Autism Spectrum Disorders and EMS: The Essentials
Teacher’s Companion

Background:
Autism Spectrum Disorders (ASD) are on the rise nationwide, and so are encounters between EMS and members of this special population. This short presentation was put together to equip EMT’s with some basic and pertinent tools to better identify individuals with ASD and tips on how to manage these scenarios effectively. The course is designed to take roughly 20 minutes to cover the information, but more time may be allotted for discussion if warranted. This document covers the teaching points for each slide as well as some background information and resources so the instructor can research more information about this complex disorder if they wish. Thank you for taking the time to help your students be more effective and compassionate caregivers.

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**Please take a moment to fill out this very short course survey at http://www.surveymonkey.com/s/7FQ8F52 so we can track distribution of the course as well as make improvements in the future. THANK YOU!**

Course Goals:

- Enable EMT’s to recognize certain traits and behaviors that may be diagnostic of a person with an Autism Spectrum Disorder.
- Learn tips that will increase the chance of having a positive encounter and minimize unnecessary stress for both patients and providers.
- Recognize that the level of impairment between any two people with ASD may vary greatly and no class can replace good judgment and compassion.

Slide 1: Case Scenario
This case illustrates some of the diagnostic traits commonly seen in Autism Spectrum Disorders (ASD) as well as potential challenges faced by first responders trying to provide assistance. What clues point towards ASD? What strategies can be used to assist this patient? Present the case to the class, but have them wait until the end of the talk to discuss forming a differential diagnosis for ASD and some ideas on how to manage this call.

Slide 2: Autism Spectrum Disorders and EMS: The Essentials
This course isn’t designed to teach everything about autism. It focuses on aspects of ASD that are essential for today’s EMS provider

Slide 3: Background Info
Autism Spectrum Disorders are a class of neurodevelopmental disorders that focus on 3 main areas: qualitative impairments communicating, ritualistic and repetitive behaviors, and impaired social skills. People who have ASD are born with them and it is a lifelong condition. While there are many theories as to the underlying causes we don’t yet know what causes ASD or why there has
been such an alarming rise in its prevalence over the last two decades. We know that vaccines are not a credible culprit. There is most likely a dual genetic and environmental component to the disease.

Students should know that the chances are good that they will encounter a person with an ASD in their careers.

**Slide 4: Video #1** *(if the movies don’t start automatically you may need to direct your computer to the movie files included on the disc by double clicking on the slide image)*

Encourage students to observe differences between Danny and his brother (both of whom have autism), his mannerisms (rocking, difficulty expressing thoughts verbally, wandering eyes) and also note they suffer no outward sign of a disability.

**Slide 5: Tips to Identify ASD**

In a recent poll by the Autism Society of Boulder County caregivers and parents of people with ASD listed their number one concern when dealing with first responders was that they wouldn’t recognize that their loved one had autism, and therefore would be mistreated or suspected of being intoxicated. This unfortunately happens far too often (see links below for examples). While most of the high publicity cases seem to involve police rather than EMS one well-educated EMT who keeps their head on scene could intervene and prevent a tragedy. Encourage students to keep this information in the back of their minds and be open to the idea that a patient may not be on drugs or alcohol; rather a neurodevelopmental disorder may be the root of their behaviors.

Some of the common mannerisms of people with ASD range from subtle (inappropriate attire or giggling, uncomfortable with eye contact—often seen as a suspicious behavior by first responders) to more overt (rocking back and forth repetitively, flapping hands or arms, repeating what is said to them, or obsessing about an unrelated topic or item). The EMT should always be on the lookout for medical ID tags or other tips about the person’s condition (sometimes people with ASD will have cards tied to their shoelaces or even temporary tattoos as the feeling of wearing traditional bracelets may be intolerable).

News articles about ASD encounters gone awry:


**Slide 6: Probable Encounters with EMS**

This slide provides examples of some of the common EMS interactions with people with ASD. First responders may be called to help locate a missing person with ASD or the patient may have been the victim of a crime—both are common scenarios. Some people with ASD have a tendency to wander away from their caregivers (not unlike Alzheimer’s patients)—it is crucial to engage the caregivers for information about likely places they may have gone. Alternatively, some people on the spectrum don’t have appropriate social boundaries and may engage in what seems like innocent behavior to them that may be offensive or inappropriate to others.

**Slide 7: Video #2**

This video reiterates the possibility of wandering away from caregivers and gives students an opportunity to empathize with a worried parent. There are many examples of this behavior. One
local family’s child boarded the light rail system by himself and was later found on top of one of the trains trying to catch a ride!

**Slide 8: Preparation**

Encourage “people first” language as well as a calm and patient approach. People with ASD are likely to become nervous around EMS (like most people) and it may take them longer to arrange their thoughts or respond to directions. People with ASD may require extra caregivers to attend to their needs in a crisis scenario (fire, disaster, etc.), as they may not recognize potential dangers. Also be prepared to treat common co-conditions, such as epilepsy. Physical contact can be very uncomfortable for some individuals with ASD, and many are especially sensitive to touch around the neck and head. Suggest doing physical exams toe-to-head to build trust and calm the patient.

