomic and physiological issues" (p. 27).

11.105 The use of choke holds by law enforcement officers is controversial; they are either approved or not approved by Police Chiefs and/or trainers.

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11.106 Eric Garner's highly-publicized death on July 17, 2014 in Staten Island, New York that was associated with a choke hold rekindled safety discussions about this defensive technique designed to be used on combative suspects. Garner's family received a \$5.9 million out-of-court settlement.

11.107 Even the United States Supreme Court has weighed in on the use of choke holds, City of Los Angeles v. Lyons, 461 US 95 (1983).

11.108 Statistics compiled by Lt. John Domingo of the Huntington Beach (CA) Police Department (HPD) showed the carotid restraint was used over 100 times by HPD officers, and was 60% effective (Domingo & Peters, 2017, p. 23).

11.109 Fatalities associated with the application of the carotid restraint can be found in Los Angeles, Las Vegas, NV, New York, and other cities. For detailed legal insights into this controversial technique, please review: "Civil Liability for the Use of Neck Restraints: Part I," and "Civil Liability for the Use of Neck Restraints: Part II," available on the Americans for Effective Law Enforcement website: www.aele.org.

11.110 Physiological. Electronic Control Weapons (ECW) have been used by law enforcement agencies for several decades.

11.111 ECW devices have included, but not been limited to the TASERTRON®, Nova XR5000, Nova Spirit, Ultron, Ultron II, and TASER® M26, X26, X3, X2, and X26P.

11.112 Electronic muscular disruption devices, such as the TASER® have been the alleged causation of sudden deaths during the first decade of the 21st Century (American Civil Liberties Union, 2004; Amnesty International, 2004).

11.113 On April 30, 2012 Harvard-trained medical doctor, Dr. Douglas P. Zipes, M.D., published the first peer-reviewed article where he "concluded that TASER® X26™ ECW in probe contact stimulation can cause cardiac electrical capture of the human heart when the ECD probes are shot into the chest area" (Peters, 2012a, July, p. 2). The article was published in *Circulation*.

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11.114 According to Dr. Zipes, if Ventricular Tachycardia (VT) and/or Ventricular Fibrillation (VF) is/are prolonged and without resuscitation, asystole (flat line rhythm) develops, which can induce death from cardiac arrest.

11.115 Dr. Zipes' methodology included a review of 8 ECD probe exposures to the chest of humans who then lost consciousness (7 died). Admitting that a major limitation of his study was not having an ECG recording of the human target during the ECD probe exposure, Dr. Zipes noted this is a "practical impossibility."

11.116 A contrasting study by Bozeman, Hauda, Heck, Graham, Martin, and Winslow (2008) that reviewed 1,201 cases of TASER use by law enforcement officers, found none of the devices could be linked to cardiac complications, even when the ECD probes landed on the upper chest area.

11.117 There are several scientific studies that show little, if any, link to cardiac deaths by TASER devices.

11.118 Although Dr. Zipes' findings are based upon a small sample size (N=8), it only takes one negative finding, in this instance a human death, to challenge the safety of ECWs.

11.119 TASER device product warnings put purchasers and users on notice that "Repeated, prolonged, or continuous CEW [conducted electrical weapon] applications may contribute to cumulative exhaustion, stress, cardiac, physiologic, metabolic, respiratory, and associated medical risks which could increase the risk of death or serious injury" (TASER Handheld CEW Warnings, Instructions, and Information: Law Enforcement, May 19, 2017, pp. 1-2).

11.120 Output for the TASER X2, X3, and X26P is less than the X26; range: 770-2520 volts (depending on model).

11.121 Instruct your learners to refrain from using 50,000 volts as a description of how many volts enter the human body. This is inaccurate. They must use the latest published data based upon scientific testing for the ECW used.

11.122 Physiological. **Firearms** are most associated device when discussing an arrest-related death, but not necessarily an in-custody death.

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11.123 Fatal shootings by law enforcement officers are the leading cause of arrest-related deaths: 987 in 2017; 963 in 2016, and 995 in 2015.

11.124 For purposes of this program, firearm associated arrest-related deaths are mentioned statistically.

11.125 Physiological. **Heavy exertion and anger** were associated with a threefold risk of triggering a person's first heart attack (Norton, 2016).

11.126 In a study published in *Circulation* (N=>12000), it was found that heavy exertion and anger could cause a heart attack within the following hour of the person's bout.

11.127 Many people who struggle with law enforcement officers are often angry and engage in heavy exertion.

11.128 Physiological. **Impact tools**, including munitions are grouped because they may be associated with an arrest-related or in-custody death.

11.129 *Impact tools* include but are not limited to plastic, metal, or wooden batons; plastic or metal flashlights; metallic handcuffs, shackles, and belly chains; and 12-gauge 37mm/40mm munitions (e.g., rubber bullets, wooden dowels, bean bags).

11.130 Impact tools may be associated with arrest-related or in-custody deaths when they cause severe blunt force trauma or penetrate the human body.

11.131 Physiological. **Oleoresin capsicum** (pepper) spray was also said to have caused sudden deaths in the 1990s (American Civil Liberties Union of Southern California, 1993; Steffen, Lantz, Flannagan, Thompson, & Json, 1995; Granfield, Onnen, & Petty, 1998).

11.132 A study on the safety of pepper spray concluded that 2 of 63 people had died from being pepper sprayed, but both had asthma (National Institute of Justice, 2003).

11.133 Physiological. **Sickle Cell Disease** is a group of disorders characterized by an abnormal type of hemoglobin called hemoglobin S. (Zieve, 2011).

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11.134 Hemoglobin S changes the shape of red blood cells causing them to look like crescents or sickles. This occurs especially when red blood cells oxygen levels are reduced (Zieve, 2011).

11.135 Sickle-shaped cells provide less oxygen to bodily tissues and are more likely to become stuck in blood vessels blocking healthy blood flow (Zieve, 2011).

11.136 Those who inherit sickle cell gene from both parents are said to have sickle cell anemia or sickle cell disease. Sickle cell disease is recognized as a life-threatening illness (Perera and Pollanen, 2007, p. 299).

11.137 People who inherit one sickle cell gene and one normal gene have the sickle cell “trait” (CDC, 2010). There may be no symptoms shown by those with the sickle cell trait, but it can be passed along from parents to children.

11.138 Sickle cell trait (SCT) affects approximately “8% of American blacks and less than 1% of person of non-black ancestry” (Scheinin and Wetli, 2009, p. 204). SCT is considered a relatively “benign” (p. 204) condition; many persons with SCT live long healthy lives never being aware of the existence of sickle cell trait.

11.139 People with sickle cell trait may experience complications of sickle cell disease including; enlargement of the spleen, extreme pain and in rare instances sudden death (CDC, 2010).

11.140 Exercise-related collapse is a rare but serious complication of sickle cell trait” (Scheinin, Wetli, 2009, p. 204). Initially reported in cases of collapse in military recruits while in intense physical training there has been increased recognized in athletes during conditioning exercises and sudden death has occurred (p.204).

11.141 Sickle cell trait is not widely recognized as having the lethal potential such as sickle cell disease. But in unusual circumstances involving dehydration, acidosis and/or physical exertion a risk of death can result in those with sickle cell trait. Though fatal the sickle cell trait may have been previously undiagnosed. (Perera and Pollanen, 2007, p. 299)

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11.142 The Minneapolis Heart Institute Foundation reported due to the association of sudden death and SCT in highly trained athletes the NCAA has instituted a program of mandatory screening for SCT for all Division I athletes prior to participation in intercollegiate sports activities.

11.143 In the event of a death involving sudden collapse, particularly after sustained running or fighting there is a need for the forensic pathologist to consider SCT as an underlying cause (Scheinin and Wetli, 2009, p. 207).

11.144 Heat, humidity and the presence of heat-retaining clothing should be noted in reports and descriptions of an exertion related collapse to alert pathologists to the possibilities of SCT involvement.

11.145 Incidents: Martin Lee Anderson, age 14, at Bay County, FL boot camp on January 6, 2006 (Loney, 2007); “Scooter” Pikes, Louisiana after running and then TASER drive stunned.

11.146 Physiological. **Suicide** and **Suicide by Cop** are two more theories of sudden and/or arrest-related death.

11.147 In 2014 the number of state prison inmate suicides was 249 (Bureau of Justice Statistics).

11.148 Suicide was the leading cause of death in jails in 2014 at 322 deaths (Bureau of Justice Statistics).

11.149 Suicide is defined by Durkheim (1979) as being “applied to all cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result” (p. 44).

11.150 Train personnel on the jail suicide predisposing factors such as: “evidence of drinking alcohol (which may cause depression), illicit or prescription drug use, delusional behavior, hallucinatory behavior, discussion of guilt or shame over the offense or arrest, loss of job, family, money, loved one (which may cause depression), and any statement such as, “You’ll be sorry when I’m dead,” even if you think it may have been made in jest” (Peters & Himebaugh, 2007, p. 94).

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11.151 Suicidal behavioral cues include but are not limited to: “Existing depression; Existing paranoia; Being delusional; being under psychiatric care; Being under the influence of drugs (prescription or illicit) and/or alcohol; Demonstrating aggression or strong agitation; Demonstrating mood swings; Demonstrating sudden changes in behavior; Excessive sleeping or insomnia; Socially withdrawing; Engaging in self-mutilation or other attempts to harm self; Giving away personal items, even if not being released; Packing personal items, but is not being released; Suddenly acting calm (may have peace about impending suicide); Admitting to prior suicide attempts; Refusing medical treatment for an illness or injury; Getting divorced; Family history of suicide attempts; History of sexual abuse; and Loss of appetite” (Peters & Himebaugh, 2007, p. 94).

11.152 policy, practice, and/or custom of some agencies, require jailers to check on suicidal inmates every 15 minutes. These “policies” are clearly not based upon scientific research and have no validity or reliability to the “15 minute” window.

11.153 Sauvageau, LaHarpe, and Geberth (2010) analyzed 8 filmed hangings and reported that loss of consciousness “was closely followed by mild convulsions in all cases (at 10-19 sec.) (p. 1279). The last muscle movement of the hanged individual ranged between a short 1 minute 2 seconds to 7 minutes, 31 seconds (p. 1279). In an earlier study, Savageau (2009) discussed the rapid loss of consciousness at 14-19 seconds (p. 194). The reviewed studies showed death having occurred is 10 minutes or less, far below most agencies suicide policy, practice, or custom of checking on inmates every 15 minutes.

11.154 According to Azizi (2011), the term “suicide by cop” was coined by forensic medical journals.

11.155 Lord (2004) credits Geberth in 1993 for defining the term as “Incidents in which individuals, bent on self-destruction, engage in life-threatening and criminal behavior to force the police to kill them” (p. 4).

11.156 Four criteria were identified by researchers that support a suicide-by-cop attempt: “Stated a wish to die and asking police officers to kill them; left evidence of written or verbal suicidal communication to a friend or family member; possessed a lethal weapon or what appeared to be such; and

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presented evidence of intentional escalation of an incident or provocation for officers to shoot them” (Lord, 2004, pp. 4-5).

11.157 Physiological. **Other** physiological theories include, but are not limited to:

- Metabolic acidosis.
- Cardiomyopathy, including pre-disposing factors.
- Catecholamine surge (Ho, et al., 2009).
- Vigorous exertion and cardiac causes of sudden death (Albert, et al., 2000, pp. 1355-1361).
- Exhaustive mania.
- Rhabdomyolysis.

11.158 **Metabolic acidosis** refers to a decrease in pH levels. A normal pH level range in humans is 7.35 to 7.45 (Myers & McGowan, 2006, p. 96). When this drops below 6.8 for some duration, recovery is often impossible. Several authors have noted that metabolic acidosis is a confounding factor in excited delirium deaths (Roberts, 2007a, p. 13; Schneir & Clark, 2006, p. 88). Severe metabolic acidosis can lead to “cardiovascular instability and collapse” (p. 88).

11.159 **Cardiomyopathy** refers to having an enlarged heart (Di Maio & Di Maio, 2006, p. 56).

11.160 **Catecholamine excess** refers to having an excessive amount of catecholamine in the human body, which has been associated with deaths from excited delirium (Schneir & Clark, 2006, p. 87).

11.161 **Exhaustive mania** refers to a hypothesis that death can follow physical exhaustion (Di Maio & Di Maio, 2006, p. 11). See also “post exercise peril.”

11.162 **Rhabdomyolysis** refers to the acute breakdown of skeletal muscle due to a variety of causes, including excessive exertion, metabolic disorders, which can cause kidney damage and/or death from hyperkalemia (increase in potassium) (Rhabdomyolysis, 2006; Stedman, 1990).

11.163 **Weight on the Back** will often be argued by Plaintiff lawyers. They will argue that too much weight was placed on the decedent’s back or chest, and that is what caused his death. Scientific research studies have been conducted where up to

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225 pounds of weight have been placed on the backs of subjects without anyone passing out or dying.

11.164 When such an event happens, ask the officer facing an allegation of placing too much weight on the back or chest of the decedent during capture, control, and/or restraint to kneel with his knee on a bathroom scale. Make sure (s)he is dressed the same as the day of the struggle. Record the weight shown on the scale. It will be less than the officer's full body weight.

11.165 DO NOT place a knee on the person's neck or throat areas because this could cause a serious injury or death.

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Lesson #12

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: Agitated Chaotic Events™

Student Performance Objective: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test five Agitated Chaotic Events with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test, five Agitated Chaotic Events, with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

12.1 Learners will be evaluated on SPO#1 by having them correctly identify, five Agitated Chaotic Events on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Are most law enforcement officers qualified to make medical or psychological diagnoses?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

12.2 Very few law enforcement officers are qualified to make a medical or psychological diagnosis.

12.3 Rather than have an officer describe a suspect being in a state of excited delirium, technically a diagnosis, the law enforcement officer can say a person appeared to be in an Agitated Chaotic Event™ (ACE), and then describe identified behavioral cues that (s)he observed.

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12.4 The term Agitated Chaotic Event™ was collaboratively developed by members of the IPICD Psychological Advisory Board to describe an individual who presents to law enforcement personnel and to others in a state of active delirium, but the basis(es) of the cause is unknown.

12.5 ACE events include, but are not limited to people who are mentally ill, suffering metabolic emergencies (e.g., diabetes), having licit and/or illicit drug reactions, reacting to a head injury, etc.

12.6 Ask the following questions: (1) Are officers in my agency expected to interact with individuals who have taken drugs, have mental illness, or are emotionally disturbed? (2) have officers in my agency interacted with individuals who have taken drugs, have mental illness, or are emotionally disturbed?

12.7 If the answer is “Yes” to either of the questions, it can be argued these are “core tasks” of officers, and that specific training is needed on these topics.

12.8 ACE will be discussed in a following lesson and will include excited delirium. The focus is on identifying the behavioral cues and treating these events as medical emergencies.

12.9 ACE behavioral cues are often associated with the following: alcohol withdrawal; autism; delirium (including excited delirium), dementia; diabetes; Down’s Syndrome; dyslexia; energy drinks; epilepsy; mental illness: Bi-Polar Disorder and Schizophrenia; Opioids; Post-Traumatic Stress Disorder (PTSD); Synthetic Drugs; Traumatic Brain Injury (TBI); and water intoxication.

12.10 It is important to remember that many behavioral cues demonstrated by individuals who are in an ACE will mirror those of excited delirium.

12.11 When teaching, make sure your learners develop the ability to recognize behavioral cues, and then classify the event as a medical emergency. However, caution must be used to not request limited emergency services when not needed, which could prevent their use in a more acute medical emergency.

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Lesson #13

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Alcohol Withdrawal

Goals: To identify and explain the behavioral cues of a person experiencing alcohol withdrawal; To identify and explain the four categories of alcohol withdrawal syndrome.

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Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test the four categories of alcohol withdrawal syndrome with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four mild-to-moderate psychological symptoms of alcohol withdrawal with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four mild-to-moderate physical symptoms of alcohol withdrawal with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test four categories of alcohol withdrawal syndrome, with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test four mild-to-moderate psychological symptoms of alcohol withdrawal with a minimum performance level of 100%.

SPO #3: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test the four mild-to-moderate physical symptoms of alcohol withdrawal with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

13.1 Learners will be evaluated on SPO#1 by having them correctly identify the four categories of alcohol withdrawal syndrome on a multiple-choice question.

13.2 Learners will be evaluated on SPO#2 by having them correctly identify four mild-to-moderate psychological symptoms of alcohol withdrawal on a multiple-choice question.

13.3 Learners will be evaluated on SPO#3 by having them correctly identify four mild-to-moderate physical symptoms of alcohol withdrawal on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Do you know what symptoms to look for when a person is having alcohol withdrawal?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

13.4 Alcohol withdrawal refers to a compilation of symptoms occurring when a person who has been drinking too much alcohol regularly suddenly stops drinking alcohol. The more heavily a person drinks on a daily or regular basis the more likely they are to develop alcohol withdrawal symptoms. Withdrawal symptoms may appear as soon as 5 hours after the last drink or up to several days later. (Merrill, Zieve, 2010, p. 1).

13.5 In order for the brain to function normally a delicate balance of neurotransmitters is maintained. Neurotransmitters are molecules working in the brain’s communication systems which regulate behavior and bodily functions (U.S. Department of Health & Human Services, 2009, p. 1). When substances such as alcohol are present in the brain for

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extended periods of time the brain begins to undergo physical changes in order to compensate for the presence of alcohol and maintain the delicate chemical balance of neurotransmitters (p.1). It is these long-term changes which appear to be responsible for the harmful effects of alcohol (p.1).

13.6 As the brain undergoes the physical changes and continues to attempt to maintain its chemical balance a tolerance can be developed rendering the brain insensitive to alcohol's effects. The increased tolerance can lead to a person's drinking more putting "heavy drinkers" at risk of health problems involving alcohol dependence.

13.7 The brain adjusts for the presence of alcohol and seeks to compensate for its presence with the release of excitatory neurotransmitters (U.S. Department of Health and Human Services, 2009, p. 3) speeding signal transmission in the brain. When the heavy drinker suddenly stops drinking the brain is forced to make rapid adjustments again: which may lead to unpleasant feelings and increased anxiety and "the shakes" (p.3).

13.8 Animal and human studies indicate that those who have experienced withdrawal symptoms previously will have more severe withdrawal symptoms during subsequent withdrawal events (Finn, Crabbe, 1997, p.150).

13.9 Alcohol withdrawal can be a contributing factor to a number of serious health issues. Personnel responsible for admitting or booking prisoners into jails or holding facilities need training along with effective policies and procedures in place to assure proper screening and classification of those people brought into the facility in an effort to identify those who are at risk of experiencing serious medical problems.

13.10 Those persons experiencing alcohol withdrawal may have trouble understanding directions or commands given by public safety personnel. Public safety personnel should attempt to manage these types of situations in a manner which minimizes the risk of injury to all parties involved.

13.11 Kulbarsh (2013) identified four categories of alcohol withdrawal syndrome:

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- Minor withdrawal where symptoms generally begin the first 5-10 hours after a person's last drink and has physical manifestations of shakes, jitters, "anxiety, nausea, vomiting, rapid pulse, and increase in blood pressure, rapid breathing, irritability, nightmares or vivid dreams, insomnia, and a hypersensitivity to light, noise, and touch" (p. 3).
- Major withdrawal that includes alcohol hallucinations, and generally begins between 10 and 72 hours after the person's last drink. Approximately 25% of people will experience "alcoholic hallucinations, which can be visual, tactile, and/or auditory" (Kulbarsh, 2013, p. 3).
- Withdrawal seizures often begin within 6-48 hours after the person's last drink and are seen in about 30-50% of alcohol dependent individuals.
- Delirium Tremens (DT) are the most severe and may come on quickly and be fatal. DTs may affect approximately 5% of alcohol dependent individuals. Symptoms include but are not limited to: shifts in breathing; hypertension; increased heart rate; fever, excessive sweating that can lead to hydration concerns; loss of consciousness; confusion; stupor; disorientation; anxiety; agitation; aggressive behavior; delusions; hallucinations; and sleep problems. Untreated, approximately 30% of individuals will die.

13.12 Psychological symptoms of mild-to-moderate alcohol withdrawal include but are not limited to: "anxiety or nervousness; depression; difficulty thinking clearly; fatigue; irritability or easy excitability; jumpiness or shakiness; nightmares; and rapid emotional changes" (PubMed, 2010, p. 1).

13.13 Physical symptoms of mild-to-moderate alcohol withdrawal include but are not limited to: "clammy skin; enlarged (dilated) pupils; headache; insomnia (difficulty sleeping); loss of appetite; nausea or vomiting; pallor; rapid heart rate; sweating; and tremor of hands or other body parts" (PubMed, 2010, p. 1).

