CHEMICAL SUICIDE

The Growing Phenomenon

DETERGENT SUICIDE AND IT'S BEGINNINGS

CHEMICAL SUICIDE

CHEMICAL SUICIDE

- Chemical suicide or detergent suicide has been present in the United States since around 2008 and seems to be on the rise.
- In 2008: 3 incidents
- In 2009: 9 incidents
- In 2010: more than 30 incidents
- In 2012 and current: still on the rise
- October 2013, San Diego County
- Even in Indiana at Willkie Residence Hall on Indiana University Campus

CHEMICAL SUICIDE

- This new wave of suicide began in Japan in 2007, where they reported more than 2000 cases.
- It has spread to the United States via the internet, where potential victims gain all the information they need to complete their task at hand.
- Suicide by asphyxiation via chemical reaction.

Riverview HEALTH

WHAT IS IT?

CHEMICAL SUICIDE

CHEMICAL SUICIDE

- It is a combination of common household cleaners that create a two-part mixture resulting in a DEADLY gas.
- Most common mixture is hydrochloric acid and lime sulfur (Bonide).
  - *Both products are easily obtained at most local hardware, grocery, or agricultural stores. Even the large outdoor centers that carry landscape and planting supplies will tend to stock these items.*
  - *Other items labeled with retail/trade names can be used as long as they carry the proper ingredients.*

CHEMICAL SUICIDE

- The chemical mixture produces a heat releasing – exothermic – reaction that will produce the deadly gas that can easily fill a small confined space.
- For this reason, the suicide attempt is most commonly done in a vehicle or small room, such as a bathroom, or closet.
- Modern day vehicles are especially air tight and provide the perfect atmosphere. In a small room of a house, the doors and windows would have to be sealed with additional products like tape and towels.

CHEMICAL SUICIDE: USUAL INGREDIENTS

WHAT ARE THE SIGNS?

CHEMICAL SUICIDE

CHEMICAL SUICIDE

- SOME KEY INDICATORS ARE:
  - *Unresponsive person in vehicle, slumped over in seat, BEWARE!!!*
  - *Windows fogged or tinted with a yellow/greenish residue.*
  - *Smell of rotten eggs or sulfur (hydrogen sulfide)*
  - *Smell of almonds (hydrogen cyanide)*
  - *Empty containers visible in vehicle from mixture preparation*
  - *Maybe, WARNING SIGNS placed on vehicle windows or even at entry doors of a house.*
  - *If it looks strange, DON'T PROCEED!!!*

CHEMICAL SUICIDE

- Picture on vehicle window warning of hazard

Riverview HEALTH

THE DANGERS THAT ARISE

CHEMICAL SUICIDE

CHEMICAL SUICIDE

- Hydrogen sulfide (H2S) is a colorless gas with a strong odor of rotten eggs, or sulfur.
- H2S is extremely toxic when inhaled, creating a dangerous atmosphere for emergency personnel responding to a chemical suicide incident.
- It is an asphyxiant, that kills by not allowing the cells in the body to use their life supporting oxygen. The body suffocates at the cellular level, resulting in body death.

CHEMICAL SUICIDE

- WHEN EXPOSED TO HYDROGEN SULFIDE:
  - *0-50 ppm: minor eye, nose, and throat irritation*
  - *10-50 ppm: headache, dizziness, nausea/vomiting, coughing, and difficulty breathing*
  - *50-200 ppm: severe eye and respiratory irritation, convulsions and shock, coma, and even possible death*
  - *Levels above 700 ppm will cause immediate death after just two or three breaths.*

  - *NOTE: At levels above 500 ppm, hydrogen sulfide is considered very flammable if exposed to an ignition source.*
  - *NO SMOKING- NO SPARK CREATING TOOLS- NO TASERS*

CHEMICAL SUICIDE

- Observe for large buckets used in the mixing of the products
- Scan for empty bottles of potential chemicals used as the mixing agents
- Only ½ to 1 cup of each chemical will produce enough gas to fill a standard four door sedan with 1000 ppm of toxic gas. This is instant death !
- It has been found that several suicide victims mixed multiple gallons inside their vehicles, resulting in a very flammable environment.

CHEMICAL SUICIDE

- Hydrogen sulfide has a vapor density of 1.19 which denotes it is heavier than air. If monitoring for a reading, check close to the ground.
- If the gas is released in confined space, such as a vehicle, it may be absorbed into the interior surfaces of the vehicle as well as the clothing and apparel of the victim.
- VENTING OF VEHICLE MAY NOT REDUCE LEVELS TO A SAFE ATMOSPHERE
- H2S will continue to off-gas from the surfaces where it has been absorbed

CHEMICAL SUICIDE

DON’T TAKE ANY CHANCES WITH YOUR LIFE!

CHEMICAL SUICIDE

- Hydrogen sulfide has a rate of decay that ranges anywhere from 12 to 37 hours.
- This rate depends upon the ambient air temperature.
- The colder it is, the longer it will take
- The warmer it is, the faster it will decay

Riverview HEALTH

THE INCIDENT RESPONSE

CHEMICAL SUICIDE

CHEMICAL SUICIDE

- It is highly possible that you will be called to a chemical suicide.
- The potential to occur at the middle and high school level is increasing.
- There is evidence indicating a shift to younger and younger individuals interested in gaining information on chemical suicides, making this their method of choice for suicide.

CHEMICAL SUICIDE

- It is very important that you recognize the clues noted earlier and maintain a safe distance from any potentially hazardous chemical scene.
- Don appropriate PPEs, both contact and respiratory
- Monitor the atmosphere
- Always protect yourself from exposure via secondary items (ie. Vehicle interior)

CHEMICAL SUICIDE

- You may never know the exact time of scene creation.
- DO NOT get in a hurry to rescue a dead body.
- ALWAYS check your scene safety prior to advancing into a potentially dangerous situation.
- If unsure of how to handle the possibility of exposure, call for a Hazardous Materials Response.

- SAVE THE LIVES OF THOSE AROUND YOU, PREPLAN!!

QUESTIONS FOR CREDIT:

1. What is another name for chemical suicide?
2. What are the usual ingredients mixed?
3. Where do these events usually occur?
4. List three key indicators that a potentially hazardous condition may exist if responding to a person down in a vehicle.
5. What does hydrogen sulfide H2S do to the body that results in death?
6. At what air concentration level does H2S become flammable?
7. Is the response to a possible chemical suicide a Hazardous Materials response as well? Explain.

Email your answers to sfreeman@riverview.org.