**Slide 9: Tips for Encounters**

This slide has some tips that may prove invaluable in an encounter. Firstly, if the caregiver is present try to go through them for all interactions. They are the expert on this patient and can be the key to keeping the person calm and cooperative. Many individuals with ASD have severe sensory integration issues. This means that they may be overstimulated by loud noises, bright lights, etc. Others may crave intense sensory input during times of stress (may try squeezing their head into a small space, or even slap themselves repeatedly, etc.). Some patients may lose the ability to integrate more than one sense at a time during periods of stress. Their ritualistic behaviors are often the only means of coping they know and should be allowed to continue if they present no danger to themselves or others. Also, concise and clear communication has a better chance of achieving compliance.

Emphasize again that ASD is too varied for any “silver bullet” approach, but that these are good suggestions to try (can be helpful for other neurodevelopmental disabilities as well). Also stress to students that these encounters may be frustrating if they focus too heavily on “getting the job done” and don’t take the proper steps to minimize stress to the patient.

**Slides 10-12: Videos 3, 4 & 5**

Self-explanatory tips for first responders

**Slide 13: Encounters Gone Wrong**

Stressful scenarios may trigger aggressive and out of control behavior termed a “meltdown.” Engage the help of caregivers if available. Increase space between responders and the person (geographic containment) and attempt de-escalation. Often the patient will calm down by themselves if given some time and space. Try to remain calm and portray a positive and caring demeanor. If restraints are used the patient is likely to remain combative while restrained—they may be unable to calm themselves and contract for safety like many typical patients. Use only as a last resort. If the patient is endangering themselves or others apply the most gentle restraints available and progress with caution.

***One particular hazard for this population is the risk of positional asphyxia. It is common for people with ASD to have under-developed trunk and diaphragm muscles. Never restrain these patients prone or with their arms crossed over their chest as they may lose the ability to breathe adequately.*** It is common practice to avoid this type of restraint in most EMS agencies, but law enforcement officers may not be so cautious (the majority of officers who took a basic ASD training course reported their most useful tip was avoiding positional asphyxia). Again, an alert EMT on-scene could avert a tragedy. Also, encourage students to be cautious during any takedowns, as many people with ASD may not experience pain as we do—many have an
unnaturally high pain tolerance. They may not let the EMT’s know if they have sustained an injury, so a thorough exam after any altercation is essential.

**Slide 14: Rescue Tips**
Caregivers may be forced to turn their homes into fortresses in order to contain a patient who has a tendency to wander. Expect Plexiglas windows with bars, etc. If you are aware an individual with ASD lives in a residence where a rescue is required anticipate difficult entry and search thoroughly. Be prepared for a fight as the patient may try to resist extrication (remember they may not recognize danger or that the EMT is there to help). Extra manpower may be warranted. Never attempt a rescue from heights if you are not secure. Try to do whatever possible to keep person calm. Suggestions include wrapping them up in a blanket, removing distractions/danger from the area rather than forcing the person to leave their home, etc.

**Slide 15: What to remember**
This is the “take-home” points slide. If the EMT leaves with these suggestions in their bag of tricks they have a great chance of managing a difficult encounter in a way they will be proud of. These points are summed up on the cards to be handed out with the presentation.

***Now, go back to the clinical scenario*** and discuss how the class could’ve approached both from a diagnostic view as well as ideas how to help this patient:

**Diagnostic hints:** man doesn’t recognize danger of traffic or the presence of EMS as being there to help; rocking and hand-flapping; dislikes physical contact and attempts to run from scene; high tolerance for pain (seems unaware of laceration)

**Some suggestions for interventions:**
- If possible make scene safe (divert traffic) instead of attempting to remove patient from scene
- Use simple and clear commands (“come here” “sit down”) with a calm tone
- Wrap man gently in a blanket to comfort and contain
- Turn down radio volume, turn off lights & sirens, limit crowds
- Perform toe-to-head exam and explain what you are going to do before you do it
- Allow patient to continue behaviors (if safe)
- Be aware of co-morbidities (i.e. be prepared to treat seizure, etc.)

Perhaps challenge your students by elaborating on the clinical scenario. Tell them the patient is becoming combative and see if they can come up with a compassionate solution rather than attempting to restrain. If they decide restraints are warranted quiz them about areas of concern when engaging the patient. There are no right or wrong answers—the goal is to get the class thinking about ways to deal with a potentially very difficult situation.

**If you have questions about this course, would like to make suggestions about its content or would like some more information about autism spectrum disorders please contact:**
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If you feel the information in this course is valuable, please help us spread the word to your EMS colleagues!

Visit http://www.jfkpartners.org/default.asp?page=87 to learn about more resources for EMT’s, including information about a free one-hour CEC course.

Further Resources for Instructors:

- Autism EMS  http://www.autismems.net/13401/index.html
- The Autism Society of America  http://www.autism-society.org/site/PageServer
- The Autism Society of Colorado  http://www.autismcolorado.org/
- EMS Responder.com  http://www.emsresponder.com/article/article.jsp?id=3232&siteSection=12
- L.E.A.N. on Us  http://www.leanonus.org/
- Autism 101 for EMS Practitioners  http://www.papremisealert.com/id71.html
- AWAARE Coalition  http://www.awaare.org/

References:

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Introduction to Autism Disorders, Dean Kelble 2009-2010
EMS Implications for Treating the Autistic Patient, Thomas Dunn, PhD 2010

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