13.14 Severe symptoms include but are not limited to: "agitation; delirium tremens; fever; and seizures" (PubMed, 2010, p. 1).

13.15 If the person exhibits these symptoms of alcohol withdrawal in public it may trigger a call by an observer or concerned citizen to agencies of public safety.

Lesson #14

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Autism Spectrum Disorder

Goals: To define Autism Spectrum Disorder; To identify and explain Autism Spectrum Disorder behaviors; and To identify law enforcement intervention guidelines.

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Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test the four common Autism Spectrum Disorder behavioral symptoms with a minimum performance level of 100%.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four law enforcement intervention guidelines with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four common Autism Spectrum Disorder behavioral symptoms with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test four common Autism Spectrum Disorder behavioral symptoms, with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test four law enforcement intervention guidelines, with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

14.1 Learners will be evaluated on SPO#1 by having them correctly identify the four common Autism Spectrum Disorder behavioral symptoms, on a multiple-choice question.

14.2 Learners will be evaluated on SPO#2 by having them correctly identify four law enforcement intervention guidelines on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “What is your understanding of a person who has Autism?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

14.3 Per the **Diagnostic and Statistical Manual of Mental Disorders DSM-5™** (2013), Autism is a form of “Intellectual Disability” (“Intellectual Developmental Disorder”) (p. 33).

14.4 The term “intellectual disability” replaced the term “mental retardation” with the passage of a federal statute known as “Rosa’s Law” (Public Law 111-256).

14.5 Per the **DSM-5**, Autism is now known as “Autism Spectrum Disorder” and categorizes people with Autism based on their severity levels: Level 1 “Requiring Support”; Level 2 “Requiring Substantial Support”; and Level 3 “Requiring very Substantial Support” (p. 52).

14.6 No longer is there a diagnosis of “autistic disorder,” “Asperger’s disorder,” or “pervasive developmental disorder not otherwise specified” (DSM-5, 2013, p. 51).

14.7 It is important to remember that after meeting a person with Autism, the only reflection can be that one has met a person with Autism. Each person with Autism will have different characteristics, so “one size does not fit everyone.”

14.8 Varga (2012) identified several common symptoms that are often apparent by people who have Autism.

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- “Difficulty in communication,
- “Physically disabled or deformed,
- “Often frightened by loud noises,
- “Often frightened by bright lights,
- “May become agitated,
- “May stand too close to an officer,
- “May stand too far away from an officer,
- “May not respond to non-verbal communication,
- “May be unable to follow instructions, and
- Will avoid eye contact when speaking or communicating” (p. 3).

14.9 Debbaudt (2006) emphasized that law enforcement officers need to understand that people with autism, may “inappropriately approach or run toward officers; flail against medical procedures; re-enter dangerous environments; become upset with changes in routine; not recognize a uniform or a marked vehicle; not understand verbal commands; be attached to shiny objects; display repetitive, self-stimulation behaviors such as finger or hand twirling, body rocking, pacing, or talking to themselves; run or move away from officers, and/or flee from dogs, lights, sirens, and light (p. 3).

14.10 De-escalation techniques may include being patient, talking calmly, softly, and avoiding the use of slang, using short sentences or phrases such as “Stand up now” (Debbaudt, 2006, p. 4).

14.11 Officers must be prepared to model calming body language, repeat requests or questions, consider using pictures or photographs, look for medical jewelry, and allow for delayed responses from the person who has Autism (Debbaudt, 2006, p. 4).

14.12 The person with Autism may engage in verbal outbursts or impulsive acts, and officers must always be aware the individual may be having a seizure (Debbaudt, 2006).

14.13 When speaking to the person with Autism, (s)he may not look the speaker in the eye, and may have difficulty understanding questions, commands, requests, etc.

14.14 The symptoms of autism cause problems in the areas of communication, social interaction and repetitive words or actions which may draw the attention of bystanders or officers

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who may misinterpret the behaviors as signs of intoxication or illness.

14.15 For example:

- “Communication-both verbal (spoken) and non-verbal (unspoken, such as pointing, eye contact, and smiling),
- Social-such as sharing emotions, understanding how others think and feel, and holding a conversation,
- Routines or repetitive behaviors (also called stereotyped behaviors)-such as repeating words or actions, obsessively following routines or schedules, and playing in repetitive ways.” (National Institute of Child Health & Human Development, 2010a)

14.16 The ideal situation would be to have the officers informed in advance by Dispatch or a Call-taker that the person they are dealing with has autism. Some jurisdictions have created registries with the assistance of caregivers and families to provide essential information before a situation escalates out of control.

14.17 Enforcement intervention guidelines include but are not limited to: (1) Protect yourself, the subject, and the public; (2) Attempt to establish and maintain control of the situation and the individual; (3) Attempt to resolve the situation in a positive manner; and, (4) Attempt to use crisis intervention strategies with an understanding that these may include physical interventions depending upon the totality of the situation.

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Lesson #15

Instructor: IPICD-Qualified Instructor

Time required: 60 minutes

Subject: Pre-Incident: Delirium, including Excited Delirium

Goals: To define Delirium as a Neurocognitive Disorder; To identify Delirium behaviors; To define Excited Delirium; To explain the history of Excited Delirium; To identify Excited Delirium behavioral cues; To identify law enforcement response guidelines; and, To identify law enforcement intervention guidelines.

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Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test the four common Delirium behavioral symptoms with a minimum performance level of 100%.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test six law enforcement response guidelines with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four general phases of excited delirium with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test three categories of excited delirium behavioral cues with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice question the four categorical causes of excited delirium with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction on the history of excited delirium, and a multiple-choice test question, the learner will be able to identify the common delirium behavioral symptoms with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide, a pen, and instruction on excited delirium, and a multiple-choice test question, the learner will be able to identify six law enforcement response guidelines with a minimum performance level of 100%.

SPO #3: Given an Excited Delirium and ACE lesson guide, a pen, and instruction on the components of excited delirium, and a multiple-choice test question, the learner will be able to identify three categories of excited delirium behavioral cues with a minimum performance level of 100%.

SPO #4: Given an Excited Delirium and ACE lesson guide, a pen, and instruction on the four phases of excited delirium, and a multiple-choice test question, the learner will be able to identify the four stages of excited delirium with a minimum performance level of 100%.

SPO# 5: Given an Excited Delirium and ACE lesson guide, a pen, and instruction on the categorical causes of excited delirium, and a multiple-choice test question, the learner will be able to identify the four categorical causes of excited delirium with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

15.1 Learners will be evaluated on SPO#1 by having them correctly identify the earliest timeframe when the term excited delirium was found in a United States medical treatise, on a multiple-choice question.

15.2 Learners will be evaluated on SPO#2 by having them correctly identify the root of excited delirium on a multiple-choice question.

15.3 Learners will be evaluated on SPO#3 by having them correctly identify at least one non-component of excited delirium on a multiple-choice question.

15.4 Learners will be evaluated on SPO#4 by having them correctly identify the four stages of excited delirium on a multiple-choice question.

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15.5 Learners will be evaluated on SPO#5 by having them correctly define excited delirium syndrome on a multiple-choice question.

15.6 Learners will be evaluated on SPO#6 by having them correctly identify the four categorical causes of excited delirium on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “What are the causes of excited delirium?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 60 minutes

15.7 Delirium has been associated with a person’s death.

15.8 “Delirium” is a neurocognitive disorder (American Psychiatric Association, 2013, p. 591).

15.9 Per the **DSM-5**, people who are experiencing delirium “may exhibit emotional disturbances such as anxiety, fear, depression, irritability, anger, euphoria, and apathy” (p. 600).

15.10 The phenomena of fatal delirium can be found in British medical literature as early as 1650 (Dewhurst, 1981).

15.11 In the United States, Dr. Luther Bell is credited with writing one of the earliest articles on sudden death, which appeared in the *American Journal of Insanity (1849)*, which introduced the concept of agitated delirium (Bell, 1849).

15.12 What Dr. Bell observed in his patients was a form of agitated delirium.

15.13 Clinical symptoms included, but were not limited to:

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- Fast (acute) onset of symptoms
- Mania (delirium tremors)
- Violent behavior (superhuman strength and hard to restrain)
- Need for restraint (often the person would fight the restraints)
- Inability or refusal to eat food
- Sleeplessness, restlessness, anxiety, and delirium
- Fatigue leading to exhaustion, and often death (Bell, 1849, p. 100; DiMaio & DiMaio, 2006, p. 8).

15.14 Dr. Bell observed 40 cases over a 12-year period (1700 admissions), with 30 individuals (75%) dying (Bell, 1849).

15.15 Similar observations were made by other medical professionals from the late 1800s through the 1947 (late 1800s, Dr. Emil Krepelin; 1933, Dr. Irving M. Derby; 1934, Dr. G. M. Davidson; 1938, Dr. N. R. Shulack; 1944, Dr. N. R. Shulack; DiMaio & DiMaio, 2006, pp. 6-13).

15.16 From 1947 through the early 1960s, the medical literature is reported to be quiet on sudden death. DiMaio wrote that there were reports of deaths due to Bell's Mania until the early 1950s, and then the literature was quiet on the topic (DiMaio & DiMaio, 2006, p. 2).

15.17 Hollister (1957) was one of the first to surface that phenothiazines might be linked to sudden deaths in psychiatric patients (Wendkos, 1979, p. 281; Laposata, Hale, & Poklis, 1988).

15.18 Law enforcement officers may encounter one or more persons who are experiencing delirium.

15.19 The delirium experienced by these individuals may fall into one or more of the following categories: "Hyperactive delirium," "Hypoactive delirium," and/or "Mixed delirium."

15.20 "Hyperactive delirium" is an agitated delirium. Behavioral cues: agitated, fearful (American Psychological Association, 2000, p. 137).

15.21 "Hypoactive delirium" is a quiet delirium. Behavioral cues: withdrawn, apathetic, a.k.a. "flat" (American Psychiatric Association, 2000, p. 137).

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15.22 “Mixed delirium” is the fluctuation between hypoactive and hyperactive delirium (American Psychiatric Association, 2000, p. 137).

15.23 Delirium may be caused by one or variables, such as medications, illicit drugs, synthetic drugs, alcohol withdrawal, head injury, etc.

15.24 Training law enforcement officers to recognize delirium is considered to be a “core task” by many individuals and organizations.

15.25 For example, the United States Supreme Court held in *Canton v. Harris* (1989) held that municipalities have a DUTY to train officers in their **core tasks**.

15.26 Delirium may be associated with mental illness, and most courts have held that law enforcement officers need to be trained in how to identify and safely manage such individuals.

15.27 A percentage of individuals who are encountered by law enforcement officers may have “**excited delirium**,” which can become fatal.

15.28 **Excited Delirium** and/or “delirium excited” has been referenced in a number of published works as early as 1798. Select, identified publications include but are not limited to:

- **Illustrations of Sterne with other essays and verses** (Ferriar, 1798. P. 285),
- *The Asiatic Journal and Monthly Register for British and Foreign India, Chine, and Australasia* (1841, p. 210),
- **The cyclopaedia of practical medicine** (Forbes, Tweedie, Conolly, & Dunglison, 1848, p. 35),
- *Missionary Herald* (1836, p. 120), and
- **Cyclopaedia of practice and medicine** published in 1881 (Peters, 2006).

15.29 The term was popularized by psychiatrist Dr. David Fishbain, M.D., and Dr. Charles V. Wetli, M.D. in the mid-1980s, when they described a category of symptoms seen in some people after they had ingested stimulants (usually cocaine).

15.30 Cocaine-related sudden deaths were reported in the medical literature in the 1980s and continue today (Wetli &

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Fishbain, 1985; Wetli, 1987; Wetli, Mash, & Karch, 1996; Wetli, 2005; Karch 2007; Karch & Drummer, 2016).

15.31 The root of “excited delirium” is delirium (Wetli, 2005, p. 276; DiMaio & DiMaio, 2006, p. 1; American Psychological Association, 2000).

15.32 According to Wetli (2005), delirium in individuals is composed of the following: transient, acute, confused state; thinking that is disorganized and incoherent; impairment of memory; disorientation; and perception disturbances (p. 276).

15.33 “Excited” delirium is when an individual is experiencing delirium and is in an excited state (Wetli, 2005, p. 278).

15.34 Di Maio and Di Maio (2009) noted that when a person’s delirium involves “combative and/or violent behavior” many people refer to this person as being in a state of “excited delirium” (p. 347).

15.35 According to the American College of Emergency Physicians (ACEP) Excited Delirium Task Force, “[t]he term ‘excited delirium’ has been used to refer to a subcategory of delirium that has primarily been described retrospectively in the medical examiner literature” (ACEP, 2009, p. 4).

15.36 “The difficulty surrounding the clinical identification of ExDS is that the spectrum of behavior and signs overlap with many other clinical disease processes” (Vilke, DeBard, Chan, Ho, Dawes, Hall, Curtis, Costello, Mash, Coffman, McMullen, Metzger, Roberts, Sztajnkrcer, Henderson, Adler, Czarnecki, Heck, & Bozeman, 2011, p. 2).

15.37 Excited delirium causes can be metabolic (e.g., low blood sugar), pharmacologic (e.g., cocaine), infectious (e.g., meningitis), or psychological (e.g., underlying psychiatric illness), and has hyperthermia as a hallmark characteristic (Wetli, 2005, p. 278; Peters, 2007).

15.38 Individuals who develop excited delirium usually have an **acute**, or fast, onset of symptoms (Wetli, 2005, p. 279).

15.39 Di Maio and Di Maio (2006) identified “excited delirium syndrome (EDS),” which is more commonly used today. According to the authors, EDS “involves the sudden death of an individual during or following an episode of excited delirium, in which an autopsy fails to reveal evidence of sufficient trauma or natural disease to explain the death” (Di Maio & Di Maio, 2009, p. 347).

15.40 Excited delirium syndrome is often described using the following notation: ExDS; EDS.

15.41 According to Dr. Deborah Mash, Ph.D., when excited delirium is suspected of being caused by illicit or licit drugs, she reported it is at the end of the spectrum of adverse psychiatric conditions due to drug abuse (Mash, 2007).

15.42 Opponents to excited delirium syndrome note it is not a medical or psychiatric diagnosis and is not recognized by the American Medical Association or the American Psychiatric Association as a stand-alone diagnosis.

15.43 At this time, they are correct, as excited delirium is a “state” a person is in and is not a medical or psychiatric diagnosis.

15.44 Excited delirium is a “descriptive phrase” that is often used to describe a subset of individuals who are demonstrating excited and delirious behaviors and may also be demonstrating other behaviors.

15.45 Opponents to the term “excited delirium” have often said that this term is used to cover-up excessive force incidents. It has also been attributed to a specific law enforcement electronic control device (ECD) manufacturer as a disguise to its product causing arrest-related or sudden, in-custody deaths. None of this is true or accurate.

15.46 What opponents fail to understand that there are several diagnoses in the *International Classification of Disease* (ICD) that fit a person who is in a state of excited delirium:

- 799.2X Abnormal Excitement
- 296.00S Manic Excitement

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- 799.2AM Psychomotor Excitement
- 307.9AD Agitation
- 799.2V Psychomotor Agitation
- 780.09E Delirium
- 293.1J Delirium of Mixed Origin
- 292.81Q Delirium, Drug-Induced
- 292.81R Delirium, Induced by Drug (ICD)

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15.47 The only reason for a diagnostic code is for insurance billing purposes.

15.48 The frequency of excited delirium events is unknown because there is no national or international registry.

15.49 The IPICD staff in collaboration with Michael Curtis, M.D. proposed to Emergency Department medical doctors the creation of a national registry for excited delirium patients, but they declined to participate because of concerns of violating the Health Insurance Portability and Accountability Act (HIPAA).

15.50 Ross and Hazlett (2018) reportedly analyzed 635 people who were arrested by 17 police agencies in six states within the United States.

15.51 Officers self-reported seeing 13 symptoms commonly associated with excited delirium (Ross and Hazlett, 2018).

15.52 The 13 symptoms were: violent behavior; non-responsive to police; high pain tolerance; hyperactivity; incoherent speech; extreme strength; extreme stamina; bizarre behaviors; rapid breathing; naked/partially nude; hot to touch; profuse sweating; and attraction to glass (Ross & Hazlett, 2018, p. 190).

15.53 The researchers' found that seven symptoms were consistently reported by the officers.

15.54 These seven symptoms were: “nonresponsive to police, high pain tolerance, extreme strength, incoherent speech, hyperactivity, extreme stamina, and bizarre behaviors” (Ross & Hazlett, 2018, p. 190).

15.55 Of those people arrested, 58% (n=368) had three to four symptoms of excited delirium (Ross & Hazlett, 2018).

15.56 Thirty percent (30%) of the people who were arrested (n=190) showed five or six symptoms of excited delirium (Ross & Hazlett, 2018).

15.57 Seldom were the people arrested attracted to glass (Ross & Hazlett, 2018).

15.58 Hall, Kader, McHale, Stewart, Fick, and Vilke (2012) conducted a retrospective study that spanned 3 years (August 2006-August 2009) and 1.56 million police-public interactions. Regarding the frequency with which police officers came into contact with individuals who were exhibiting signs of excited delirium, they identified:

- 1269 (0.08%) of the incidents involved a use of force;
- 66% (n = 837) of these individuals were identified as having effects of emotional disturbances, drugs, alcohol, or a combination;
- 31.9% (n = 405) of the individuals exhibited 1 or 2 signs of excited delirium;
- 16.5% (n = 209) showed 3 or more behavioral signs (Peters, 2012b, p. 2), and, 1 person had died during the study, and had 10 features of excited delirium at the time force was used (p. 3).

15.59 There are also evidence-based sudden death **pre-disposing factors** associated with individuals who may struggle with law enforcement officers, family, and/or others.

15.60 Scientific studies have shown the following pre-disposing factors for a sudden death generally will remain *invisible* and *unknown* in pre-mortem individuals but may be identified in post-mortem examination.

- Under the influence of alcohol or alcohol withdrawal;
- Past use or under the influence of illicit drugs (e.g., cocaine, methamphetamine, Bath Salts, Synthetic Drugs, Ecstasy, PCP, or LSD);
- Failure to take prescription drugs, or took too much of the prescription medication;
- Dehydration;
- Hypoglycemic (low blood sugar);
- Epilepsy (e.g., postictal psychosis);
- Prior or current head injury;
- Underlying psychiatric disease (e.g., paranoid schizophrenia);

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- Cardiomegaly (enlarged heart);
- Small vessel wall thickening;
- Coronary atherosclerosis;
- Fibrotic scarring (see, Healy, 2012; Penders, Gestring, & Vilensky, 2012; Sober College, 2012; Alvarez, 2011; Prosser & Nelson, 2011; CDC Report, 2011; Devinsky, 2008; Chan, 2006; Roberts, 2007b; Roberts, 2007c; Jones, Macias, Barreira, Fisher, Hargreaves, & Harding, 2004; Arciniegas, Harris, & Brousseau, 2003).

15.61 Officers who respond to a call may find a person in a state of excited delirium.

15.62 Many individuals who are in a state of excited delirium will have one or more of the following characteristics:

- Dilated pupils;
- Profuse sweating (may not occur or be seen in every situation);
- Hyperthermia (in most cases, but not always)
- High core body temperature (103° F to 110° F or higher; 39.44° C to 43.33° C);
- Skin discoloration (e.g., flushing);
- Large belly (high BMI; may indicate alcoholism);
- Foaming at the mouth (rare; watch for it)
- Uncontrollable shaking, shivering (e.g., substance withdrawal);
- Respiratory distress (difficulty in breathing).

**In the presence of behavioral cues,
struggling and resistance can indicate an**

IMMEDIATE

MEDICAL EMERGENCY

taking precedent over criminal prosecution.

15.63 The following are evidence-based **behavioral cues** that are typically associated with individuals who are in a state of excited delirium, or similar medical emergencies. The behavioral cues are broken into **psychological behavioral cues, communication behavioral cues, and physical behavioral cues.**

15.64 **Psychological behavioral cues** include, but may not be limited to the following:

- The individual demonstrates intense paranoia (e.g., fearful, hiding, etc.);
- The individual demonstrates extreme agitation;
- The individual demonstrates rapid emotional changes (e.g., laughing, crying, sadness, anger, panic, etc.);
- The individual is disoriented about place, time, purpose;
- The individual is disoriented about him or herself (i.e., visions of grandeur);
- The individual is experiencing hallucinations (e.g., hears voices, talks to imaginary people and/or inanimate objects);
- The individual is delusional;
- The individual has scattered ideas about things;
- The individual is easily distracted (e.g., cannot follow commands or instructions);
- The individual is psychotic in appearance;
- The individual is described by others as having “just snapped” or suddenly “flipped out”; and,
- The individual makes people, including yourself, feel uncomfortable (Peters, 2007a).

