

Hazmat 88 Chronicles

Case Studies from FLFR Hazmat 88



Situational Awareness for All Crews Chemical Assisted Suicide

HM88 & RE53 assist the 2nd Battalion on an apparent Chemical Suicide

On August 30th, 2013, C Shift crews responded to an unresponsive person found sitting in his vehicle. On both sides of the car were signs taped to the inside windows that read "**Poison Gas 911**". A Good Samaritan trying to help the victim opened the door and was immediately greeted with toxic fumes escaping from the vehicle. The victim had been deceased for sometime.

Originating in Japan, this type of suicide (often referred to as "**detergent suicide**") has received much attention in the last 5 years since the first case in the US in 2008. The chemicals needed and how to mix them is easily found on the web. The combination of toilet bowl cleaner (which contains hydrochloric acid) with certain pesticides produces a toxic gas. In this case, the gas was **hydrogen sulfide** (or a close sulfur-based derivative.)

Hydrogen sulfide (H₂S) is a flammable, colorless gas with a characteristic odor of **rotten eggs**. The primary route of exposure is inhalation. The lungs rapidly absorb the gas. Labored breathing occurs shortly after the gas is inhaled and respiratory paralysis soon follows. Death will occur by asphyxiation unless the person is removed immediately to fresh air and resuscitated.

Continuous exposure to H₂S can dull a person's ability to smell the gas even though it is still present (**olfactory fatigue**.) The higher the concentration, the quicker this phenomenon occurs. Don't rely on your sense of smell to tell you if you are in danger or not!!! **SCBA!!!!**

How many calls have you responded to for a person passed out behind the wheel??? Keep your eyes open and your wits about you...



These are the two chemicals found inside the vehicle that had been mixed to form toxic hydrogen sulfide. When the car door was opened, a bystander was exposed to the remainder of the gas that killed the victim. The person behind the wheel was deceased and the exposed patient was brought to the ER after he was decontaminated.

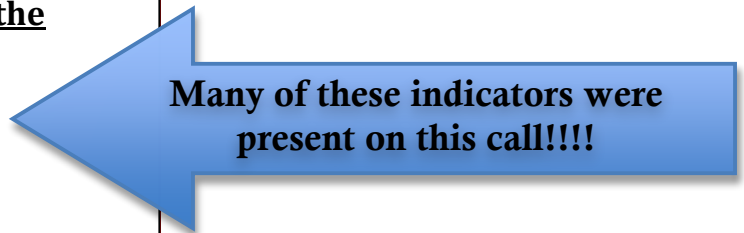


Below are key indicators of potential chemical or detergent suicide scenes (www.fema.org):

- **Unresponsive subject inside the vehicle** Subject committing suicide with the proper chemical mixtures will be dead instantly.
- Subject **wearing goggles or gloves** to prevent chemical burn before his or her death
- **Warning signs (such as HAZMAT or SUICIDE)** taped to the window or door of a vehicle or room
- **Yellow/Green or white residue on a vehicle's seat or dashboard** This residue has been found in almost all chemical suicide cases
- Windows **fogged or tinted** with yellow/green residue
- **Smell of rotten egg or sulfur, indicating the presence of hydrogen sulfide**
- Smell of **bitter or burnt almonds**, indicating the presence of **hydrogen cyanide**
- **Empty household cleaning containers** on the floorboard or seat of a vehicle
- One or more **large buckets visible**
- Vehicle's inside **door handles removed** which prevents subject who has changed his or her mind from stopping the suicide process
- **Duct tape, plastic or towels to cover air vents, windows and doors.** This prevents the deadly chemical mixture from seeping out

Here are some good points to remember when presented with what appears to be a Chemical Suicide:

- **This is a Hazmat call! Request Hazmat!**
- **This is a Hazmat call! Establish a Hot Zone!**
- **This is a Hazmat call! If the car door is open, chance of exposure to residual poison gas is high – wear your SCBA!**
- **This is a crime scene! Request PD! Don't mess with the evidence!**
- **Assess any exposed patients – decontaminate if exposed!**



Many of these indicators were present on this call!!!!

Don't forget - If you are transporting a patient that has been contaminated, it is usually the hospital's policy to decontaminate that patient **AGAIN** before they enter the ER. **Give them PLENTY of notice before you get there** – if you don't you may find yourselves waiting on the ramp with a critical patient until they set up their equipment!

Stay safe out there!

- Your Training Bureau

(ROIC Publications H2S Suicide, www.osha.gov H2S Fact Sheet, NYtimes.com)