

Chemical Assisted Suicides



**A New Threat to Public Safety
Personnel**

v1.0

Firefighters Support Foundation

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About FSF



To prepare first responders and other public safety officials with some basic tools and information needed to develop guidelines for responding to these chemical assisted suicides.

Course Goal

- ❖ The guidelines and procedures discussed in the presentation should not replace common sense and experience.
- ❖ **It is impossible to plan for every situation.**
- ❖ New “best practices”, lessons learned and training become available on an on-going basis. These planning and training efforts should be updated on a regular basis.

Course Note

Please remember that this information should ONLY be used as an educational guide and you should ALWAYS use your local training, guidelines, and procedures!

Remember!

- ❖ A rapid, safe and successful response to these unusual situations requires some planning and preparation.
- ❖ The likelihood of a chemical assisted suicide incident is low, BUT public safety officials must prepare for these situations. No agency, big or small is immune to these incidents.
- ❖ It can be anticipated that the number of these incidents will rise as more people become aware of the process.

Introduction

- ❖ The purpose of this awareness training is to provide “situational awareness” to first responders which may come in contact with this hazardous and deadly method of committing suicide.
- ❖ These situations are commonly occurring in vehicles, closets, laundry rooms and residential bathrooms, and other enclosed areas where a small amount of gas can quickly reach lethal concentrations.

Emerging Threats

- ❖ There have been several documented cases in the United States of the use of readily available household chemicals as a method to commit suicide that can expose responders to a significant health and safety risk.
- ❖ The method involved mixing two readily available, household chemicals to produce a flammable, toxic gas. The resulting gas causes the victims to go unconscious and suffer heart failure.

Emerging Threats (2)

- ❖ This method of suicide, sometimes commonly referred to as “detergent suicide,” is being seen more frequently in the U.S.
- ❖ Instructions are readily available on the internet and some sites will encourage anyone planning to use this method to provide appropriate warnings to people who might encounter or respond to their situation about the presence of the deadly gas.

Emerging Threats (3)

- ❖ Involves mixing common household chemicals to create hydrogen sulfide, hydrogen cyanide, chlorine or other gases which can be “immediately dangerous to life and health” if inhaled in small, enclosed locations.
- ❖ DOT Response Guidebook 111 (Mixed Load/Unidentified Cargo)

Emerging Threats (4)

- ❖ First responders can be the first exposed to this hazard.
- ❖ Typically, persons committing this act have left hazardous warning signs displayed to anyone approaching the scene.
- ❖ **This is not always the case.**



Responder Safety

- ❖ Dispatchers and call takers should warn callers not to approach, or enter, vehicles, or rooms where unresponsive people may have attempted chemical suicide.
- ❖ The caller may say there are warning signs on the vehicle or location but may not volunteer this information.

Dispatch Considerations

- ❖ “Warning signs” may be removed, become detached or dislodged, or blow away before responders arrive on scene.
- ❖ The caller may not say anything about a strange or unusual smells unless prompted when they call 911.
- ❖ Proper initial questioning may yield information vital to the safety of the first responders.
- ❖ The information must be immediately passed on to the first responders by the 911 personnel.

Dispatch Considerations (2)

- ❖ While using proper PPE and SCBA carefully size up any situation involving an unresponsive person in an enclosed space.
- ❖ Subject appears unconscious and unresponsive.
- ❖ Tape or plastic over vents and windows.

Warnings/Indicators: Vehicle

- ❖ Suicide note visible or posted.
- ❖ One or more posted “warning signs”.
- ❖ Buckets, pails, pots or coolers in the vehicle containing a variety of chemicals.
- ❖ Empty containers of chemicals in or around the vehicle.
- ❖ Smell of rotten eggs or unusual odors.

Warnings/Indicators: Vehicle (2)

Full firefighter turn out gear (TOG) and SCBA can be utilized for initial approach and/or rescue based on scene size-up and indicators.



Approach

- ❖ A chemical assisted suicide becomes an emergency response and a crime scene at the time it is discovered.
- ❖ The Public Safety Official who discovers a chemical assisted suicide is considered the “first on-scene”
- ❖ This incident is to be considered a CRIME SCENE and should be treated as such!

First On-Scene

- ❖ Survey the exterior and interior of the vehicle
- ❖ Determine responsiveness of subject
- ❖ Conscious or unconscious
- ❖ Appears to be breathing –chest rise and fall
- ❖ If the subject is conscious can they open the door and exit the vehicle. Have the subject walk / crawl away from vehicle to fresh air.
- ❖ Be careful when treating the patient due to the “off gassing” from the subjects clothing and exhaled breaths.
- ❖ If the subject is unresponsive and there is no apparent breathing for 30 seconds to a minute stand by for Haz-Mat and back away from the vehicle.
Follow local response guidelines!