15.65 **Communication behavioral cues** include, but may not be limited to the following:

- The individual is screaming for no apparent reason;
- The individual uses pressured, loud, incoherent speech (mumbling);
- The individual makes grunting and/or guttural sounds;
- The person speaks to imaginary people; and,
- The individual has irrational speech (Peters, 2007a).

15.66 **Physical behavioral cues** include, but may not be limited to the following:

- The individual demonstrates violent behavior (e.g., toward others or objects);
- The individual demonstrates bizarre behavior;
- The individual demonstrates aggression toward inanimate objects (e.g., glass, mirrors, shiny objects and materials, rotator lights, etc.);
- The individual runs into traffic or at parked or oncoming cars;
- The individual is running for no apparent reason;
- The individual is running wildly;
- The individual is naked (trying to get cool);

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- The individual is stripping off clothing, or is partially clothed (trying to get cool);
- The individual appears to have superhuman strength;
- The individual has seemingly unlimited endurance (fails to get tired);
- The individual resists violently during capture, control, and restraint;
- The individual resists violently after being restrained;
- The individual experiences muscle rigidity (e.g., stiff arm may not indicate intentional resistance, but may be due to licit or illicit drugs);
- The individual demonstrates a diminished sense of pain (e.g. OC may not work);
- The individual demonstrates insensitivity to pain (e.g., baton strikes are ineffective, etc.);
- The individual is harming him or herself (e.g., cuts self with sharp objects); and,
- The individual says, “I can’t breathe” (possibly indicating respiratory distress) (Peters, 2007a).

15.67 It is important to train law enforcement officers, 911 call takers, dispatchers, investigators and/or detectives, command staff, and others about excited delirium and its associated behavioral cues.

15.68 However, personnel are not being trained to make a diagnosis of the individual (this is only for qualified medical and mental health professionals), but rather they are being trained to recognize behavioral cues that may permit them to identify a high-risk individual for a sudden death.

15.69 Reminder: Have your learners use the “Mini Poster” to identify the behavioral cues they see when watching the agitated chaotic event videos shown in class.

15.70 Reminder: Tell your learners about the *free* mobile site that lists behavioral cues to assist them when writing reports:
m.ipicd.com

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Lesson #16

Instructor: IPICD-Qualified Instructor

Time required: 60 minutes

Subject: Pre-Incident: Dementia

Goals: To define Dementia as a Neurocognitive Disorder; To identify Dementia behaviors; To identify law enforcement response guidelines; and, To identify law enforcement intervention guidelines.

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Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test five observable Dementia traits and behavioral cues with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test five observable Dementia traits and behavioral cues with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question five observable Dementia traits and behavioral cues with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

16.1 Learners will be evaluated on SPO#1 by having them correctly identify five observable Dementia traits and behavioral cues on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Because demographics in the United States show people are getting older, what are the traits of a person who has dementia?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 60 minutes

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16.2 Dementia is a major neurocognitive disorder (American Psychiatric Association, 2013), and it is reported that 5.7 million people in the United States are living with it (Alzheimer Association, Retrieved <https://www.alz.org/media/Documents/alzheimers-facts-and-figures-infographic.pdf>.)

16.3 In the United States, approximately 7% of individuals between the ages of 65 and 74 have been diagnosed with Alzheimer's disease (American Psychiatric Association, 2013).

16.4 The percentage of diagnosed individuals increases to 53% for individuals between the ages of 75 and 84 (American Psychiatric Association, 2013).

16.5 The percentage of diagnosed individuals is 40% for those aged 85 years and older (American Psychiatric Association, 2013).

16.6 Dementia is a loss of brain function occurring with certain diseases. It affects memory, thinking language, judgment, and behavior (Zieve and Eltz, 2011).

16.7 Most types of dementia are non-reversible or degenerative. Nonreversible means the changes causing the dementia cannot be stopped or the effects turned back. Alzheimer's is the most common type of dementia (Zieve and Eltz, 2011).

16.8 Changes in the brain begin at a microscopic level occurring long before there is any evidence of memory loss (Alzheimer's Association, 2010, p.10).

16.9 Billions of nerve cells (neurons) are in the brain (p.10). Each nerve cell is connected to others in a form of network (p.10). Brain cells interact and receive supplies, generate energy, get rid of waste, process and store information while communicating with other cells (p. 10). Plaques and tangles begin to accumulate in the brain in abundance (p.11). Plaques are deposits of protein fragment that build up between nerve cells (p.11). Tangles are twisted fibers of protein that build up inside cells (p.11). As damage to the network of brain cells

begins, the cells lose their ability to do their jobs eventually dying and the cell damage spreads to other areas of the brain (p. 10). It is the death and destruction of nerve cells in the brain that causes the memory failure, personality changes, problems in carrying out daily life tasks and the other behaviors that are the symptoms of Alzheimer's disease (p.11).

16.10 Scientists are not exactly sure where Alzheimer's trouble begins but have scientific evidence that it is a form of diabetes (de la Monte & Wands, 2008; Milner, n.d.).

16.11 The human brain relies on glucose for energy (Milner, n.d.).

16.12 Classified as "Type 3" diabetes, there is a scientific connection between diabetes and dementia (Milner, n.d.).

16.13 Type 3 diabetes invades the human mind (Milner, n.d.).

16.14 de la Monte and Wands (2008) reported scientific studies "provide strong evidence in support of the hypothesis that [Alzheimer's Disease] represents a form of diabetes mellitus that selectively afflicts the brain" (p. 1109).

16.15 Some causes of dementia may be stopped or reversed if acted on soon enough include: brain tumors, changes in blood sugar, sodium, and calcium levels, low vitamin B12 levels, normal pressure hydrocephalus, use of certain medications, including cimetidine and some cholesterol-lowering medications, and chronic alcohol abuse (Zieve and Eltz, 2011).

16.16 It is estimated that 81 percent of those with Alzheimer's live alone or live in the community with others its impact extends to millions of family members, friends, neighbors and caregivers (Lepore, Ferrell, & Wiener, 2017, p. 1). Approximately 81% of people with dementia live in their community (p. 1). As the number of people living with Alzheimer's increases so does the likelihood of encountering someone with the disease.

16.17 A person with Alzheimer's or dementia may not be apparent at first glance. By observing traits and behavioral

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cues public safety personnel may be led to believe they are encountering someone with Alzheimer's or dementia (Alzheimer's Association, 2009).

16.18 Observable traits and behavioral cues include:

- **Age** – the majority of those with Alzheimer's are over 65, but the disease may strike people as young as 30's.
- **Facial Expression** – A blank or confused facial expression may be a clue the individual has a problem.
- **Appearance** – The person may be dressed inappropriately for the weather or conditions or may appear to be disheveled.
- **Balance/gait** – An unbalanced gait or appearing to shuffle may be a behavior observed. The individual may appear to be intoxicated or under the influence.
- **Actions** – The person may be engaging in dangerous behavior but unaware of the peril (e.g., walking in traffic) (Alzheimer's Association, 2009).

16.19 Certain behaviors of an individual with Alzheimer's or other dementia increase the likelihood of their interacting with law enforcement or public safety personnel. (Alzheimer's Association, 2009). Since a person with Alzheimer's or other dementia may be unknowingly putting themselves in danger requires quick responses and acting as quickly as possible.

16.20 Up to 60 percent of the people with dementia wander (Alzheimer's Association, 2018). If not located within 24 hours up to half of those who wander are at risk of death or serious injury (Alzheimer's Association, 2009). Wandering is dangerous for a number of reasons: the person may walk into traffic, they may be dressed inappropriately for the weather or changing conditions, they may not realize they are lost; they may be unable to tell first responders where they live (Alzheimer's Association, 2009).

16.21 Due to memory and perception issues the individual with dementia who is operating a vehicle may fail to obey traffic rules and is an increased risk of being involved in a traffic accident (Alzheimer's Association, 2009). Erratic driving of an individual with dementia may appear to those who observe it as someone driving under the influence. If the person is involved in an accident or other mishap they might leave the scene, unaware of injuries or property damage.

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16.22 Persons who have dementia may walk out of stores without paying for merchandise unaware that they have done anything wrong (Alzheimer's Association, 2009).

16.23 When a person's essential needs are going unmet that is neglect. Self-neglect is not uncommon for dementia sufferers who live by themselves (Alzheimer's Association, 2009). Family members may not be aware that the person's cognitive awareness is diminishing.

16.24 Abuse is the infliction of harm, it may be physical, psychological or financial (Alzheimer's Association, 2009). Physical abuse may be done by caregivers, family or the person with the disease may be abusive to others.

16.25 In the event of natural or other type of disaster a person with dementia who may already be scared, and frightened finds fears magnified or behaves inappropriately for the situation (Alzheimer's Association, 2009).

16.26 The Alzheimer's Association offers a program to assist first responders with the issue of wandering through MedicAlert®+Alzheimer's Association Safe Return® program.
(http://www.alz.org/safecenter/we_can_help_safety_medicalert_safereturn.asp)

16.27 If a person with Alzheimer's or other related dementia wanders away, a caregiver can call a nationwide response line (1.800.625.3780) requesting assistance. The Alzheimer's Association will notify Association chapters in the area, law enforcement agencies in an effort to reunite the person with family or caregivers from who they wandered away.

16.28 When a person with Alzheimer's or related dementia is located by public safety personnel or others and is wearing Alzheimer's Association Medic Alert+Safe Returns® pendant or bracelet the jewelry has the 24-hour, toll-free number for the Association's Medic Alert+Safe Returns® network. When the network is contacted using the ID number on the jewelry it can provide information about the person's medical condition, information to contact family or caregiver.

Lesson #17

Instructor: IPICD-Qualified Instructor

Time required: 60 minutes

Subject: Pre-Incident: Diabetes

Goals: To define Diabetes; To identify the categories of diabetes; To identify law enforcement response guidelines, and To identify law enforcement intervention guidelines.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test five types of diabetes with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test three physiological results of low blood sugar with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question five types of diabetes with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question three physiological results of low blood sugar with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

17.1 Learners will be evaluated on SPO#1 by having them correctly identify four types of diabetes on a multiple-choice question.

17.2 Learners will be evaluated on SPO#1 by having them correctly identify three physiological results of low blood sugar on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

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Anticipatory Set: 1 minute. Ask the learner, “How many of you have heard about Type 3 diabetes?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 60 minutes

17.3 Diabetes is a chronic condition occurring when a person has abnormally high levels of sugar (glucose) in the blood. (MedicineNet.com, Diabetes Mellitus)

17.4 The pancreas produces insulin which lowers blood glucose. Insufficient production of, or an absence of insulin causes diabetes. (MedicineNet.com, Diabetes Mellitus)

17.5 There are several types of diabetes; Diabetes Mellitus (DM), Type I, Type II, and Type III; Diabetes Insipidus (DI); and Gestational Diabetes. (MedicineNet.com, Diabetes Insipidus; de la Monte & Wands, 2008; Milner, n.d.).

17.6 There are 3 types of Diabetes Mellitus:

- Insulin dependent, **Type I** diabetes frequently diagnosed in childhood. In Type I diabetes the body does not make any or enough insulin. Daily injections of insulin are required. (Eckman and Zieve, 2010).
- Non-insulin dependent, **Type II** diabetes is more common than Type I. The pancreas does not produce sufficient amounts of insulin to maintain “normal” or proper glucose levels. There are many people with Type II diabetes that are unaware that they have it (Eckman and Zieve, 2010).
- **Type III** diabetes invades the human mind (Milner, n.d.).

17.7 Diabetes Insipidus (DI) occurs when the kidneys ability to handle and process fluids is disrupted. Diabetes Insipidus cause frequent urination potentially leading to dehydration. DI is rare and does not receive the publicity or attention of DM. (MedicineNet.com, Diabetes Insipidus)

17.8 Gestational Diabetes is a form of Diabetes Insipidus that occurs during pregnancy (MedicineNet.com, Diabetes Insipidus).

17.9 Over 20 million Americans have diabetes and an additional 40 million have pre-diabetes, the early stages of type II diabetes (Eckman and Zieve, 2010).

17.10 Researchers at Duke University reported that diabetes is three times more likely in people hospitalized for bipolar disorder than the general population (Diabetes Health, 2000).

17.11 A person in the throes of a diabetic emergency may appear to be drunk, under the influence of drugs and uncooperative.

17.12 Recall during academy training you were likely advised to be certain the individual pulled over for suspected drunk driving was not in-fact a person experiencing a diabetic emergency.

17.13 It is not uncommon for law enforcement officers to stop a driver who is driving erratically on a highway only to discover that (s)he is experiencing a diabetic emergency (Peters and Berman, 2012).

17.14 Officers should ask the person or people who may be with the person if (s)he has diabetes.

17.15 Officers should also look for any identifying jewelry or identification indicating the person may have diabetes or another medical issue.

17.16 Instruct officers that low blood sugar (hypoglycemia) may present the following behaviors: Sweating; Shakiness; Anxiety; Confusion; Difficulty Speaking; Uncooperative behavior; Paleness; Irritability; Dizziness; Inability to swallow; Seizure; and/or Loss of consciousness.

17.17 Actions officers may take when encountering hypoglycemia include, but are not limited to:

- give a ½ can sugar soda (not diet) unless they can't swallow.
- Obtain professional medical assistance immediately (American Diabetes Association, Training Poster).

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17.18 Instruct officers that high blood sugar (hyperglycemia) may present the following behaviors: Flushed skin; Labored breathing; Confusion; Cramps; Very Weak; Sweet breath; Nausea; and/or Loss of consciousness.

17.19 Actions officers may take when encountering hyperglycemia include, but are limited to:

- give the person access to water
- give the person access to a bathroom
- give the person access to appropriate medications.
- obtain professional medical assistance immediately (American Diabetes Association, Training Poster).

17.20 If a person who is in custody or who has been detained requests medical care or exhibits signs or symptoms of diabetic illness, IMMEDIATELY obtain professional medical assistance.

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Lesson #18

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: Down Syndrome

Goals: To define Down Syndrome as a Neurocognitive Disorder; To identify Down Syndrome behaviors; To identify law enforcement response guidelines; and, To identify law enforcement intervention guidelines.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test that Down Syndrome is not a disease with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test five observable Down Syndrome traits a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question that Down Syndrome is not a disease with a minimum performance level of 100%.

SPO#2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question five Down Syndrome behavioral cues with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

18.1 Learners will be evaluated on SPO#1 by having them correctly identify that Down Syndrome is not a disease on a multiple-choice question.

18.2 Learners will be evaluated on SPO#2 by having them correctly identify five Down Syndrome behavioral cues on a multiple-choice question.

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Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you are aware of Down Syndrome?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

18.3 Down Syndrome is a major neurocognitive disorder (American Psychiatric Association, 2013), and it is reported that 1 in every 700 babies is born with it in the United States (National Down Syndrome Society, “Down Syndrome Fact Sheet,” n.d.).

18.4 The condition of “Down Syndrome” is credited to an English physician, John Langdon Down, and is not a disease but a “condition or syndrome” (National Down Syndrome Society, “Down Syndrome Fact Sheet,” n.d.).

18.5 There are three types of Down Syndrome, all defined by their chromosomal makeup: trisomy 21; translocation; and mosaicism (National Down Syndrome Society, “Down Syndrome Fact Sheet,” n.d.).

18.6 Per the National Down Syndrome Society, all individuals who have been diagnosed with Down Syndrome have cognitive delays (National Down Syndrome Society, “Down Syndrome Fact Sheet,” n.d.).

18.7 Some of the more common physical traits of a person with Down Syndrome are: “low muscle tone; small stature; an upward slant to the eyes; and a single deep crease across the center of the palm” (National Down Syndrome Society, “Down Syndrome Fact Sheet,” n.d.).

18.8 People with Down Syndrome should be referred to, for example, as “a man with Down Syndrome.”

18.9 Common mental health concerns with people who have Down Syndrome include but are not limited to: “general

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anxiety, repetitive and obsessive-compulsive behaviors; oppositional, impulsive, and inattentive behaviors; sleep related difficulties; depression, autism; and neuropsychological problems characterized by progressive loss of cognitive skills” (National Down Syndrome Society, “Mental Health Issues & Down Syndrome,” n.d.). They also have an increased risk for congenital heart defects, respiratory, and hearing problems.

18.10 Adults with Down Syndrome may have generalized anxiety, depression, withdraw from friends and social events, lose interest in things, including their own self-care, show cognitive and social skills decline, and develop dementia (National Down Syndrome Society, “Mental Health Issues & Down Syndrome,” n.d.).

18.11 A high profile and tragic event took place in Maryland on January 12, 2013 when off-duty Frederick County police officers attempted to forcibly remove Ethan Saylor, a 26-year-old man with Down syndrome, from a movie theatre after he had watched a movie, wanted to see it a second time, but failed to purchase another movie ticket.

18.12 The tragic death of Mr. Saylor was the catalyst for the State of Maryland to require all law enforcement officers to be trained about Intellectual and Developmental Disabilities.

18.13 Law enforcement officers who interact with individuals with Down Syndrome must be patient, speak slowly, speak clearly, not yell, and ask themselves or others, “Is there a crisis?”

18.14 A *crisis* is a situation that can become a barrier to the person reducing his or her ability to cope (Maryland Police and Correctional Training Commissions, “People with Intellectual and Developmental Disabilities,” 2015, p. 34).

18.15 From a crisis management focus, officers must ensure safety to all parties and the public, attempt to de-escalate the situation, be directive, and, if necessary, use physical intervention.

18.16 Per the Maryland Police and Correctional Training Commissions, law enforcement officers should: (1) “Move to where the subject can see them and use an open stance; Avoid

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crowding the subject; control distance,” and control the person’s escape routes; “remain alert, but try not to appear tense; Use your name, rather than a title; use the individual’s name; use simple commands (e.g., Bill, show me your hands); *ask* the person to look at you; take your time” (pp. 28-31).

18.17 It is also important to be aware of any *implicit bias* you may have toward intellectually disabled individuals.

18.18 Per the Kirwan Institute, “implicit bias refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner” (Kirwan Institute, Retrieved from <http://kirwaninstitute.osu.edu/research/understanding-implicit-bias/>)

18.19 Remember: Always be professional and think a video camera is recording your actions.

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Lesson #19

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Dyslexia

Goals: To define Dyslexia as a learning disability; and, To identify law enforcement intervention guidelines.

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How will learners be evaluated and what methods will be used to measure competency?

19.1 Learners will not be evaluated on this topic.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many know of someone who has Dyslexia?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

19.2 Per the International Dyslexia Association, “Dyslexia refers to a cluster of symptoms, that result in people having difficulties with specific language skills, particularly reading. Students with dyslexia often experience difficulties with both oral and written other language skills, such as writing, and pronouncing words and writing” (Retrieved from <https://dyslexiaida.org/frequently-asked-questions-2/>).

19.3 Actress Joyce Bulifant spoke at an IPICD annual conference and explained that she cannot say the alphabet or count backwards from 10 to 1, but she can sing it. Ms. Bulifant has Dyslexia.

19.4 Depending upon the severity of the individual’s Dyslexia, (s)he may be disabled according to the American With Disabilities Act (ADA).

19.5 A person with Dyslexia may have difficulty in reading documents given by law enforcement officers, and/or have difficulty with pronouncing words, explanations, etc.

19.6 As a presenter, you may have learners in your class who have Dyslexia. Keep this in mind as you present, ask for questions, etc.

19.7 Depending upon the situation, individuals with Dyslexia may become frustrated or appear to be noncooperative.

19.8 Ozernov-Palchik and Gaab reported Dyslexia “affects approximately 5-17% of children” (2016, p. 156).

19.9 Eissa (2010) reported children with Dyslexia had lower self-esteem, higher depression, increased aggression and delinquent behavior than those children who were “typical” readers.

19.10 Again, it is also important to be aware of any *implicit bias* you may have toward individuals who may have learning disabilities.

19.11 When interacting with an individual who has Dyslexia, remember to remain professional, keep calm, and use patience.

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Lesson #20

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: Energy Drinks

Goals: To define energy drinks; and To identify human medical issues after ingesting energy drinks.

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Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test five health-related problems from drinking energy drinks with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question five health-related problems from consuming energy drinks with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

20.1 Learners will be evaluated on SPO#1 by having them correctly identify five health-related problems from drinking energy drinks on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you consume energy drinks?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

20.2 Energy drinks can be defined as those drinks that typically contain high caffeine and other energy-boosting ingredients and give their consumers an energy boost (Statista, “U.S. Energy Drinks - Statistics & Facts”).

20.3 Energy shots are slightly different because they are more concentrated and contain an increased amount of caffeine, generally the primary ingredient.

20.4 A third category is Energy drink mixes.

20.5 In 2017, sales of energy drinks in the United States topped \$2.98 billion (Statista, “Energy Drink Sales in the United States from 2015-2017”).

20.6 Energy drinks are frequently classified as nutritional supplements and do not undergo the scrutiny of other foods and drugs by governmental and oversight agencies and organizations (Joelving, 2011).

20.7 Energy drinks contain a wide range of ingredients such as caffeine, sugar, vitamins and herbal extracts that the effects of combining them have not been widely studied.

20.8 Dr. Steven Lipshultz, Department of Pediatrics, University of Miami Leonard M. Miller School of Medicine warned “Across the world there are signs that for some people who consume these drinks, there are side effects”(Joelving, 2011).

20.9 Problems reported from energy drink consumption include, but are not limited to:

- seizures,
- delusions
- heart problems
- kidney damage, and/or
- liver damage (Joelving, 2011).

20.10 Dr. Lipshultz, warns individuals with heart disease, diabetes, seizure disorders, high-blood pressure or attention-deficit hyperactivity disorder (ADHD) “should think twice before downing and energy drink (Joelving, 2011).

20.11 Manufacturers of energy drinks that contained alcohol were warned by the Food and Drug Administration (FDA) in November 2010, that adding caffeine to alcoholic beverages made the products unsafe to prompting several to remove them from the market (Martin, 2011).

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20.12 Several police officers attending IPICD training programs have said they experienced acute health issues after consuming several energy drinks while working (Personal communication to IPICD staff).

20.13 In more than one situation, emergency medical services were called to treat them, with some officers being taken to the hospital for heart arrhythmias.

20.14 Drinking energy drinks mixed with alcohol is a popular trend that may have risks involved.

20.15 Combining alcohol with energy drinks is “much more concerning in terms of adverse events than in terms of an energy drink alone or alcohol alone” (Martin, 2011).

20.16 People who presented at emergency departments for energy drink medical emergencies often involved the use of alcohol or other drugs.

20.17 Campbell (2017) reported there were more than 20,000 emergency room visits associated with consuming energy drinks.

20.18 Instruct officers and other stakeholders that energy drinks may affect person’s behaviors.

20.19 Impulsivity and judgment may be affected in persons consuming energy drinks.

20.20 If an officer encounters an individual who says (s)he had consumed energy drinks, or the officer is told by others the person had consumed energy drinks, the event must be treated as a medical emergency.

20.21 Remember: It may be a co-worker or a family member who has an acute medical emergency caused by the consumption of energy drinks.

NOTES

Lesson #21

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Epilepsy

Goals: To define epilepsy; and To identify the leading cause of death of individuals with chronic, uncontrolled epilepsy.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test the definition of epilepsy with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify on a multiple-choice test what the leading cause of death of individuals with chronic, uncontrolled epilepsy with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of epilepsy with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question what the leading cause of death of individuals with chronic, uncontrolled epilepsy with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

21.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of epilepsy on a multiple-choice question.

21.2 Learners will be evaluated on SPO#2 by having them correctly identify the leading cause of death of individuals with chronic, uncontrolled epilepsy on a multiple-choice question.

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Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Can a person swallow his or her tongue during an epileptic seizure?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

21.3 Epilepsy is a disorder of the brain which involves seizures (Vorvick, Jasmin, 2010, p. 1). A seizure is a sudden usually “brief disruption of the normal function of neurons in the brain which causes some nerve cells to fire erratically and spread to other nerve cells”(Simmons, 2011). It is not a mental illness.

21.4 Seizures may result from other causes such as drugs, fever, unusual or abnormal levels of sodium or glucose in the blood. If the seizure or seizures are not reoccurring and stop after the underlying problem is removed or corrected this is not considered epilepsy (Vorvick & Jasmin, 2010, p.1).

22.5 Epilepsy is not mental illness.

22.6 Epilepsy may be caused by:

- Stroke or transient ischemic attack (TIA)
- Deterioration of the brain from illness
- Dementia (e.g. Alzheimer’s)
- Traumatic brain injury
- Infections (meningitis, encephalitis, neurosyphilis, and AIDS)
- Congenital birth defects
- Kidney or liver failure
- Metabolic disease that you were born with
- Tumors or other brain lesions (hematomas, abnormal blood vessels) (Vorvick & Jasmin, 2010, p.1).

22.7 There are over 20 types of seizures law enforcement personnel are likely to encounter: **generalized tonic-clonic** and **partial (complex and simple)** seizures (Simmons, 2011).

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22.8 Other types of seizures include but are not limited to:

- Absence (petit mal) (blank stare lasting a few seconds),
- Complex focal (partial) (blank stare, lip smacking),
- Atonic (drop attacks, kinetic) (“sudden loss of muscle tone”),
- Myoclonic (sudden, brief shock-like muscle jerks), and
- Infantile Spasms (“clusters of quick, sudden movements between 4 and 8 months of age”) (Epilepsy Foundation Eastern Pennsylvania, “Seizure Chart,” n.d.).

22.9 **Generalized tonic-clonic** seizures involve the entire brain, resulting in loss of consciousness, and limbs stiffening (the “tonic” phase). Breathing may be temporarily interrupted.

22.10 **Complex partial seizures** are incidents of “altered awareness”, the person is conscious but unable to respond (Simmons, 2011). Symptoms include, but are not limited to:

- blank stare
- smacking lips
- chewing motions
- blinking,
- mumbling, and
- wandering.

22.11 “One hallmark of complex partial seizures is repetitive non-purposeful movements (such as picking at clothes, wringing hands, or fumbling with an object)” (Simmons, 2011).

22.12 **Simple partial seizures** are incidents where the person is “conscious, is oriented and is able to respond verbally. Symptoms last less than one minute and may include, but are not limited to:

- motor changes (shaking of one arm or leg)
- sensory symptoms (distortion of vision, hearing smells), or
- emotional reactions (fear or anxiety, sense of déjà vu)” (Simmons, 2011).

22.13 Almost three million people in the United States have epilepsy, approximately one percent (1 in 100) of the population (Epilepsy Foundation, 1992).

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22.14 Some epileptics experience sudden unexpected (unexplained) death or SUDEP (Leetsma, 2009, p. 669).

22.15 SUDEP is the” leading cause of death in people with chronic uncontrolled epilepsy” (Tomson, Nashef, Ryvlin, 2008, p. 1).

22.16 “People with epilepsy are well known to be at increased risk of sudden death” (Tomson, Nashef, Ryvlin, 2008, p. 1). In the last ten to twenty years there has been an increased awareness of SUDEP. What had been disputed is now acknowledged to be a “serious problem in epilepsy” (p.1).

22.17 Some individuals develop *postictal psychosis* that are “associated with symptoms of depression, anxiety, and disturbances in sleep and appetite” (Epilepsy Foundation Eastern Pennsylvania, “Psychosis,” n.d.).

22.18 The most frequent postictal psychosis symptoms include but are not limited to: “thought blocking (a sudden interruption in thought) and overt thought disorder, manifested by an inability to express thoughts in a coherent manner; illusions and formed and unformed hallucinations in different modalities (visual, auditory, olfactory, etc.), paranoid, religious, and grandiose delusions, and acute confusion” (Epilepsy Foundation Eastern Pennsylvania, “Psychosis,” n.d.).

22.19 People with epilepsy may be found anywhere. Some people because of their conditions or circumstances may not have access to prescribed seizure medications. Irregularly using or not taking seizure medication may lead to additional seizures. Seizures in public or certain other locations (homeless shelters) may cause the police to be summoned (Epilepsy Foundation, 1992).

22.20 “Epilepsy is the most common form of neurological condition,” increasing the likelihood of first responders encountering people with epilepsy (Epilepsy Foundation, 1992).

22.21 Epilepsy and seizures are brain disorders that result in “a temporary malfunction of the normal electrical system in the brain, which controls movement and awareness” (Epilepsy

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Foundation, “Law Enforcement Training Guide,” 2008. p. 3).

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22.22 Public safety personnel may encounter persons having seizures and not be aware of it. Complex partial and simple partial seizures may lead an officer to believe the person is confused or possibly under the influence of intoxicants. People having seizures may not follow commands or they may become combative unknowingly which will likely lead to uses of force and arrest by the officer (Center for Disease Control and Prevention, 2011).

22.23 People with epilepsy have a “medical disability” over which they have no control (Simmons, 2011).

22.24 Instruct officers and other stakeholders about this medical emergency and also that people who have epilepsy may experience a sudden unexpected death.

22.25 Officers responding to a report of a person acting strangely or creating a disturbance should always consider the possibility that they will encounter a person having a seizure (Simmons, 2011).

22.26 Persons who have been taken into custody should not be denied access to their seizure-preventing medications (Simmons, 2011).

22.27 Officer safety shall not be ignored, and personnel are to follow all standard operating procedures in responding to unknown situations but if a seizure is suspected as the cause of the behavior being observed personnel shall:

- Remain calm while asserting control of the area,
- Communicate with the person having the suspected seizure in a non-confrontational, non-threatening manner attempting to determine awareness,
- Look for any evidence of a known medical condition: bracelets, pendants, MedicAlert® jewelry,
- Gather information from witnesses as to what occurred prior to your arrival including, but not limited to:
 - When did the event start?
 - Was the person acting unusual before the seizure began?
 - Does anyone know the person?
 - If so, has the person had seizure(s) before?
 - How long has the seizure gone on?

- Protect the individual from any potential hazards in the area,
- Keep in mind that a person having a seizure may respond with physical aggression to efforts to restrain them physically. These movements are often undirected and flailing rather than focused strikes or blows, and
- Remember actions are involuntary and should not be deemed to be threatening or assaultive (Epilepsy Foundation, 1992).

22.28 Those who take medication to control their seizures must maintain a regular medication schedule. If an individual with epilepsy or other seizure disorder is taken into custody their pharmacist or prescribing physician can be contacted to verify use and dose information (Epilepsy Foundation, 1992).

22.29 The presence of police to a person who is coming out of a seizure may be frightening or intimidating. Be calming and reassuring that you are there to help (Epilepsy Foundation, 1992).

22.30 If circumstances require the use of force during an arrest take the necessary and reasonable actions. If a seizure occurs remember the person having the seizure is incapable of resisting arrest since they have no ability to control their actions.

22.31 Emergency medical services must be summoned for someone having a seizure if:

- It cannot be determined if this is their first seizure, they have no medical
- ID, or there is some other medical condition apparent.
- The person is obviously pregnant
- If the seizure occurred in water and there is any chance they ingested or inhaled any water
- If there were injuries visible before or that happened as a result of the seizure.
- If a seizure lasts five minutes or longer, if another seizure begins shortly after a previous seizure (Epilepsy Foundation, 1992).
- This is not an exhaustive list.

22.32 Be sure to prepare a detailed and accurate report of the event even if no enforcement actions were taken.

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Lesson #22

Instructor: IPICD-Qualified Instructor

Time required: 40 minutes

Subject: Pre-Incident: Mental Illness, including Bi-Polar and Schizophrenia

Goals: To define mental illness; To define mental disorder; To define Bi-Polar Disorder; To define Schizophrenia; To identify law enforcement intervention and approaches.

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Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify on a multiple-choice test four Schizophrenia behavioral cues with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question four Schizophrenia behavioral cues with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

22.1 Learners will be evaluated on SPO#1 by having them correctly identify four Schizophrenia behavioral cues on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Do you think there are more people in your community who have mental illnesses?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 60 minutes

22.2 Mental illness is a serious medical condition that “disrupts a person’s thinking, feeling, mood, ability to relate to others and daily functioning” (NAMI, 1996).

22.3 The American Psychiatric Association (APA) (2015) defines mental illness as a “health condition involving changes in thinking, emotion or behavior (or a combination of these)” (Retrieved from <https://www.psychiatry.org/patients-families/what-is-mental-illness>).

22.4 Statistically, approximately 1 in 5 U.S. adults have experienced some form of mental illness, and 1 in 24 individuals has a serious mental illness (Retrieved from <https://www.psychiatry.org/patients-families/what-is-mental-illness>).

22.5 The APA (2013) defines “mental disorder” as a “syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behavior that reflects a dysfunction in psychological, biological, or developmental processes underlying mental functioning” (p. 20).

22.6 The ability to cope with the ordinary demands of living may diminished in the mentally ill. Serious mental illnesses include: major depression, schizophrenia, bipolar disorder, obsessive compulsive disorder (OCD), panic disorder, post-traumatic stress disorder (PTSD) and borderline personality disorder (NAMI, 1996).

22.7 Factors that have contributed to create the current mental health situation in America are “deinstitutionalization, criminalization, medicalization, and privatization” (Cordner, 2006) .

22.8 Deinstitutionalization may be the biggest factor that has impacted policing, since in the 1960’s there was a wholesale closing of state hospitals, psychiatric facilities and asylums that housed the mental ill. As a society there was a shift away from warehousing and/or institutionalizing those with mental illness (Cordner, 2006, p.6).

22.9 The mentally ill who returned to live in communities found inadequate services and treatments available. Calls to the police about disorder, the behavior and crimes committed by the mentally ill increased (Cordner, 2006, p.6). Deinstitutionalizing the mentally ill significantly increased the number of persons with mental illness incarcerated in local or county jails (Etter, Birzer, & Fields P.79).

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22.10 According to Cordner (2006), police handled many of the calls regarding those with mentally illness informally (p.6). When discussion, counseling and persuasion failed, and the behavior persisted, and a civil commitment was inappropriate (the individual posed no danger to him-or herself or others) and inpatient or outpatient services were likewise unavailable an arrest became the immediate solution chosen to solve the problem (p.6). This created the criminalization of mental illness (p.7).

22.11 Medication plays a significant part in the treatment of mental illness. A major issue is getting non-institutionalized people with mental illness to take their medication **as prescribed** (Cordner, 2006, p.7).

22.12 Adverse side-effects of some drugs, the high cost of medications, the high incidence of self-medication, abuse of other drugs and alcohol coupled with the lack of follow-up and oversight by an overburdened social service system aggravate the already serious issues of people with mental illness (Cordner, 2006, p. 7).

22.13 Privatization happens when cost cutting measures, staff reductions and reduced hours in community-based mental health facilities, like group homes then rely on the police to manage behavior and actions of guests, clients or patients (Cordner, 2006, p. 7). Many of these facilities are not government-run (not that government-run facilities are trouble-free) but private and profit has an effect on the quality and training of staff members and the levels of staffing in the facility (p.7).

22.14 As first-responders law enforcement personnel are the routinely the first contact a mentally ill person in crisis has with community services (Borum, Deane, Steadman, & Morrissey, 1998). The police will frequently encounter people with mental illness since approximately 6 percent of the U.S. residents have a serious mental illness (NAMI, 2011), and 10 to 15 percent of people in jail have serious mental illness (Cordner, 2006). Police are a primary referral source for psychiatric emergency departments, providing “up to a third of all mental health referrals (Borum, et al, p. 394).

22.15 Mental illness is a social services and medical problem not in and of itself a police problem. However, the behavior

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and actions of some of the people with mental illness become police problems. These activities include, but are not limited to committing crimes, attempting or threatening suicide, and a wide variety of other actions which generate calls for service to law enforcement (Cordner, 2006). The mentally ill individual encountered by police may be a criminal offender, victim, complainant, witness, missing person, or person in need of care.

22.16 When police handle situations or respond to calls for service such as, shoplifting or disorderly conduct they may not realize that mental illness is involved. The officer may attempt to deal with the situation in a conventional manner giving directions, issuing commands, attempting to make an arrest, but not get any cooperation or compliance as expected, leading to an escalation of tension possibly resulting in the use of force. It is for these and other reasons police need training in mental illness recognition and crisis management techniques (Cordner, 2006).

22.17 The fact that the mentally ill are prone to violence and involved in a disproportionate number of violent crimes is a common misperception (Cordner, 2006).

22.18 A small portion of those who have serious psychotic symptoms, are more violent than the general public (Cordner, 2006, p.4). Their violent behavior is associated with several factors including drug and alcohol abuse, not following directions regarding medications and” biological or biochemical disorders” (p.4). Generally, “violent and criminal acts directly attributable to mental illness account for a very small percentage of all such acts in the United States. Most persons with mental illness are not criminals and of those who are, most are not violent.” (p.4).

22.19 The problems police have that often are related to mental illness are coupled with other problem issues such as homelessness, drug and alcohol abuse (Cordner, 2006). Many of the people encountered by the police who have mental health problems or are in crisis are homeless, some of those abuse alcohol or drugs (p.5). In one study officers responded that dealing with people with mental illness in crisis was either a “moderate” or “big” problem (Borum, et al, p.397).

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22.20 Efforts must be made to balance the safety needs of the public with the treatment needs of mentally ill people (Etter et al, p. 87).

22.21 The police response to incidents could be improved with more training on handling mental health crises (Cordner, 2006, p. 14).

22.22 A study identified by Cordner (2006) claimed 47 percent of respondents (police officers) disagreed that they were “qualified to manage persons with mental illness” (p.14). Officers will resort to arrest when a mental health disposition would be more appropriate but mental health resources are “inaccessible, unavailable, or viewed as hostile (Borum, et al, p. 394).

22.23 Training in the identification of persons with mental illness and the coping strategies to deal with those people on the street and in correctional facilities is essential for law enforcement and corrections personnel (Etter, et al, p.87).

22.24 Policies and training must reinforce the idea that tense and threatening situations involving those with mental illness can be resolved by calm demeanor, employing good oral and non-verbal communication, proper tactics if and when those fail have available alternatives short of deadly force (Cordner, 2006, p.15). When dealing with individuals with mental illness strive to use reasonable force.

22.25 Arresting people with mental illness except in cases when serious crimes are involved is not an effective response and will have limited effectiveness (Cordner, 2006, p.23).

22.26 Many United States’ law enforcement agencies have made efforts to improve service to those with mental illness through regular and in-depth training.

22.27 The law enforcement response to persons in a mental illness crisis demands “ethical, practical, and effective strategies with interagency collaboration (Tucker, Van Hasselt, & Russell, p. 249).

22.28 Now our focus will turn to two of the primary underlying mental disorders for individuals who die generally

NOTES

following a struggle with law enforcement and correctional officers: **Bipolar Disorder** and **Schizophrenia**.

22.29 **Bipolar Disorders**, Bipolar I and Bipolar II, are on the schizophrenia spectrum according to the APA (American Psychiatric Association, 2013, p. 123).

22.30 Bipolar I follow the “classic manic-depressive disorder” (American Psychiatric Association, 2013, p. 123).

22.31 Bipolar II must include at least one major depression within one’s lifetime, and “at least one hypomanic episode” and is no longer considered a “milder” than Bipolar I (American Psychiatric Association, 2013, p. 123).

22.32 Bipolar disorder involves “mood swings” with periods of elevated or irritable mood (mania) alternating between periods of depression. The swings from mania to depression may be very abrupt.

22.33 **Risk Factors and Occurrences:** There is no clear cause for the mood swings. In people vulnerable to the disease the following may trigger an episode of manic behavior:

- Childbirth or other life changing events
- Taking steroids or antidepressants
- Sleeplessness
- Recreational drug use

22.34 Law enforcement personnel will often encounter individuals who have bipolar disorder.

22.35 Some of these individuals may not have been diagnosed with the disorder, yet their behaviors may indicate they have bipolar disorder, or a parent or other person who knows the individual may confirm the individual has the disorder.

22.36 The individual may demonstrate one or more behavioral cues and/or symptoms.

22.37 **Symptoms**, which may last from days to months, may include, but not be limited to:

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- Agitation or irritation
- Inflated self-esteem (delusions of grandeur, false beliefs in special abilities)
- Little need for sleep
- Noticeably elevated mood
- Hyperactivity, increased energy, lack of self-control, racing thoughts
- Over involvement in activities
- Poor temper control
- Reckless behavior such as: Binge eating; drinking and/or drug use; Impaired judgment; Sexual promiscuity; Spending sprees; etc.
- Tendency to be easily distracted

22.38 Symptoms of mania in bipolar disorder type I. Bipolar disorder type II, “hypomanic” episode will have similar symptoms but be less severe.

22.39 The depressed phase of both types of bipolar disorder include, but are not limited to:

- Daily low mood
- Difficulty concentrating, remembering, or making decisions
- Eating disturbances
- Loss of appetite and weight loss
- Overeating and weight gain
- Fatigue or listlessness
- Feelings of worthlessness, hopelessness and/or guilt
- Loss of self-esteem
- Persistent sadness

22.40 Training officers, dispatchers, and other stakeholders about the behavioral signs and symptoms of an individual who has bipolar disorder will enable those officers and others to identify the agitated chaotic event as a medical emergency and request and/or seek timely medical assistance and intervention.