Response to Vehicle Incident

- ❖ Consider wind speed and direction when determining the need to evacuate nearby locations and structures.
- ❖ In a dorm or apartment building, consideration should be given to evacuating the entire floor or building.

Response Considerations

- ❖ Any exterior visual signs as you approach the residence or apartment.
- ❖ “Warning Signs” posted on the front of the house or apartment. Doors may taped or sealed from the inside.
- ❖ Other persons from inside the location complaining of difficulty breathing.
- ❖ The smell of rotten eggs or other unusual odors in the area that gets stronger as you approach the location.
- ❖ Be prepared to evacuate the residence or apartment building.

Warnings/Indicators for Structures

- ❖ If there's a possibility the victim is sleeping or intoxicated, attempt to wake them with a vehicle public address system, bullhorn or siren.
- ❖ If they cannot be awakened, responders should perform a thorough recon before entering the space to assist the victim using binoculars or spotting scopes.

Response Considerations (2)

- ❖ Signs may not be easily detected or understood by other people – including first responders!
- ❖ Signs may be hidden or obscured by condensation, frost, snow, or vapors produced by the reaction.
- ❖ REMINDER: “Victim” may not be dead and is still suicidal, thus an increased likelihood of violence.

Response Considerations (3)

- ❖ Interview anyone who may have approached the scene to learn what they saw or smelled.
- ❖ A “rotten egg” smell could indicate hydrogen sulfide.
- ❖ An almond odor is typical of cyanide compounds.
- ❖ Responders should not attempt to identify any hazardous materials using their sense of smell.

Response Considerations (4)

- ❖ If you can clearly see there are no chemical containers and mixing containers present anywhere in the space, they could be hidden from view.
- ❖ Please maintain your “situational awareness” and observe the entire scene.



Response Considerations (5)

- ❖ If chemical containers are present, attempt to identify the chemicals from labels or a sales receipts.
- ❖ The reaction may utilize an acid found in many common cleaning compounds, and a sulfide present in many paints, insecticides, and shampoo to produce Hydrogen Sulfide.

Response Considerations (6)

- ❖ The presence of containers of potassium cyanide, or cyanide compounds would indicate a reaction that produces hydrogen cyanide.
- ❖ This is less common than the hydrogen sulfide reaction as the cyanides are not as easily obtained but have been emerging as a threat.

Response Considerations (7)

- ❖ Air monitoring and detection can be used to determine the presence or absence of hydrogen sulfide, hydrogen cyanide, chlorine gas or other materials.
- ❖ A small hole may be punched in a car or structure window, or a probe, or colorimetric tube inserted in the gap between a door to the room and the floor.
- ❖ A properly trained and equipped hazardous materials team may be the best option for these tactics.

Response Considerations (8)

- ❖ Both hydrogen sulfide and hydrogen cyanide are flammable.
- ❖ There have been no incidents of fire reported with these incidents at this time.
- ❖ Concentrations may not typically reach the LEL (Lower Explosive Limit) except at close proximity to the mixing containers.
- ❖ Responders should eliminate ignition sources whenever possible.

Response Considerations (9)

- ❖ Vapors inside the space should be ventilated to the outside.
- ❖ Ensure no one will be endangered by the vapors before using natural or forced ventilation to air the space out.
- ❖ Positive pressure ventilation can be used to reduce vapors in a structure.
- ❖ The reaction may restart if the bucket is moved.

Response Considerations (10)

- ❖ Clothing should be removed and double-bagged.
- ❖ Contaminated clothing and PPE should be laundered before being re-used.
- ❖ If alive, the victim should be immediately stripped and decontaminated with soap and water before being transported from the scene.

Field Decontamination

- ❖ Responders must initially utilize emergency decon for rescue operations.
- ❖ Deceased victims should be covered by a sheet and may require decontamination.



Field Decontamination (2)

- ❖ The Saline County Criminal Justice Training Center: Chemical Suicides First Responder Safety Presentation.
- ❖ National Hazardous Materials Fusion Center, Chemical Assisted Suicides: Responder Information Sheet
- ❖ Hampden County Sheriffs Dept Chemical & Detergent Suicides Presentation
- ❖ Federal Bureau of Investigation (FBI), WMD Directorate, WMD Operations Unit, WMD THREAT CREDIBILITY ASSESSMENT: HYDROGEN SULFIDE GAS THREAT

References

Thank you & be safe!