22.41 **Schizophrenia** is a mental disorder that makes it hard to tell real from fantasy, to think logically, to behave normally in social situations and have normal emotional responses.

22.42 Schizophrenia is a very complex disorder the cause of it is not known.

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22.43 According to some researchers, schizophrenia occurs from environmental factors in those who are genetically at risk. An infection while in the mother's womb or stressful psychological experiences may increase likelihood of developing schizophrenia later in life.

22.44 Schizophrenia affects about 1% of people worldwide. It occurs in men and women, but men have higher rates of occurrence. It usually begins in young adulthood, but cases have begun later in life.

22.45 There are a variety of symptoms that develop slowly over many months or even years. As with other diseases schizophrenia may have cycles which vary from few symptoms to more symptoms over a period of time.

22.46 Early indications of schizophrenia include difficulty sleeping, concentrating, making and keeping friends. Person may become tense and withdrawn.

22.47 Behavioral cues and/or symptoms may include, but are not limited to:

- No emotion is shown in mood or expression (flat affect)
- Catatonic behavior, bizarre movement
- Delusions, thoughts without a basis in reality
- Hallucinations, hearing and seeing things that are not there
- Problems paying attention
- Disorganized thought, ideas "jump" from one to another
- Paranoia feeling that other people are trying to harm the person or others
- Anxious
- Angry
- Argumentative
- Childlike behavior
- Difficulty thinking
- Difficulty expressing thoughts or ideas
- Muscle rigidity
- May become catatonic (not move)
- May be in a state of constant unrest
- May make facial grimaces

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- May become less responsive

22.48 Per the **DSM-V**, two or more from the following list must be present for at least one month or longer, and at least one of the following must be from the top three items:

- “Delusions,
- “Hallucinations,
- “Disorganized speech,
- “Grossly disorganized or catatonic behavior, and
- “Negative symptoms” (p. 99).

22.49 An episode of schizophrenia may require hospitalization.

22.50 Instruct officers and others that encountering a person with schizophrenia may become a medical emergency.

22.51 Because antipsychotic medications are frequently prescribed to change chemical balance in the brain and reduce symptoms of the illness, the individual may have stopped taking his or her medications, which caused the behavior cues and/or symptoms.

22.52 Officers need to ask parents, spouses, and/or others if the individual has stopped taking his or her medication.

22.53 After struggling with an individual who appears to have Bipolar Disorder or Schizophrenia, make sure to constantly monitor him or her for signs of responsiveness and breathing. Placing him or her in the recumbent position is always recommended unless injury or other exigent circumstance prohibit such positioning.

NOTES

Lesson #23

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Pre-Incident: Posttraumatic Stress Disorder (PTSD)

Goals: **Goals:** To define PTSD; To PTSD behavioral cues; and, To identify law enforcement intervention and approaches.

NOTES

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of PTSD with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify the four types of symptoms of PTSD with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

23.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of PTSD on a multiple-choice question.

23.2 Learners will be evaluated on SPO #2 by having them correctly identify the four types of symptoms of PTSD on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Do you know the types of symptoms for PTSD?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

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23.3 Per the U.S. Department of Veterans Affairs, PTSD is defined as “PTSD (posttraumatic stress disorder) is a mental health problem that some people develop after experiencing or witnessing a life-threatening event, like combat, a natural disaster, a car accident, or sexual assault” (U.S. Department of Veterans Affairs. Retrieved from <https://www.ptsd.va.gov/public/PTSD-overview/basics/what-is-ptsd.asp>).

23.4 According to Charles Wilhite, J.D., Ph.D. and retired Captain of the Riverside County (CA) Sheriff’s Department, “PTSD may develop following exposure to one or more traumatic stressors” (2017).

23.5 “Symptoms often include re-experiencing the stressor through intrusive memories, nightmares, dissociative reactions, flashbacks, distress when exposed to reminders of the event, hyperarousal, difficulty concentrating, an exaggerated startle response, and aggressive behavior” (Wilhite, 2017, p.1)

23.6 Individuals with PTSD “will often avoid stimuli, thoughts, and feelings associated with the trauma” (Wilhite, 2017, p. 1).

23.7 Individuals, including law enforcement officers who experience PTSD, “often experience alternations in mood, including an inability to experience positive emotions, negative beliefs about self-efficacy and the safety of the world, and powerful emotions including self-blame, fear, anger, and shame (Wilhite, 2013, p. 1; APA, 2013).

23.8 Although there are four types of symptoms of PTSD, not everyone will experience them the same. They are:

1. **“Reliving the event (also called re-experiencing symptoms).** You may have bad memories or nightmares. You even may feel like you're going through the event again. This is called a flashback.
2. **“Avoiding situations that remind you of the event.** You may try to avoid situations or people that trigger memories of the traumatic event. You may even avoid talking or thinking about the event.

3. **“Having more negative beliefs and feelings.** The way you think about yourself and others may change because of the trauma. You may feel guilt or shame. Or, you may not be interested in activities you used to enjoy. You may feel that the world is dangerous ,and you can't trust anyone. You might be numb or find it hard to feel happy.

4. **“Feeling keyed up (also called hyperarousal).** You may be jittery, or always alert and on the lookout for danger. Or, you may have trouble concentrating or sleeping. You might suddenly get angry or irritable, startle easily, or act in unhealthy ways (like smoking, using drugs and alcohol, or driving recklessly)” (U.S. Department of Veterans Affairs. Retrieved from <https://www.ptsd.va.gov/public/PTSD-overview/basics/what-is-ptsd.asp>).

23.9 Other problematic issues associated with PTSD include but are not limited to: “Feelings of hopelessness, shame, or despair; Depression or anxiety; Drinking or drug problems; Physical symptoms or chronic pain; Employment problems; Relationship problems, including divorce” (U.S. Department of Veterans Affairs. Retrieved from <https://www.ptsd.va.gov/public/PTSD-overview/basics/what-is-ptsd.asp>).

23.10 Becker, Meyer, Price, Graham, and Arsena (2009) noted that “law enforcement personnel may view themselves as immune to stressful events and are sometimes reluctant to seek mental health services” (p. 5).

23.11 Green (2003) using PTSD criteria from the **DSM-IV** found in his study (N=103) the following symptoms: Insomnia; Anxiety; Intrusive thoughts, images, sounds and sensations; Irritability; Poor concentration; Diminished interest in significant activities; Recurrent dreams of the trauma; Avoidance of activities or places associated with the trauma; Foreshortening of expectations about the future; Detachment from others; Avoidance of thinking or conversing about the trauma; Poor appetite; Hypervigilance; Startle reactions; Acting or feeling as if the event was recurring; Restricted affect; Inability to recall parts of the trauma (not secondary to loss of consciousness or organic amnesia)” (p. 3).

23.12 A tragic case involved a veteran of the New Jersey Air National Guard and retired Newark police sergeant diagnosed

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with PTSD who fought a team of police officers who ultimately strapped his limbs together after fighting them (Weischelbaum & Schwartzapfel, 2017, p. B1).

Thanks to Charles Wilhite, Ph.D., J.D. for his peer-review of this lesson.

NOTES

Lesson #24

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: Traumatic Brain Injury (TBI)

Goals: To define traumatic brain injury (TBI); and To identify TBI behavioral cues.

NOTES

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify the definition of TBI with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify four behavioral changes resulting from TBI with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of TBI with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify four behavioral changes resulting from TBI with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

23.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of TBI on a multiple-choice question.

23.2 Learners will be evaluated on SPO #2 by having them correctly identify four behavioral changes resulting from TBI on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Would you agree with me that there are people in your community with TBI?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

23.3 Per the APA (2013), there occur approximately 1.7 million TBIs per year in the United States.

23.4 A TBI often results from a “violent blow or jolt to the head or body [or when] an object penetrates brain tissue” (Mayo Clinic, p. 1. Retrieved from <https://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557?p=1>).

23.5 There are two types of TBI: mild and moderate to severe.

23.6 TBIs are often caused by one or more of the following events: “falls; vehicle-related collisions; violence; sports injuries; and explosive blasts and other combat injuries” (Mayo Clinic, p. 3. Retrieved from <https://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557?p=1>).

23.7 TBI behavioral changes include but are not limited to “difficulty with self-control; lack of awareness of abilities; risky behavior; difficulty in social situations; verbal outbursts; and physical outbursts (Mayo Clinic, p. 6. Retrieved from <https://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557?p=1>).

23.8 A person who suffers a moderate to severe TBI most likely will have cognitive or mental symptoms that include but are not limited to: “profound confusion; agitation, combativeness or other unusual behavior; slurred speech; coma and other disorders of consciousness; lack attention or concentration; judgment problems; memory problems; learning problems; problem-solving difficulties; multitasking difficulties; decision-making difficulties; and have trouble beginning or completing tasks” (Mayo Clinic, pp. 2, 6. Retrieved from <https://www.mayoclinic.org/diseases-conditions/traumatic-brain-injury/symptoms-causes/syc-20378557?p=1>).

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23.9 Management of individuals who have TBI can be difficult. You may wish to adopt and use the following:

23.10 Attention deficits: Ask the person to repeat what you told him or her to make sure (s)he understood your directions; ask the person to write down your instructions; allow extra time for the person to comply; reduce or eliminate any environmental distractions (Brainline, p. 4. Retrieved from <https://www.brainline.org/article/traumatic-brain-injury-guide-criminal-justice-professionals>).

23.11 Memory deficits: Speak slowly and clearly; ask the person to repeat what you told him or her; provide examples or ask the person to provide you with examples; request the person to ask you questions if (s)he does not understand (Brainline, p. 4).

23.12 Slow verbal or physical responses do not always indicate uncooperative behavior. Give the person appropriate time to comply with your requests (Brainline, pp. 4-5).

23.13 Irritability or anger: DO NOT argue with the person; try to re-phrase the problem by breaking it into small parts so it is easier to understand; reinforce the person's positive behaviors (Brainline, p. 6. Retrieved from <https://www.brainline.org/article/traumatic-brain-injury-guide-criminal-justice-professionals>).

23.14 Remember: TBI can affect family, friends, co-workers, and strangers.

23.15 Keep in mind the person may be experiencing a medical emergency. Contact EMS, if necessary.

NOTES

Lesson #25

Instructor: IPICD-Qualified Instructor

Time required: 15 minutes

Subject: Pre-Incident: Water Intoxication (Hyponatremia)

Goals: To define water intoxication; and To identify water intoxication behavioral cues.

NOTES

How will learners be evaluated and what methods will be used to measure competency?

There are no performance measures associated with this lesson.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you have heard of water intoxication?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 15 minutes

25.1 Hyponatremia is water intoxication, occurring as the result of the ingestion of too much plain water which reduces the concentrations of sodium in the blood stream (Quinn, 2011).

25.2 One study in the New England Journal of Medicine (April, 2005) reported drinking too much water by runners of the Boston Marathon resulted in 13 percent developing hyponatremia (Quinn, 2011).

25.3 Warning signs of hyponatremia or water intoxication are nausea, muscle cramps, confusion, disorientation, slurred speech, and muscle cramps. In extreme case seizures, coma and death can occur (Quinn, 2011).

25.4 Over exertion during exercise by novices engaging in extreme or endurance type of events is leading to more occurrences of hyponatremia. (60-90 minutes) (Quinn, 2011).

25.5 Ms. Jennifer Strange, age 28, entered a radio station-sponsored water-drinking contest called “Hold Your Wee for the Wii” in 2007, and died from drinking too much water (Associated Press, 2007).

25.6 There have been at least 3 case reports of individuals who had ingested synthetic cathinone developing hyponatremia (Prosser & Nelson, 2012, p. 37).

25.7 A complication of taking MDMA is hyponatremia (Prosser and Nelson, 2012, p. 37).

25.8 A peace officer from the Bakersfield, California area told IPICD staff he experienced a naked, sweating, young woman running up and down the hallway in a local hotel. Upon arrival, he thought she was on drugs, and acted like she was in a state of excited delirium. After capturing, controlling, and restraining her, EMS took her to the Emergency Department at a local hospital where the doctor diagnosed her with water intoxication.

25.9 Tell officers that exercise can mimic the actions of someone fighting the police or fleeing the police. The extreme type of exertion has similar effects on the body.

25.10 When interacting with someone who has been involved in a long fight or confrontation or who was involved in a prolonged struggle or foot pursuit with police should be monitored.

25.11 Law enforcement personnel who are involved in prolonged physical activity should be warned of the risks of hyponatremia. Their physical condition monitored for any signs or symptoms of hyponatremia and the amount of plain water they ingest.

NOTES

Lesson #26

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Incident: Operational and Tactical Responses

Goals: To identify and discuss general operational response strategies for intervention of ACE events; To discuss proven tactical response action plans to manage the ACE event; and, To discuss why “pacing” of an event by officers is often a critical variable.

NOTES

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify two key pieces of information Dispatchers need to obtain from callers with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify five proven tactical response steps to manage an ACE event with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify the definition of pacing with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question two key pieces of information Dispatchers need to obtain from callers with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice question five proven tactical response steps to manage an ACE event with a minimum performance level of 100%.

SPO #3: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice question the definition of pacing with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

26.1 Learners will be evaluated on SPO#1 by having them correctly identify two key pieces of information Dispatchers need to obtain from callers on a multiple-choice question.

26.2 Learners will be evaluated on SPO #2 by having them correctly identify five proven tactical response steps to manage an ACE event on a multiple-choice question.

26.3 Learners will be evaluated on SPO #3 by having them correctly identify the definition of pacing on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you want to end an ACE event quickly and safely?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

26.4 **Dispatchers** need training on how to get more behavioral information about the person from the caller, and to follow 911 Call-Taker and Dispatcher Excited Delirium protocols.

26.5 **Dispatchers** need training on the identification of key words that may describe high-risk behavioral cues such as “naked,” “breaking glass,” “just snapped,” “flipped out,” etc.

26.6 **Dispatchers** need training on strategies for keeping the caller on the line, if immediate caller safety is not an issue, because agitated people tend to frequently move and not stay in one place. The caller can be asked questions about the person’s behavior and geographic location. This information is extremely valuable to responding officers or officers who are at the scene trying to locate the person.

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26.7 When such information is identified or obtained, dispatchers should be authorized by policy and by training to immediately send more back-up officers, a supervisor, and contact EMS to roll on the scene. Mirroring EMS and hospital violent patient guidelines generally requiring at least 4-6 personnel at the scene to control the violent person (Limmer, O’Keefe, Grant, Murray, & Bergeron, 2001; Bledsoe, Porter, & Shade, 1994)

26.8 EMS should “stage” nearby so when needed response time will be minimal. [NOTE: Do not unnecessarily have an EMS unavailable for other emergencies unless there is a clear need to have an ambulance nearby because in some communities’ other emergencies requiring EMS services may get delayed or become unavailable because of your “staging” request.]

26.9 If it is safe and there is time, the responding officers and EMS personnel should develop a plan.

26.10 At a minimum, the action-plan model should include the following:

- **Capture** the person (use agency-approved tactics and equipment),
- **Control** the person (use approved tactics/equipment),
- **Restrain** the person (use metallic, plastic, or nylon restraints such as The WRAP Restraint),
- **Sedate** the person (can only be done by emergency department physician or by paramedics, with approval of the emergency department physician). DO NOT instruct and/or demand paramedics to sedate anyone,
- **Transport** (use the ambulance with person in supine (face-up) position; if using a squad car, person should be seated upright, seat belted, and shoulder harnessed, or lying on the side),
- **Monitor constantly** because the person’s medical and/or psychological condition may change very quickly,
- When practical and safe, the individual’s core body temperature must be taken and recorded by paramedics at the scene or by the emergency department personnel (Peters, 2006b).
- **Investigate**. The investigation should be commenced: when the subject appears to be in critical condition; when the subject is going to be placed on a ventilator; or when the

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subject has died at the scene. Investigators should conduct a *psychological autopsy* in addition to the Medical Examiner's physical autopsy.

26.11 Consider developing a specialized response and/or an investigative team to handle ACE calls.

26.12 The agency response must be systemic, seamlessly working in conjunction with other first responders and their agencies, including the hospital.

26.13 Review mental health statutes, as many times this type of event is covered by such statutes. Mental health statutes are often more restrictive and directive about first responders' responsibilities and limitations.

26.14 Visit web sites, such as www.ipicd.com, www.ipicd.com, www.exciteddelirium.com, www.aele.com, and www.ecdlaw.com, for peer-reviewed updates about sudden death, arrest-related deaths, in-custody deaths, and collateral issues.

26.15 If the ACE person is taken to a jail, hospital, mental health, or other facility, make sure intake personnel are told about the event history, behavioral cues, restraint methods and devices used, etc. so they have background information to make their responses more accurate.

26.16 Following each ACE event conduct a debriefing of those involved (e.g., officers, EMS, etc.) and attempt to identify what procedures worked, what procedures and/or policies did not work, and what procedures and/or policies need to be developed. This information must be shared with trainers, other first responders, and with agency administrators.

26.17 Identify what tactics worked, what tactics did not work, and what tactics and/or equipment must be taught to facilitate the handling of ACE events, while minimizing risk to everyone involved.

26.18 The pacing of an event is often critical and may affect the outcome. *Pacing* is defined as the speed with which the event and response happens. First responders often set the pacing of an event. Pacing must be monitored and slowed or

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increased depending upon the situation. In many mental health-related ACE events, the pacing is slowed to provide the individual with an opportunity to get calm, and to provide first responders with more time to develop or change response strategies.

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Lesson #27

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Incident: Agonal Breathing Awareness

Goals: To make learners aware of the IPICD *tuition-free* online breathing program available at www.ipicdtc.com; To define and explain agonal breathing; To identify how agonal breathing is described.

NOTES

By the end of the lesson the learner will be able to correctly identify with a minimum performance level of 100%.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify the definition of agonal breathing with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify three descriptions of agonal breathing sounds with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of agonal breathing with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify three descriptions of agonal breathing sounds with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

27.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of agonal breathing on a multiple-choice question.

27.2 Learners will be evaluated on SPO #2 by having them correctly identify three descriptions of agonal breathing on a multiple-choice question.

Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “How many of you have been trained by your employer on how to recognize agonal breathing?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

27.3 Although rare, following a physical confrontation with law enforcement officers and/or being restrained, individuals may suddenly become nonresponsive, and may die.

27.4 Recall from an earlier lesson the topic of *exhaustive mania* was discussed. **Exhaustive mania** refers to a hypothesis that death can follow physical exhaustion (Di Maio & Di Maio, 2006, p. 11).

27.5 This phenomenon is also known as “post exercise peril,” which can take place within approximately 5 minutes following struggle and/or restraint.

27.6 There are numerous situations where a person who suddenly became nonresponsive and began making “snoring” sounds caused the law enforcement officer to wrongly believe the person was taking a nap.

27.7 It was a surprise to the law enforcement officer when the person suddenly died.

27.8 While law enforcement officers generally receive good training on how to contain, capture, control, and restrain people, often times little, if any, training is given to them about post-restraint issues, such as how to identify breathing difficulties.

27.9 Compounding this lack of training is the dangerous misunderstandings officers may have about “breathing.”

27.10 Myth: One or two breaths means the person is breathing.

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27.11 Myth: If a person is talking, (s)he is breathing.

27.12 Officers must also learn about agonal breathing, which is often associated with cardiac arrest and occurs before death, including what they might do to assist a person with breathing difficulties.

27.13 Officers must also learn there are many potential causes of “air hunger” including, but not limited to: asthma, trauma to the chest, trauma to a major airway, and chronic obstructive pulmonary disease (COPD), etc. among others.

28.14 It is important that LEOs are trained how to recognize a person in medical distress, which will, at some point in time, change the person’s status from, say, “suspect” to “patient”.

28.15 Breathing involves both ventilation and respiration.

28.16 *Ventilation* refers to the moving of air into and out of the lungs (Myers, 2006).

- The taking in of air is called *inhalation*;
- The discharge of air into the atmosphere is called *exhalation*. As a person ventilates CO₂ out, more O₂ is needed by the body. *Inhalation* is moving air into the lungs; *exhalation* is moving air out of the lungs; and,
- This process brings in more O₂ to the body, and exhausts CO₂, which is a “waste product” of metabolism. The body needs to rid itself of harmful increased levels of CO₂.

28.17 Normally, adults breathe between 12 and 20 breaths per minute (Myers, 2006, p. 5).

28.18 *Respiration* refers to: (1) how oxygen (O₂) diffuses from the air into the lungs (Alveoli); and (2) how carbon dioxide (CO₂) is then diffused from the blood into the lungs and discharged into the atmosphere (Myers, 2006, p. 3). With each breath, O₂ is brought into the lungs, and CO₂ is expelled from the lungs.

28.19 The process of oxygenating the blood and releasing CO₂ into the atmosphere is referred to as “gas exchange.”

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28.20 Signs and/or symptoms of abnormal breathing include, but are not limited to: (1) rapid breathing (> 20 breaths per minute called tachypnea; hyperventilation); (2) slow breathing (< 12 breaths per minute called bradypnea; hypoventilation); (3) shallow breathing; (4) irregular breathing; (5) noisy breathing; (6) increased work of breathing including exaggerated use of breathing muscles, flaring of nostrils, grunting excessively deep breathing; (7) cyanosis (blue discoloration of the skin); (8) restlessness; and/or (9) anxiety (Myers, 2006, pp. 185-186; Curtis, 2015, personal communication).

28.21 **Talking does not equal breathing.** Paramedics recognize that a patient who talks in short or one-word sentences is in medical trouble and needs immediate treatment. Officers need to watch for this situation, too.

28.22 If a person subjectively says “I can’t breathe” or uses similar words, do not dismiss the person’s claim. While a person may say something to make you come closer so (s)he can assault you, remain careful, but do not ignore the person. Also, do not mock or belittle the person. Officers must demonstrate concern and remain professional at all times. Show compassion.

28.23 Abnormal breathing in an unconscious person that may appear as irregular and sporadic gasps or gulps for breath is often agonal (ag-uh-nl) breathing.

28.24 Agonal respirations, or what is commonly called agonal breathing, looks or sounds like: snoring; heavy breathing; labored or exaggerated breathing; gurgling; guttural sounds; groaning; snorting; and/or gasping (Bobrow, Zuercher, Ewy, Clark, Chikani, Donahue, Sanders, Hilwig, Berg, & Kern, 2008; Eisenberg, 2006).

28.25 Agonal respirations are often heard by those people who are near a person prior to death (Eisenberg, 2006).

28.26 Agonal breathing can be seen in individuals who have suffered cardiac arrest (Bobrow, Zuercher, Ewy, Clark, Chikani, Donahue, Sanders, Hilwig, Berg, & Kern, 2008; Eisenberg, 2006). There are a multitude of other causes of agonal breathing such as Central Nervous System injury (e.g., brain trauma, high blood pressure).

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28.27 *Cardiac arrest* is when the heart stops beating. IOM (2015) defined cardiac arrest as “a severe malfunction or cessation of the electrical and mechanical activity of the heart” (p. 27). A person who has suffered a cardiac arrest will rapidly become unconscious. Death follows if the heart beat is not restored.

28.28 Cardiac arrest is different than a *heart attack*. A heart attack occurs when the blood flow is interrupted to part of the heart muscle because of a blockage or a narrowing of arteries that supplies that area of the heart (IOM, 2015, p. 28). Not everyone who has a heart attack will go into cardiac arrest.

28.29 Agonal breathing is a brainstem reflex, and is an ominous sign that death is imminent.

28.30 In an unconscious person, agonal breathing indicates cardiac arrest until proven otherwise. CPR must be started immediately, and medical assistance requested.

28.31 Take a moment and watch the agonal breathing demonstration videos.

28.32 Bobrow, Zuercher, Ewy, Clark, Chikani, Donahue, Sanders, Hilwig, Berg, and Kern (2008), reported that “bystanders’ or emergency medical dispatchers’ delay in recognizing cardiac arrest because of the presence of gasping or other forms of abnormal breathing in the early stage of [cardiac] arrest” (p. 2550).

28.33 Research shows bystanders, including physicians and LEOs, often delay performing cardio-pulmonary resuscitation (CPR) because the person is gasping or making other breathing sounds (Bobrow, Zuercher, Ewy, Clark, Chikani, Donahue, Sanders, Hilwig, Berg, & Kern, 2008).

28.34 Because some people may suffer cardiac arrest and/or ventricular fibrillation after struggling with LEOs or after running away from them, it is important LEOs have training about agonal breathing and its sounds.

28.35 There has been litigation filed against governmental entities alleging they “failed to train” LEOs about agonal breathing, which one could argue is an “essential skill” of LEOs.

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Lesson #28

Instructor: IPICD-Qualified Instructor

Time required: 30 minutes

Subject: Post-Incident: Documentation

Goals: To define and explain phenomenology; To discuss the importance of event documentation; To discuss the importance of video compression analysis; and To discuss the importance of video and audio recording.

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify the definition of phenomenology with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify why video compression analysis is important with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of phenomenology with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the importance of video compression analysis with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

28.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of phenomenology on a multiple-choice question.

28.2 Learners will be evaluated on SPO #2 by having them correctly identify the importance of video compression analysis on a multiple-choice question.

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Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “Do you know officers in your agency that write lousy Incident Reports?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 30 minutes

28.3 Too many times an officer’s Incident Report is incomplete and contains vague or missing information.

28.4 It is the responsibility of first-line supervisors and others to reject incomplete and/or vague Use-of-Force and/or Incident Reports about an event.

28.5 Incident Reports are considered a category of qualitative research known as Phenomenology (lived experiences) and are often foundational documents attorneys and medical examiners can use to begin laying a scientific foundation (Peters, 2012).

28.6 Subject to existing agency policy, procedures, and regulations, current collective bargaining agreement, union constraints, and applicable state and/or federal laws, when writing a report about a sudden, in-custody, or jail suicide event, be thorough in the documentation of the event.

28.7 It is also an acceptable and encouraged practice to have officers write Supplemental Reports when they remember more details about an incident. This also applies to those officers who later learn something they had written in their initial reports contained an error.

28.8 Historically, some law enforcement administrators and supervisors were of the opinion that writing Supplemental Reports gave the impression the officer(s) misrepresented information in the initial report(s).

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28.9 In the last several years the adoption of body-worn cameras (B-WC) by law enforcement agencies has increased significantly.

29.10 In 2015, approximately 6000 police departments were using body-worn cameras (DeLong & CNN Wire Service, 2015).

29.11 That figure does not include civilians who have video capability on their cellular telephone, surveillance videos, drones, etc.

29.12 In 2017, there were approximately 224.3 million smartphone users in the United States, approximately 68.4% of the population (www.statista.com/topics/2711/us-smartphone-market/).

29.13 By the year 2022, the number of smartphone users in the United States is projected to be approximately 270.66 million (www.statista.com/statistics/201182/forecast-of-smartphone-users-in-the-us/).

29.14 Statistics show in 2014 there were “125 surveillance cameras per thousand people” (www.statista.com/statistics/484956/number-of-surveillance-cameras-per-thousand-people-by-country/).

29.15 Gettinger (2017) reported “at least 347 state and local police, sheriff, fire, and emergency units have acquired drones in the past several years” (p. 1).

29.16 Reaves (2015) reported that 68% of local police departments used in-car cameras. In 2005, the International Association of Chiefs of Police (IACP) reported 72% of all state patrol vehicles in the United States were equipped with in-car cameras.

29.17 These figures do not reflect the sales or use of hand-held video cameras that are not incorporated within a cellular telephone or similar device, including “GoPro” cameras many people attach to their clothing, bicycles, and other vehicles.

29.18 Video recording has several limitations that may not be known to the media, officers, administrators, and others.

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29.19 These limitations require that a video forensic analyst be used to unmask what video compression may have “hidden” within the system.

29.20 According to forensic video expert, Grant Fredericks, “Most people assume that video recorded to police body worn and in-car systems is always accurate. [There have been] cases where the video was not accurate, and it resulted in unfounded Use of Force charges against the officer (Personal communication, 8/12/2017).

29.21 Other video recording limitations include but are not limited to:

- Video cameras used by law enforcement agencies do not record in 3-D, which may distort distance, weapon placement, etc.
- Video cameras do not always record all suspect behavioral cues.
- Video cameras do not always turn and follow your eyes or head.
- An officer’s body may temporarily or totally block the camera lens, as shown in the “Jefferson Street Incident” in Wisconsin (2009), and recently in the United Kingdom (2017).
- Time-code stamping of the video may not be correct and be shown to out of sync with other time stamps about the incident (e.g., Dispatch, EMS, etc. time stamps).
- Seckiner, Mallett, Roux, Meuwly, and Maynard (2018) caution that there are *extrinsic* and *intrinsic* factors that may affect video image distortion such as: maintenance, environment, camera placement, and the targeted subject (p. 80).

29.22 Topics to consider for inclusion in the report include, but are not limited to:

- Date and time of the event;
- A description of what was observed upon arrival at the scene;
- A description of the person’s behavior and appearance (e.g., naked, sweating profusely, yelling, screaming, hallucinating, etc.) upon arrival and at the scene. Bob Willis, former instructor for Caliber Press, suggests writing the report

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- as if one were describing an athletic event over the radio. In short, paint pictures with words;
- A description of the attempted and actual communication between the individual and others at the scene;
- A description of the attempted force used for the controlling of the individual, and who used it;
- A description of whether the attempted force was effective, or whether the initial force had to be escalated, based upon the individual's responses to it;
- A description of how the individual was restrained including the defensive tactics, tools, techniques, etc. used in attempting to restrain him or her;
- A description of the individual's behavior while attempting to be restrained;
- A description of the resistance offered by the individual during the attempted control and/or restraint of him or her;
- A description of how the person was positioned after being subdued;
- A description of how the person was transported (i.e., include seat belt and shoulder harness use; positioning of the individual, etc.);
- A description of the person's behavior during preparation for transport;
- A description of the person's behavior during transport;
- A description of how the person was monitored during transport, and by whom;
- A description of where the person was taken for processing or medical or mental health observation and when;
- A description of who witnessed or may have witnessed the event, with names, addresses, telephone numbers (only if the officer has time and/or is authorized to collect such information);
- A description of any injuries received during the event, and how these injuries were received and their severity;
- A listing of other police, fire, EMS personnel who responded to the scene, and
- A listing and description of drugs that were administered by paramedics and/or emergency department medical providers.

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29.23 Law enforcement officers must write comprehensive, accurate, and honest reports following an incident, unless agency policy prescribes another methodology of capturing the information (i.e., detective interviews and then a report).

29.24 Officers know they must write complete reports because of what has become known as the “information doctrine” from the United States Supreme Court case Whitley v. Warden, Penitentiary of Wyoming, 401 U.S. 560 (1971). In short, if information is not contained in a written document, it cannot be rehabilitated through testimony.

29.25 Please make sure you read the article on Phenomenology located in the Appendices. This will also make a good handout for your learners.

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Lesson #29

Instructor: IPICD-Qualified Instructor

Time required: 60 minutes

Subject: Post-Incident: Investigating Guidelines

Goals: To identify strategies for investigating arrest-related and in-custody deaths; To discuss the distinction between a “sudden death” and an “instantaneous death”; To provide unbiased, rigorous analyses of ECDs;

Student Performance Objectives: By the end of the lesson the learner will be able to correctly identify the definition of instantaneous death with a minimum performance level of 100%.

By the end of the lesson the learner will be able to correctly identify the definition of a sudden death with a minimum performance level of 100%.

SPO #1: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of instantaneous death with a minimum performance level of 100%.

SPO #2: Given an Excited Delirium and ACE lesson guide: V.6, a pen, and instruction, the learner will be able to correctly identify on a multiple-choice test question the definition of sudden death with a minimum performance level of 100%.

How will learners be evaluated and what methods will be used to measure competency?

29.1 Learners will be evaluated on SPO#1 by having them correctly identify the definition of instantaneous death on a multiple-choice question.

29.2 Learners will be evaluated on SPO #2 by having them correctly identify the importance of sudden death on a multiple-choice question.

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Anticipatory Set or Mental Readiness: (Describe the introduction to the lesson you will use to get the students involved in the lesson).

Anticipatory Set: 1 minute. Ask the learner, “What is the definition of sudden death?”

Instructional Components: (Include type of lesson and major concepts to be covered)

Type of lesson: Lecture. 60 minutes

29.3 Many times when officers are promoted to detectives and/or investigators they are suddenly expected to “know” how to investigate different events, including arrest-related and/or sudden, in-custody deaths.

29.4 Many arrest-related and/or sudden, in-custody deaths are unique and require specialized investigative training, such as an ECD-associated death.

29.5 Historically, the investigation of sudden and /or in-custody deaths were left to trial and error, as these subjects went unmentioned, or at best briefly mentioned, in forensic textbooks.

29.6 Many people, including those who work in the health care and legal communities, cannot accept that someone died while interacting with law enforcement. If the individual is dealing with law enforcement temporal to his or her demise, law enforcement is often instantly suspect—regardless of the person’s behavior, history, physical condition, psychological condition, drug use, etc. This phenomenon is often best observed when viewing, reading, and/or hearing sensationalized media reports about the incident.

29.7 There are typically two definitions applied to individuals who die suddenly: instantaneous death and sudden death. It is important to know and to understand these definitions.

29.8 “Instantaneous death” has been defined as death that occurs within 5 minutes of the onset of symptoms (Engle, 1971).

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29.9 The World Health Organization defined “sudden death” as cardiorespiratory collapse within 24-hours of the onset of symptoms.

29.10 Chan (2006) defined sudden death as being “applied to the unexpected cardiac deaths of individuals who were in a stable medical condition less than 24 hours previously with no evidence of a noncardiac cause” (p. 9).

29.11 Sudden death is not new, as the earliest identified writing is dated 1406 B.C.

29.12 Sudden death can be traced to the Biblical book of Genesis, where Lot’s wife looked back at the city of Sodom and Gomorrah and instantly became a pillar of salt.

29.13 There are other Biblical and historical accounts of sudden deaths.

29.14 Sudden death can be caused by one or more variables.

29.15 “Sudden Cardiac Death” (SCD) has been defined as “. . . a dramatic and/or spontaneous death that is thought to be (and usually is) caused by a heart condition and may have been caused by exercise” such as fighting with law enforcement officers (Behr, 2003, p. 2).

29.16 “Sudden Arrhythmic Death Syndrome” (SADS) has been defined as having occurred when “no definite cause of death can be found, even after the heart has been examined by an expert cardiac pathologist” (Behr, 2003, p. 2). The frequency of SADS occurs in “about 1 in every 20 cases of sudden cardiac death” (p. 2).

29.17 These and other definitions may apply to arrest-related or sudden, in-custody death events.

29.18 It is important to know these and other definitions because they may be used in criminal and/or civil proceedings.

29.19 If asked by the media, attorneys, and/or others if a person who died 15 hours after struggling with law enforcement officers were a “sudden death,” the officer and/or investigator must know that this death would be classified as a

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“sudden death” by the WHO and/or other organizations and authors.

29.20 Investigators must also know about prescription drug warnings and contraindications, specifically “black box” warnings.

29.21 A **black box warning** may be required by the FDA regarding a drug’s significant risk of serious or even life-threatening adverse effects as set forth in 21 CFR 201.56 and 201.57 (Peters, 2007).

29.22 On many prescription drugs, the United States Food and Drug Administration (FDA) has placed a “Black Box warning” per the *Code of Federal Regulations* (Peters, 2007).

29.23 Ritalin® and Ritalin-SR® are both mild central nervous system stimulants that have been the focus of “black box” warnings (Peters, 2007).

29.24 Many prescription drugs have “contraindications”, which are “any special symptom(s) or circumstance(s) that make the use of the prescription or over-the-counter drug inadvisable, usually because of risk to the user” (Peters, 2007, p. 14).

29.25 Should a person suddenly die during the process of arrest, intake, or incarceration, make sure that investigators attempt to identify if the individual was taking any prescription or over-the-counter medications that may have had contraindications or “black box” warnings.

29.26 To help identify “black box” warnings, investigators can perform a Google search on the term “black box warnings.”

29.27 Investigators need to identify the psychological, communication, and physical behavior cues seen by the officers and witnesses before the person died.

29.28 Also, investigators will need to develop a tight timeline showing every observation, activity, time, etc. for the event.

29.29 Reports from the dispatch, event-involved officers, TASER data download EMS responders, Emergency

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Department personnel, who treated the individual(s) will assist in the accurate creation of a detailed *timeline*.

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29.30 Often when toxicology reports and/or autopsy reports are completed (sometimes months after the event and death) and law enforcement is cleared of wrongdoing, this information often receives small, non-descript media attention, if it is even mentioned.

- Medical examiners sometimes fail to examine the small details such as having the braid microscopically examined, or fail to collect and then analyze hair samples, which may indicate chronic drug abuse.
- A negative autopsy is not uncommon in these deaths, because there is a lack of forensic evidence for identification of a proven mechanism of death (unlike a firearm death).
- When there is a negative autopsy, or simply the event is reported or resurrected months later by the media, often times critics of criminal justice agencies and their professional personnel “try and convict” the agency and its officers in the media and other forums on innuendo and unsupported speculation.

29.31 It is important for investigators to recall the many contemporary theories of death that were discussed and remind Medical Examiners to consider one or more of the theories, such as Sickie Cell.

29.32 To assist investigators and medical examiners, the following guidelines are offered:

- Obtain identification information (e.g., name, social security number, age, date of birth, gender, ethnicity, marital status, address(es), and level of education),
- Obtain specific detail of the death (i.e., date, time, location, method, provisions for rescue efforts, acts of violence prior to death, other),
- Remember: The scene and history can provide insights into the cause of death; Photograph and video tape the site of death with high quality equipment (excellent resolution). Compare the video and photographs later to identify key items, etc.,
- Obtain family, employment, and financial histories, as these can provide insights into genetics, behavioral problems, and stressors that might explain a sudden change in behavior,

- Obtain the person's medical history and information within the boundaries of the law. The person's spouse may know if (s)he was diabetic and /or a smoker. The medical examiner can provide specific information about the examination of the body, injuries, toxicology, etc.,
- Obtain a list of current medications, both prescription and non-prescription. These medications may have been a factor in the decedent's behavior prior to death and may have been a contributing factor to the death. In some cases, a person may not have taken required medications that caused behavioral problems, cognitive problems, health problems, etc.,
- Obtain information about the person's substance abuse—chronic or recreational. Remember: there is no such thing as a non-lethal dose of cocaine,
- Obtain health records, health plan records, local pharmacy records, psychological and psychiatric record, and also a list of drugs and other medications that are located in the person's medicine cabinet, dresser, kitchen, etc. The taking of certain drugs may have an adverse reaction to alcohol,
- Obtain police records and also check for how many times the police may have interfaced with the decedent. Many times, a person, who has a mental illness, or violent and other behavioral problems, has interfaced with the police on more than one occasion,
- Obtain nutritional information about the person's eating and drinking habits. Sodium and potassium levels may adversely change as a function of the person's diet,
- Obtain photographs of the decedent, as this may show recent weight gain or loss. Having a large belly may indicate a diet rich in fats, carbohydrates, and or alcohol. A large belly may also be a factor in a positional event. The loss of teeth may indicate methamphetamine abuse,
- Obtain information about the person's behavioral history. Speak to family members, friends, co-workers, etc. to gain insights into the person's behavior patterns,
- Obtain a core body temperature in cases where agitated delirium is a consideration. A core body temperature greater than 103°F (41°C) will indicate hyperthermia. Drug levels may be non-existent, and/or very low at the time of the autopsy, especially in those people who were chronic drug abusers,
- Obtain urine levels of cocaine and bezoylecgonine. These levels, however, may not provide a basis for intoxication, so avoid an intoxication decision based solely on these levels,

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- Obtain an analysis of the person's brain. The brain can be extremely valuable in toxicological analysis, as compounds can be found in the brain that cannot cross the blood-brain barrier. The brain should be harvested within 24 hours, put on dry ice, and sent for analysis (1.800.UM-BRAIN). Corneal slices of the anterior striatum and the substantial nigra need to be collected as soon as possible in relation to the time of death,
- Obtain and analyze hair. The hair can provide insights into a person's chronic and recreational drug abuse, especially cocaine. Do not wait for a negative autopsy report about cocaine, "meth", and other stimulants. Analyze the hair as part of the customary investigation and analysis. NOTE: The longer the hair, the greater the history. Also, hair can be taken from any portion of the body. **Obtain hair sample(s) before they are lost** (e.g. cremation),
- Obtain an analysis of the decedent's heart, as this is one of the primary target organs for cocaine toxicity,
- Obtain analysis for atherosclerosis, focal myofibrillar necrosis, myofibrillar necrosis, small vessel wall thickening, and heat shock proteins,
- Obtain environmental factors, such as weather, humidity, temperature, and other climatic conditions. If the person was restrained on the ground, on a roadway, etc., obtain the surface temperatures, as this variable may be important. Remember too, that some medications, and/or drugs can cause an increase to heat sensitivity,
- A chemical analysis can be performed on Heat Shock Protein 70 to determine if the person's body temperature was elevated, provided the brain is harvested in time.

29.33 There have been arrest-related and in-custody deaths that were *associated* with TASER® devices.

29.34 Whenever there is a high-profile or controversial event, especially if someone is seriously injured with an ECD or has died following the use of one, the analysis of the ECD data download will be of critical importance for many reasons. One reason is that the data download should show the date of the ECD discharge, the time of the ECD discharge, and the duration of the ECD discharge. Each one of these variables may become a critical focus during an investigation, an analysis, a deposition, and/or a trial.

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29.35 The TASER must also be tested to make sure it was operating within factory operating specification.

29.36 There are also more and more reports, both scientific and anecdotal, that highlight ECDs not working as intended, or as perceived by the deploying officer. Dawson, et al. (2010) tested 84 different TASER-brand X26™ ECDs and found 17% of them to be “out-of-tolerance” (p. 5). “When a weapon was *out-of-tolerance* one time, it remained *out-of-tolerance* every subsequent time it was fired, or it continued to be *out-of-tolerance* several weeks later when re-tested” (p. 5). Dawson, et al. reported that when the power source to the out-of-tolerance X26 ECDs was replaced (Digital Power Magazine) that most of the ECDs were then found to be in an “in-tolerance” basis (p. 5). Some ECDs, however, “were not serviceable at all” (p. 5).

29.37 Anecdotal reports from several law enforcement agencies have found that not all of their ECD perform as designed, intended, or perceived by the deploying officer.

29.38 Can a TASER kill someone?

29.39 On April 30, 2012 Dr. Douglas Zipes, M.D. published “Sudden Cardiac Arrest and Death Associated with Application of Shocks from a TASER Electronic Control Device” in *Circulation*. Dr. Zipes reviewed 8 cases of TASER X26™ applications where the human target lost consciousness, concluding: “ECD stimulation can cause cardiac electrical capture and provoke cardiac arrest due to ventricular tachycardia/ventricular fibrillation” (www.circ.ahajournals.org/content/early/2012/04/20/circulationaha.112.097584.abstract).

29.40 Regardless of the controversy surrounding Dr. Zipes’ report, Axon Enterprises, Inc. has issued a TASER product warning that cautions users that in rare instances, the device may cause cardiac issues that could lead to sudden death.

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21 CFR 201.57.

21 CFR 201.57 (a)(4).

24 U.S.C. §12012(1)

28 C.F.R. Pt. 35, App. B

21 U.S.C. 812

42 U.S.C. §12101(a)(1)

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APPENDICES

- A. Contemporary Observations
- B. Is This an In-Custody Death?
- C. Graduation Party
- D. Golf Course
- E. Brittle Diabetic
- F. Legal Cases
- G. Phenomenology

APPENDIX A

OBSERVATIONS

(written by John G. Peters, Jr., Ph.D., CTC, CLS)

OBSERVATIONS: We know that lawsuits are inevitable, and that law enforcement officers and agencies will make mistakes. Also, there are “bad” law enforcement officers and governmental administrators.

Most people’s understanding of law enforcement comes from the media. Law enforcement activities have extra high visibility to the public. Many of the contacts between law enforcement and the public are inherently unpleasant, which has the potential for greater conflict. As a practical matter, injuries can be comparably more serious than most kinds of civil liability. Civil liability is politically volatile. Remember: Force can look awful yet be totally lawful. Seemingly, more than in the past the public is holding law enforcement accountable for actions taken or not taken.

Public mistrust of law enforcement and governmental entities has grown across the United States and globally. In some situations, a law enforcement officer’s actions may have enhanced such public mistrust (e.g., Mapp v. Ohio; North Charleston shooting; planted drugs; disrespect by law enforcement officers).

The purchase of Smartphones by civilians has enabled them to videotape many high-profile law enforcement officer-suspect-involved events. Many of these events were uploaded to social media, and some later broadcast by mainstream media. Many of these events fueled, deepened, and galvanized the public’s mistrust of law enforcement.

Today, the public is demanding **accountability** of law enforcement officers, and **transparency** from governmental entities.

VIDEO: In addition to civilian cellphone video, there are other types of video that seem to be everywhere. These include, but are not limited to: body-worn cameras; dash cameras; surveillance cameras; etc. Law enforcement behaviors and words will be recorded. Video will help eliminate or confirm law enforcement officers from saying, “I did not do that.”

ACTION: In addition to ethical and moral obligations, cameras and personal observations that record and report law enforcement behaviors, law enforcement officers must act professionally always. They must demonstrate concern for the individual, family members, and friends. If a person tells law enforcement officers that (s)he is experiencing breathing problems, this must be treated as a medical emergency. Reassure the person experiencing the breathing difficulty and try to keep him or her calm.

APPENDIX B

IS THIS AN IN-CUSTODY DEATH?

On Monday, June 24, 2013 citizen was reported to be a 36-year-old, Caucasian male, who was 72.5-inches tall, and weighed 169 pounds. Because of prior hallucinations, the police were called, and citizen taken in for a medical and psychological evaluation. At approximately 12:04 a.m. on Saturday, June 8, 2013 citizen was evaluated in a Medical Center by its Crisis Intervention Team. After his evaluations at the Medical Center, citizen was released and taken to the County Jail where he was booked at approximately 2:18 a.m.

The jail Processing Officer noted on a form that citizen had mental health problems, and then wrote “suicidal.” Citizen was asked a series of questions that were on the “Preliminary Health Questionnaire” including if he were “currently suicidal” or if he “had suicidal thoughts in the past”; citizen answered “no.”

Video footage showed citizen exiting his cell and being escorted to a wall telephone in the control area. Citizen walked to the phone, made motions that he had called someone, then walked to the control desk, then made a second call without correctional officers escorting him. He then returned to the wall telephone and appeared to make a third phone call before being escorted away and back to his cell. A Correctional Officer reported hearing a noise coming from citizen’s cell and approached it and asked him if he had hit his head and told him to stop such behavior.

Citizen asked a Correctional Officer if he could again use the wall telephone. As they both got near the wall telephone, citizen is seen on video turning to his right, and then sprinting toward the opposite wall. It took approximately 02.48 seconds to turn, run, and bend at his waist so the top of his head was pointing toward the wall. Citizen then struck the wall with the top of his head. The approximate time in seconds from turning to striking his head on the wall was 02.84 seconds. Citizen fell to the floor and screamed as if he were in pain. Correctional Officers immediately went to aid citizen and saw a large laceration to the top of his head. Correctional Officers placed citizen’s hand into hand restraints. Citizen then struck his head on the floor several times.

Because of citizen’s active resistance, the Utility Response Team arrived with a restraint chair and tried to place him into it, but he demonstrated more active resistance by “arching his back, thrashing about and tensing his whole body.” A Correctional Officer reported “delivering two closed hand strikes to citizen’s abdomen and also applied pressure to citizen’s chest area to get him seated into the restraint chair. Fire personnel arrived and said they could not transport citizen in a restraint chair. They inserted a 20-gauge IV into citizen’s right hand that contained a sedative (2 mg of Versed) that made him lethargic, removed him from the chair, and transported him to a local hospital where he underwent surgery for a 4-inch laceration to the top of his head and for a C5 spinal fracture. He died on June 21.

CAUSE of DEATH was “Complications of craniocervical trauma (weeks).

APPENDIX C

GRADUATION PARTY

On May 27, Richard, age 18, attended a high school graduation party for Daniel and Adam at Adam's house. Richard, who had a long history of deviant behavior and criminal conduct, also had a history of taking Ritalin, and illicit drugs. A friend, Dwayne, confirmed Richard and he did "lines of meth and cocaine"...but [they] liked cocaine more than meth". On May 27, 2005, Dwayne stated that he thought Richard "ate two" Ecstasy pills. Kerry, Dwayne's girlfriend, recalled that Dwayne told her and others that he saw Richard take pills. Ralph, who arrived at the party later in the evening about 11:30 p.m. or 12 midnight, told police he heard Richard had taken an Ecstasy drug. According to Jessica, who was also at the party, she and Richard each took a shot of Jack Daniels whisky and also smoked marijuana. Jessica said that Richard left the party and the residence for a period of time, and when he returned, she heard yelling outside the residence and after exiting the house she described Richard as: having his shirt off, bare skinned, scared, failing to recognize any of the people, running around the driveway, acting weird, telling people "I'm Jesus" or "I'm God", and trying to kiss people. After about 20 minutes of several people trying to catch Richard, "took off down the road". Jessica described Richard as running fast. Adam recalled hearing Richard making noises like R2-D2 who was in the Star Wars movie. Richard eventually entered the property at 644 Griffith Road. This location is the home of Debbie who called the police when three juveniles, including Richard, got too close to her house. Officer Female arrived at Debbie's residence and heard screaming and when she saw Richard, he was screaming and yelling. Richard was also swinging his arms as if he were swinging a baseball bat. Officer Female had called for back-up and advised that she thought the person was on drugs. Richard started running toward her. Debbie testified that Richard "kind of went up in the air and lunged towards her [Officer Female]. Fearing for her safety, Officer Female discharged her TASER X26 electronic control device (ECD) toward Richard striking him, causing him to fall to the ground. Because he attempted to get up, she recalled cycling the TASER ECD at least three times, although the TASER ECD download indicates a total of four cycles. Officer Male was the first to arrive at the scene to assist Officer Female, and he immediately handcuffed Richard. A short time later Sgt. Male arrived on the scene. Richard was breathing when these officers arrived and was moaning. Kneeling alongside Richard's body, Officer Male handcuffed him without putting any body part onto Richard's back area. While Sgt. Male was asking Richard questions, Richard, who was on his side and resting against Officer Male's leg, slid down and his eyes began to roll back into his head, in addition to having a bowel movement. EMS arrived on scene about this time (police had made a prior request), and found Richard non-responsive. He was taken to City Hospital where he was pronounced dead at 2:05 a.m. The causes of death were listed as: cardiac arrhythmia, due to drug induced psychosis, methamphetamine and MDMA/MD intoxication, acute, with electrical pulse incapacitation as a contributory condition, and was classified as a homicide.

APPENDIX D

GOLF COURSE: WHAT'S MISSING?

While they were watching a movie on their television set, a young man told his girlfriend that he had to go to the bathroom. He got off the couch and went into the bathroom for a few minutes and then returned to the couch. A short time later, he stood up from the couch, and then jumped through the second-floor window of the apartment, landing on the ground below. It was dark outside, and the girlfriend did not see the direction her boyfriend ran when he took off running down the driveway.

The girlfriend waited to see if her boyfriend would return, and when he did not return she called 911 and reported him missing. Law enforcement officers arrived at the apartment to get a description of the boyfriend, and also information about what they were doing prior to him jumping through the apartment window.

She told the officers that they were merely watching television when her boyfriend went to the bathroom. Shortly after returning to the couch, he jumped up and then jumped through the second-floor apartment window like Superman. He was fully clothed.

After searching several hours during the night to locate the young man, police received a call from an attendant at a local golf course. The attendant had found a young man on a green and he was not responsive. Officers arrived and found a man lying on the grass who matched the description of the missing boyfriend.

Upon closer examination, the man appeared dead, and his clothing was soaked. The officers asked the golf course attendant what time the water sprinklers came on, and were told that it would be later in the morning. Upon further investigation it was determined that the golf course water sprinklers had not yet come on for the day.

Emergency medical services responded and transported the non-responsive man to a local hospital, where he was pronounced dead.

1. What caused the young man's death?
2. Were the police involved in his death?
3. Why was the young man's clothing soaked?

APPENDIX E

BRITTLE DIABETIC

Mr. Braxton was a brittle diabetic who had difficulty in following his doctor's orders regarding the management of his diabetes. Having had diabetes for years, the 40-something-year-old man was living with his Mother, because he had one leg amputated at the knee, and the toes of his other foot amputated because of his diabetes.

One morning Mr. Braxton's mother called 911 and reported that her son was acting strangely and that he also refused to eat what she had given to him to raise his sugar level. She reported that she was afraid for his safety, and that she needed emergency medical services right away. The 911 dispatcher sent the city fire department rescue and city police to the Braxton residence.

The police were the first to arrive and stood on the porch until the paramedics arrived. Opening the front door for the paramedics, the police officers never laid hands on Mr. Braxton, as he "attacked" the paramedics on his hands and knees. Working his way across the floor on his hands and knees, Mr. Braxton was yelling at the paramedics, spitting at them, and as they attempted to grab an arm or a leg, he tried to bite them. The paramedics knew from their numerous prior visits to the Braxton residence, that Mr. Braxton was not only a brittle diabetic, but also hepatitis C positive.

Four of the paramedics each grabbed one of Mr. Braxton's limbs, with paramedics holding onto both legs and arms. The fifth paramedic placed a small baby blanket over the face of Mr. Braxton, and also then knelt upon his back to help control him. One paramedic was able to get a blood sugar reading of "28". As they tried to get an IV started, Mr. Braxton suddenly got calm. He was rushed to the hospital where he was pronounced dead.

1. The paramedics and their employer were sued for using improper restraint methods. The city was sued for failure to train its paramedics in how to handle a person such as Mr. Braxton under the Americans' With Disabilities Act. Why?
2. Is it proper to initially hold a person on the ground, face-down, and in the prone position?
3. Did the paramedics do anything wrong from a procedural viewpoint?

APPENDIX F

LEGAL CASES of INTEREST

- **Cruz v. City of Laramie**, 239 F.3d 1183, 2001 U.S. App.Lexis 2243 (2001). Police responded to an apartment where they found the decedent naked, jumping up and down, yelling, and kicking his legs in the air. He was placed in a hog-tie restraint and subsequently died. Chan, et al. study on hog-tying is not persuasive because it focused on healthy males, not individuals with an apparent and discernible **diminished capacity**. This case did not ban the practice of hogtying an individual but limited its application to identifiable criteria.
- **Gutierrez v. City of San Antonio, et. Al.** 139 F.3d 441,1998 U.S. App. LEXIS7395 (1998). Officers arrested a man, hog-tied him in the back seat of a patrol car, where he died enroute to the hospital. The officers admit that they failed to monitor Gutierrez as they drove him to the hospital. Citing the San Diego Study and Criminal Law Update article, hog-tying presents a substantial risk of death or serious bodily harm only in a limited set of circumstances. The court found that Gutierrez enjoyed the protections of the Fourth Amendment.
- **Ashworth v. Round Lake Beach Police Department, et al.** 2005 U.S. Dist. LEXIS (N.D. Ill. 2005). Officers handcuffed a 300-pound man with his hands behind his back. Later the man exhibited signs that he was having trouble breathing, and slumped over the officer's squad car, still handcuffed. A jury could find that Defendants knowingly violated the decedent's right to due process. The officer had an obligation to move fast when he was aware that his prisoner required medication and was having trouble breathing. The officer should not have waited six minutes before an ambulance was called.
- **Weigel v. Broad**, 544 F.3d 1143 (10 Cir., 2008).
- **Lewis v. City of West Palm Beach, Florida**, 561 F.ed 1288 (11 Cir., 2009).
- **Taylor v. City and County of San Francisco**, 166 F.3d 344 (9th Cir., 1999).

The Phenomenological Role of Incident Reports

By: John G. Peters, Jr., Ph.D., CLS

Science is often used at trial when governmental entities and/or officers are sued in an arrest-related death, or are involved in a criminal prosecution. The United States Supreme Court held in Daubert v. Merrill Dow Pharmaceuticals, Inc. that to determine scientific reliability of research studies and/or data that are introduced at trial, the following five factors need to be considered by the Trier of Fact:

- Empirical testing;
- Subjected to peer review and publication;
- Known or potential error rate;
- Whether there are standards controlling the technique's operations; and,
- Whether the theory and technique is generally accepted by a relevant scientific community (Daubert v. Merrill Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)).

When thinking about laying a scientific foundation at trial, the officer's incident report is often not considered to be scientific. This is incorrect because an officer's incident report is a qualitative, phenomenological report. Leedy and Ormrod (2001) noted that "in its broadest sense, the term *phenomenology* refers to a person's perception of the meaning of an event, as opposed to the event as it exists external to the person" (p. 153). Cresswell (1994) wrote that phenomenology is "understanding the 'lived experiences'" (p. 12).

Fighting with a suspect or suspects is a "lived experience" and therefore, the officer's incident report qualifies as a phenomenological report, which can be used at trial to lay a scientific foundation. Reynard (1998) suggests the following questions be asked to determine if the reports are sound:

- Is the report firsthand?
- Where was the observer?
- Did the participant have a reason to give false or biased information?
- Is the report internally consistent?
- Can the report be validated by other independent reports? (p. 202).

Providing answers to these questions is straightforward, as the officer who was involved in the arrest-related death confrontation is reporting firsthand, and was the observer. (S)He was involved in the altercation, so it is a "lived experience." The officer has no reason to provide false or biased information, because the arrest-related death incident will be investigated by others within or outside his or her agency. The investigative reports will help to provide internal consistency about the officer's report, and will also help to validate the officer's incident report.

The importance of accuracy and thoroughness cannot be overstated. First line supervisors must be diligent and reject those incident reports that are vague and poorly written. As highlighted by Wallace

and Roberson (2009) written communication is critical in law enforcement and is often taken for granted. Officers need to revise their incident reports until they contain sufficient and necessary information to inform others accurately and honestly about an event in which they were involved. Understanding the additional role of incident reports as phenomenological reports should make first line supervisors and officers motivated to write better, more complete and more accurate descriptions about the event and their observations.

When an arrest-related death occurs, the Medical Examiner, Judge, and/or jury were not present so they must rely upon incident reports written by those who "lived or observed the experience." Therefore, incident reports become classified as phenomenological reports, because they give first-hand observation about what took place before, during, and after the struggle. In some cases, incident reports also provide analysis and interpretation of what had occurred between the suspect and the officer, or among the suspect and the officers. Incident reports help others, such as a Medical Examiner and/or a Judge and jury "[attempt] to understand people's perceptions, perspectives, and understandings of a particular situation" (Leedy & Ormrod, 2001, p. 153).

In summary, law enforcement officers' incident reports are often foundational documents attorneys can use to begin laying a scientific foundation at trial, and need to be thought of as a phenomenological document. These "lived and/or observed experience" reports are qualitative in nature, and are also often used by scholars performing qualitative research. Incident reports contain descriptions and data about the "lived experience" that involved the officer and the suspect. Phenomenology is one qualitative research methodology that is often used by expert witnesses and others, such as Medical Examiners, at trial. Too often officers' incident reports are *only* considered documents used to help educate medical examiners and others about events. However, when it is rightly classified a product of qualitative research that can be used to help lay a scientific foundation at trial, suddenly the incident report gets the significance that it deserves.

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GLOSSARY

Acidosis is an abnormal change in the acidity of the body's fluids. Higher than normal range is described as alkalosis. Lower than normal is acidosis (Myers & McGowan, 2006, p. 97).

Acute is short; not chronic (Stedman, 1990, p. 22).

Agitated Delirium is a more accurate term for excited delirium. "The individual may exhibit emotional disturbances such as anxiety, fear, depression, irritability, anger, euphoria, and apathy. There may be rapid and unpredictable shifts from one emotional state to another" (American Psychiatric Association, 2000, p. 137).

Agonal Breathing is where the body is actively dying. Breathing sounds are often described as snoring, heavy breathing; labored or exaggerated breathing; gurgling; guttural sounds; groaning; snorting; and/or gasping and the person's lips and chest may be slightly moving.

Amine "a substance formally derived from ammonia by the replacement of one or more of the hydrogen atoms by hydrocarbon or other radicals (Stedman, 1990, p. 56).

Ampere is the International System of Units (abbreviated SI) base unit of electric current. It is named after Andre-Marie Ampere one of the main discoverers of electromagnetism. Ampere. (n.d.). *Dictionary.com Unabridged (v 1.1)*. Retrieved February 06, 2008, from Dictionary.com website: <http://dictionary.reference.com/browse/ampere>

Amygdala is an almond-shaped mass of gray matter in the anterior (front) portion of the temporal lobe of the human brain. Shown in research to perform a primary role in fear and emotions (Wikipedi, [n.d.], *Dictionary.com Unabridged, v 1.1*. Retrieved February 06, 2008, from Dictionary.com website: <http://dictionary.reference.com/browse/Wikipedi>

Antipsychotic Medications "A medication (or another measure) that is believed to be effective in the treatment of psychosis. For example, aripiprazole (Abilify) is an antipsychotic medication used to treat schizophrenia." The National Institute of Mental Health (www.nimh.nih.gov; www.medterms.com/script/main/art.asp?articlekey=11993)

Association is not the same as correlation, as it focuses upon how the independent variable provides information about the dependent variable (Rubin, 1983).

Asystole is a dire form of cardiac arrest in which the heart stops beating – (there is no systole) — and there is no electrical activity in the heart. The heart is at a total standstill. An absence of contractions (Stedman, 1990, p. 146).

Autopsy in its simplest form is a data gathering process. "An examination of the organs of a dead body to determine cause of death or to study the pathological changes present" (Stedman, 1990, p. 158).

Bipolar disorder is “a mood disorder sometimes called manic-depressive illness or manic-depression that characteristically involves cycles of depression and elation or mania. Sometimes the mood switches from high to low and back again are dramatic and rapid, but more often they

are gradual and slow, and intervals of normal mood may occur between the high (manic) and low (depressive) phases of the condition. The symptoms of both the depressive and manic cycles may be severe and often lead to impaired functioning” (Stoppler, n.d; http://www.medicinenet.com/bipolar_disorder/article.htm).

Blood pH “normal blood pH varies a little between species but is of the order of 7.35 to 7.45. If the blood pH is less than 7.35, an acidosis is present; if pH is greater than 7.45, the term alkalosis is used. Although a larger variation in pH can be tolerated (pH 6.8-7.8) for a short time, recovery is often impossible if blood remains at pH 6.8 for long “ (Myers & McGowan, 2006, p. 97).

Body-worn Camera is a small, portable video recording device that is usually worn on a person’s clothing. The camera can generally record sound and can be activated by the user.

Case Research “permits the investigator to examine a current entity, or case, within its real-world context when it is bounded by time and activity” (Peters, 1999, p. 76).

Case Studies is where an investigator “explores a single entity or phenomenon (‘the case’) bounded by time and activity (a group, event process, institution, or social group) and collects detailed information by using a variety of data collection procedures during a sustained period of time” (Cresswell, 1998, p. 12; see also Yin, 1994). The individual, program, or event is studied in depth (Leedy & Ormrod, 2001, p. 149).

Catecholeamine is an amine derived from the amino acid tyrosine — examples include epinephrine (adrenaline), norepinephrine (noradrenaline), and dopamine — that act as hormones or neurotransmitters (Stedman, 1990, p. 259).

Causality looks at cause and effect. “That which produces an effect; that by which a morbid change or disease is brought about.” One author notes that death can be traced back to the birth of a person. Causality is not the same as correlation. Correlation only measures the relationship strength between two or more variables (Stedman, 1990, p. 261).

Cause (independent variable) is what produces an effect on a condition (dependent variable).

Cause of death determines how a death came to happen. What thing happened at a particular time to bring an end to an individual’s life (Downs, 2007).

Clinical significance the potential for research findings to make a real and important difference to clients or clinical practice, to health status or to any other problem identified as a relevant priority for the discipline.

Cocaine is derived from the leaves of the coca shrub; for criminal law purposes it is classified as a narcotic. “Has moderate vasoconstrictor activity and pronounced psychotropic effects; its salts are used as a topical anesthetic (Stedman, 1990, p. 321).

Cocaine-associated agitated delirium is an acute mental state caused by cocaine. This syndrome embodies four parts, which appear subsequently. They are: hyperthermia, delirium with agitation, respiratory arrest and death (Wetli, C., Mash, D., Karch, S., 1996).

Competency-based testing is performed by a qualified instructor who follows a quantitative rubric to measure a learner’s knowledge or skill about the topic.

Compression is the weight that narrows the space between opposing surfaces.

Coroner is a public “official whose duty it is to investigate sudden, suspicious, or violent death to determine the cause,” but is not required to have medical training, and generally is limited to one county or jurisdiction (Stedman, 1982, p. 354; Hanzlick, 2003).

Correlation is a statistical technique that is used to measure the strength of two or more variables and does not equal causation (Gravetter & Wallnau, 1999).

Cortical nucleus The regions described as amygdalae encompass several nuclei with distinct functional traits. Among these nuclei are the basolateral complex, the centromedial nucleus and the cortical nucleus.

Coulomb is the SI unit of electric charge. 1 coulomb is the amount of electric charge carried by a current of 1 ampere flowing for 1 second. It is named after Charles-Augustine de Coulomb (Stedman, 1990, p. 363).

Creatine kinase is an enzyme. Has an importance in muscle contraction. (Stedman, 1990 p. 367) “A CPK is a blood test that measures creatine phosphokinase (CPK), an enzyme found mainly in the heart, brain, and skeletal muscle.” “When the total CPK level is very high, it usually means there has been injury or stress to the heart, the brain, or muscle tissue” (*Internet posting, Medline Plus*).

Cue is a secondary stimulus that guides behavior either consciously or unconsciously.

Delirium is a mental state of confusion and excitement that includes disorientation for time and place with illusions and hallucinations. Develops over a short period of time (American Psychiatric Association, 2000, p. 136-137).

Delusion is a form of mental disturbance. Delusion differs from hallucination in that the latter involves false excitation of one or more of the senses such as imaginary sights, noise, taste, etc. Different types of delusions may be based on a theme; Erotomaniac Type-another person is in love with the individual; Grandiose Type-convinced of having talents, prominence or is a deity; Jealous Type-believes a spouse or other is being unfaithful based on imagined or loosely related

coincidences; Persecutory Type-the person believes they are followed, spied on, poisoned or harassed; Somatic Type-involves bodily function or sensations. May believe that an odor emits from a part of their body or feeling an infestation of insects or parasites (American Psychiatric Association, 2000, p. 323-324).

Dependent variable is the variable that is hypothesized to have a relationship (outcome, such as a change in lactic acid) with the independent variable (length of ECD application) (Graziano & Raulin, 2000, p. 420; Peters, forthcoming, 2009).

Diagnosis is the determination of the nature of a disease through the act of careful examination that includes study of signs, symptoms, abnormal attitudes and habits, and the valuation of facts (Stedman, 1990, p.428).

DICRA 2000 (*Death in Custody Reporting Act*) is a federal law requiring the reporting the death of any person who is in the process of arrest, is en route to be incarcerated, or is incarcerated in any municipal or county jail, State prison, or other local or State facility (including juvenile facilities).

Dopamine An important neurotransmitter (messenger) in the brain. Dopamine is classified as a catecholamine (a class of molecules that serve as neurotransmitters and hormones) (DiMaio, 2006, p. 46).

Drive stun is the removal of a TASER® electronic control weapon's cartridge and then placing the device's contact points against a target area and pulling the trigger.

DSM-V is an acronym for the **Diagnostic and Statistical Manual of Mental Disorders**, Fifth edition, published by the American Psychiatric Association in 2013.

Electric current is the flow of electric charge. The most familiar artificial form of electric current is the flow of conduction electrons in metal wires.

Electrolytes are minerals (magnesium, potassium, sodium, and calcium) that are lost through perspiration or other forms of dehydration, particularly in heat stress situations.

Enzyme is a substance that acts as a catalyst to induce chemical changes in other substances. Every chemical reaction in living organisms is facilitated by an enzyme (Stedman, 1990, p. 519).

Epilepsy is a chronic disorder involving brain dysfunction, characterized by episodes of convulsions, alteration of consciousness and abnormalities of behavior (Stedman, 1990, p.523).

Epinephrine A substance produced inside of the adrenal gland. It causes quickening of the heart beat, strengthens the force of the heart's contraction, opens up the airways (bronchioles) in the lungs and has numerous other effects (Stedman, 1990, p. 525).

Excited delirium is a descriptive phrase used when delirium becomes combative or violent in nature (DiMaio, 2006, p.1).

“**Excited delirium syndrome** involves the sudden death of an individual, during or following an episode of excited delirium, in which an autopsy fails to reveal evidence of sufficient trauma or natural disease to explain the death. In virtually all such cases, the episode of excited delirium is terminated by a struggle with police or medical personnel, and the use of physical restraint” (DiMaio, 2006, p.1).

Experiment is where the investigator (researcher) “tests cause-and-effect relationships in which the researcher randomly assigns subjects to groups” (Cresswell,1994, p. 117).

Experimental design includes the procedures and methods “that defines a research study at the experimental level of constraint” (Graziano & Raulin, 2000, p. 421).

Fallacies are errors in reasoning (Peters, forthcoming, 2009; Aldisert, 1997; Epstein, 2002).

Historical evidence refers to the history of the person or the event. This information is important many times to make sense out of what happened (Leedy, 1974, p. 68).

Hog tying is the pulling of a person’s arms behind the back and then linking them together with the ankles, which limited research shows to impact a person’s ability to breathe normally, and which has been found to be the cause or a precipitating cause of death in humans (Ross & Chan, 1006, p. 39).

Hyperactive delirium is an agitated delirium. Behavioral cues: agitated, fearful (American Psychological Association, 2000, p. 137).

Hyperthermia is a rapid onset of high body temperature (with muscle rigidity); the opposite of hypothermia (Stedman, 1990, p. 746).

Hypoactive delirium is a quiet delirium. Behavioral cues: withdrawn, apathetic, a.k.a. “flat” (American Psychiatric Association, 2000, p. 137).

Hypothalamus is a part of the brain that lies below the thalamus, forming the major portion of the ventral region of the diencephalon and functioning to regulate bodily temperature, certain metabolic processes, and other autonomic activities (Stedman, 1990, p. 754).

Hypothermia is a decrease in body temperature below normal; the opposite of hyperthermia (Stedman, 1990, p. 755).

Hypothesis is “a logical supposition, a reasonable guess, an educated conjecture” that attempts to provide a possible explanation for the subject under investigation (Leedy & Ormrod, 2001, p. 6).

Hypoxemia is when the oxygen content of the blood falls below normal and levels of carbon dioxide may rise (hypercapnia). Severe hypoxemia, with or without hypercapnia, is known as respiratory failure (Stedman, 1990, p. 756).

Hypoxia is levels below normal of tissues, arterial blood (Stedman, 1990, p. 756).

Hypoxic is the lack of oxygen in the blood. Characterized by hypoxia (Stedman, 1990, p. 756).

Illusion is a form of mental disturbance that misinterprets something that is seen, heard, tasted, touched, or smelled. Illusion differs from hallucination in that the latter has no source in fact (Stedman, 1990, p. 764).

Independent variable is what is manipulated by the researcher (e.g., length of ECD application) to see if it affects the dependent variable (e.g., change in lactic acid).

Instantaneous death occurs within five minutes of the onset of symptoms.

Manner of death is why the cause came to be. There are five manners of death, *Natural*, *Accidental*, *Suicide*, *Homicide*, and *Undetermined*. *Natural* is just that, natural. *Accidental* is due to the unintended actions of one's self or another. *Suicide* is due to the deliberate actions of one's self. *Homicide* is due to the deliberate actions of another. *Undetermined* is undetermined (Downs, 2007, p. 45).

Mechanical asphyxia is asphyxiation because of improper positioning of the restrained person. It can also be caused by applying a neck hold (Ross & Chan, 2006, p. 43).

Mechanism of Death is how the cause of death worked to be incompatible with life. Cardiopulmonary arrest is a mechanism of death.

Medical Examiner medical-legal professional appointed to an office who determines cause and manner of death. Deaths handled by the Medical Examiner generally involve; deaths due to violence; suspicious deaths; and sudden and unexpected deaths (Downs, 2007, p. 44).

Meta-analysis is when researchers follow a prescribed "set of procedures for summarizing the quantitative results of multiple studies . . ." (Cooper & Lindsay, 1998, p. 315).

Methamphetamine is an amine derivative of amphetamine, used in the form of its crystalline hydrochloride as a central nervous system stimulant, both medically and illicitly. Methamphetamine has greater effects on central nervous system than amphetamines (Stedman, 1990, p.956).

Mixed delirium is the fluctuation between hypoactive and hyperactive delirium (American Psychiatric Association, 2000, p. 137).

Morbidity can refer to: the state of being diseased; the degree or severity of a disease; the prevalence of a disease; the incidence of a disease (Stedman, 1990, p.981).

Morphology refers to the form and structure of plants and animals (Stedman, 1990, p.982).

Mortality may refer to: The quality of being mortal or susceptible to death; the opposite of immortality. Mortality rate, a measure of the number of deaths in a given population (Stedman, 1990, p. 982).

Myocardial necrosis refers to irreversible destruction of myocardial (heart muscle) cells.

Myocardial infarction is a term used to describe irreversible injury to heart muscle. Synonym: heart attack (Kroll, 2007).

Myoglobin is a single-chain globular protein it is the primary oxygen-carrying protein of muscle tissues (Stedman, 1990, p. 1016).

Neuroleptic medication is a term that refers to the effects of antipsychotic drugs on a patient, especially on his or her cognition and behavior. Neuroleptic drugs may produce a state of apathy, lack of initiative and limited range of emotion. In psychotic patients, neuroleptic drugs cause a reduction in confusion and agitation and tend to normalize psychomotor activity (American Psychiatric Association, 2000, p.735, 795).

Neuroleptic malignant syndrome is a medication-induced movement disorder. Commonly referred to as NMS. Usually associated with the use of neuroleptic medication, NMS symptoms usually develop over a 24-72 hour period with the following characteristics: muscular rigidity, elevated body temperature, altered consciousness (confusion through coma), incontinence, and/or dysfunction of the automatic nervous system that controls the heart rate, blood pressure, and other involuntary functions (American Psychiatric Association, 2000, p.735, 795).

Neurons are the primary cells of the nervous system. They are found in the brain, the spinal cord and in the nerves and ganglia of the peripheral nervous system (Stedman, 1990, p. 1047).

Neuropsychiatric is the medical study of disorders with both neurological and psychiatric features (Stedman, 1990, p. 1049).

Neurosis is a less severe emotional disturbance when compared to a psychosis. Anxiety is the primary characteristic without exhibiting gross distortions that accompany psychosis (Stedman, 1990, p. 1049).

Neutral position is when a person is lying down. Ordinarily, the neutral position does not significantly interfere with a person's ability to breathe. The neutral position may compromise a person's breathing 10% to 11%.

Norepinephrine is a hormone produced by the adrenal glands that also acts as a neurotransmitter for nerve cells. Part of the fight-or-flight response (Stedman, 1990, p.1061).

Phenomenology refers to a qualitative research category that is often compiled by those who have lived or observed the experience. “In its broadest sense, the term *phenomenology* refers to a person’s perception of the meaning of an event” (Leedy & Ormond, 2001, p. 153).

Population is a clearly defined set of objects, people, animals (such as swine), manufactured items, food, etc.).

Postictal is occurring after a seizure or an attack (Stedman, 1990, p. 1245).

Positional asphyxia is when a person’s body position (e.g. lying prone) interferes with respiration, resulting in asphyxia (Ross & Chan, 2006, p.43).

Potassium a necessary electrolyte facilitates nerve impulse conduction and the contraction of skeletal and smooth muscles, including the heart. It also facilitates cell membrane function and proper enzyme activity. Levels must be kept in a proper (homeostatic) balance for the maintenance of health (Stedman, 1990, pp. 1246, 1247).

Pseudoscience is when people and/or organizations distort scientific knowledge and procedures to make it look like the findings are scientific, but when examined lack the rigor of scientific procedures (Graziano & Raulin, 2000, p. 430).

Psychogenic death is when a person is frightened to death. This should not be confused with myocardial stunning.

Psychological autopsy is a procedure for investigating a person’s death by reconstructing what the person thought, felt, and did preceding his or her death. This reconstruction is based upon information gathered from personal documents, police reports, medical and coroner’s records, and face-to-face interviews with families, friends, and others who had contact with the person before the death.

Psychosis is a severe emotional disturbance when compared to a neurosis (Stedman, 1990, p. 1286).

Psychostimulants is a drug having antidepressant or mood-elevating properties (Stedman, 1990, p. 1287).

Reliability focuses upon how reliable the findings are (how free are the findings from errors) (Peters, forthcoming, 2009). If another study were done, would the second study yield consistent findings?

Research is when the investigator (researcher) follows a “systematic process of collecting and analyzing information in order to increase of the phenomenon” under study (Leedy & Ormrod, 2001, p. 4). It is not the transportation of information from one source to another place.

Research process follows the following systematic process: Identification of a problem; Development of a hypothesis(es) or research question(s); Develop a research methodology; Identify how information collected will be measured; Collect data; Analyze these data; Report the findings and attempt to generalize the findings (Nachmias & Nachmias, 1981; Leedy & Ormrod, 2001; Cresswell, 1994).

Respiration is what most people call breathing. It is the interchange of gases between the person and his or her environment (Stedman, 1990, p. 1347).

Reuptake inhibitors there are two categories licit and illicit. In the illicit category would be cocaine, methamphetamine, PCP and ecstasy. These illicit stimulants prevent the reuptake of the neurotransmitter dopamine. The licit drugs are a group of anti-depressants which selectively prevent the reuptake of the neurotransmitter serotonin. These drugs are primarily used to treat mood disorders and depression.

Rhabdomyolysis The breakdown in muscle fibers resulting in the release of muscle fiber contents (myoglobin) into the bloodstream. Disorder may be caused by damage to skeletal muscle especially trauma. Risk factors include use of cocaine, amphetamines, PCP and other illicit or licit drugs (Stedman, 1990, p. 1356).

Restraint asphyxia is a condition that is induced by compression, restriction, and position that interferes with a person’s respiration and creates a situation that leads to death (Ross & Chan, 2006, p.45).

Sample is a portion of the population from which inferences are drawn (Peters, 2009).

Schizophrenia a common type of psychosis, displaying confusion, delusions, hallucinations, and often extensive withdrawal from associates (Stedman, 1990, p. 1390).

Science “refers to the disciplines involved, to the scientists within them, their scientific societies, and their publications” (Sieber, 1998, p. 152). It is also a “way of knowing about the universe around us, which combines rationalism and empiricism to form a system that places great demands on procedures, data, and theories” (Graziano & Raulin, 2000, p. 432).

Sepsis commonly called a “blood stream infection.” The presence of bacteria or other infectious organisms or their toxins in the blood or in other tissue of the body. Sepsis is a serious situation, a life-threatening disease calling for urgent care (Stedman, 1990, p. 1405).

Statistical significance In statistics, a result is called **significant** if it is unlikely to have occurred by chance. “A statistically significant difference” simply means there is statistical evidence that there is a difference; it does not mean the difference is necessarily large, important or significant in the usual sense of the word.

Sudden death is defined by the World Health Organization as cardio-respiratory collapse occurring within 24 hours of the onset of symptoms. In contrast, others define it as one hour for death to occur.

Sympathetic nervous system The sympathetic nervous system (SNS) is a branch of the autonomic nervous system. It becomes more active during times of stress. Its actions during the stress response comprise the fight-or-flight response (DiMaio, 2006, p. 45).

Syndrome is when a number of symptoms occur together, characterizing a specific disease (Stedman, 1990, p. 1522).

TASER® is a registered trademark of Axon Enterprises, Inc. (f/k/a Taser International, Inc.), and refers to Thomas A. Swift Electronic Rifle. It is an electronic control weapon that can be fired in probe mode or used in drive-stun mode (without a cartridge).

Temporality focuses upon time and is often applied incorrectly in causation analysis (Peters, 2009).

Theory of Generalizability focuses upon the reliability of research findings and how those data relate to the generalized universe. A minimum sample between 30-50 is statistically required to generalize the findings to the population (Cascio, 1998, p. 95).

Thermoregulation is the ability of an organism to keep its body temperature regulated, act like a thermostat (Stedman, 1990, p. 1590).

Tonic-clonic seizure is the classic type of epileptic seizure consisting of two phases to a tonic-clonic seizure — the tonic phase and the clonic phase. In the tonic phase the body becomes entire rigid, and in the clonic phase there is uncontrolled jerking. Tonic-clonic seizures may or may not be preceded by an aura, and are often followed by headache, confusion, and sleep. They may last mere seconds or continue for several minutes. Also known as a grand mal seizure. If a tonic-clonic seizure does not resolve or if such seizures follow each other in rapid succession, seek emergency help.

(<http://www.mayoclinic.com/health/grand-mal-seizure/DS00222/DSECTION=2>)

Toxicology “The science of poisons, including their source, chemical composition, action, tests and antidotes” (Stedman, 1990, p. 1613).

Toxicology screen This test is often done in emergency medical situations. It can be used to evaluate possible accidental or intentional overdose or poisoning. It may help determine the cause of acute drug toxicity, to monitor drug dependency, and to determine the presence of substances in the body for medical or legal purposes.

(www.nlm.nih.gov/medlineplus/ency/article/003578.htm)

Troponin Cardiac troponins are released within the first few hours after the onset of myocardial necrosis, typically reaching a peak concentration 12–24 hours after myocardial infarction. In this regard the time course is similar to creatine kinase, but troponins, because of their long plasma half-life, stay raised when creatine kinase has returned to values within the reference range. In contrast to creatine kinase and CK-MB, cardiac troponins are undetectable in normal healthy subjects using most of the current assay systems available.

Transient compression is the result of kneeling on a person back during handcuffing or control.

Validity focuses upon whether the experiment really tested what it was to test. There are five categories of validity, which make up this major concept in research design (Peters, 2009).