



CHEMICAL SUICIDE GUIDANCE

DISPATCHERS FIRST RESPONDERS HAZ-MAT TEAMS

MEDICAL PROFESSIONALS

DETERGENT (HYDROGEN SULFIDE)

Q: Do you feel ok? Back out.
 Q: Warning signs
 Q: Suicide note
 Q: Did you smell rotten eggs?
 Q: Did you see any buckets or containers in the car with yellow liquids?
 Q: Were you able to read the container labels?
 Q: Do you see tape over vents, windows, door cracks
 Q: Wearing goggles or gloves?

-Approach from uphill/upwind
 -Set a 150' perimeter
 -Eliminate ignition sources
 -Interview all witnesses
 -Secure HVAC at building
 -If H2S is suspected do not open the vehicle doors, initiate a hazmat call
 -Use a public address system/sirens to communicate with victim
 -If odors are being detected down wind issue a shelter in place order
 -Notify area hospitals of possible self transports from dorm rooms/apt./hotel.
 -Do not transport containers to ER.

-Recon in FFTO & SCBA
 -Look for secondary devices
 -Monitor with 4-gas/H2S sensor, PID
 -Ensure perimeter is suitable for wind conditions
 -Ventilate vehicle for 15 min.
 -Ensure the vented gases are not impacting other populated areas
 -Re-monitor vehicle to ensure safe levels of H2S
 -Wait for medical examiner to document scene if deceased
 -Decon body at ME request only
 -Remove containers in level "B" CPC
 -Neutralize with fast set concrete
 -Decontaminate the vehicle
 -Neutralized acids with concrete can be treated as solid waste according to study data.

HIBACHI (CARBON MONOXIDE)

Q: Do you feel ok? Back out.
 Q: Warning signs
 Q: Suicide note
 Q: Did you see a small BBQ or Hibachi?
 Q: Formic or sulfuric acid containers?
 Q: Chemical burns around the mouth?
 Q: Where is this occurring? Bathroom? Bedroom? Small space?
 Q: Gas cylinders in the area?

-Approach from uphill/upwind
 -Evacuate building in FFTO/SCBA
 -Set a 150' perimeter
 -Eliminate ignition sources
 -Secure HVAC
 -Interview all witnesses
 -If CO suicide is suspected initiate a hazmat call

-Recon in FFTO & SCBA
 -Look for secondary devices
 -Monitor with 4-gas/CO sensor
 -if high levels of CO still present begin ventilation
 -Do not use gas powered fans as they will generate more CO
 -Ensure the vented gases are not impacting other populated areas
 -Mitigate BBQ/Hibachi
 -if acids present: check area for spilled acids using pH paper
 -Wait for medical examiner to document scene if deceased
 -Neutralize any spilled acids with soda ash
 -Containerize remaining acids for disposal

PESTICIDE (BASED ON MALATHION)

Q: Do you feel ok? Back out.
 Q: Warning signs
 Q: Suicide note
 Q: Do you smell a pesticide odor?
 Q: Skunky or garlic?
 Q: Pesticide containers?
 Q: Amber jars?
 Q: Words "Malathion"
 Q: Victim shaking, twitching, runny nose, vomiting

-Approach from uphill/upwind
 -Evacuate building in FFTO/SCBA
 -Set a 150' perimeter
 -Eliminate ignition sources
 -Secure HVAC
 -Interview all witnesses
 -Be careful of spilled pesticides and contaminated vomit
 -These victims are often alive on arrival
 -If transported: Emergency decon, transport in open vehicle if possible, wear tyvek with APR, be prepared for contaminated vomit. See below.
 -Do not transport containers to ER.

-Recon in level "B" CPC
 -Look for secondary devices
 -Monitor with 4-gas & PID
 -Begin ventilation if needed
 -Do not use gas powered fans as they will generate CO
 -Ensure the vented gases are not impacting other populated areas
 -Mitigate any spilled pesticides with absorbent and containerize
 -Ensure the scene is safe for other personnel to enter in street clothes
 -Wait for medical examiner to document scene if deceased
 -If victim is transported ensure they are treated outside or in negative pressure room. DO NOT bring the container into the ER.

CYANIDE (SODIUM & POTASSIUM CYANIDE SALTS INGESTED)

Q: Do you feel ok? Back out.
 Q: Warning signs
 Q: Suicide note
 Q: Smell of bitter almonds/pungent
 Q: Did you see any white powders
 Q: Sodium or potassium cyanide containers
 Q: Recent trend of CN suicide in courtrooms post guilty verdict

-Approach from uphill/upwind
 -Evacuate building in FFTO/SCBA
 -Set a 300' perimeter
 -Eliminate ignition sources
 -Secure HVAC
 -Interview all witnesses
 -If CN suicide is suspected initiate a hazmat call
 -Notify area hospitals of possible self transports-dorm rooms/apt./hotel
 -if victim is transported do so in an open vehicle with PPE. Ensure they are treated outside or in negative pressure room. DO NOT bring the container into the ER.

-Recon in level "B" CPC-flash suit
 -Look for secondary devices
 -Monitor with 4-gas, colorimetric tubes/chips, CN specific sensor
 -Monitor deceased for continued gas production, isolate if off gassing.
 -Begin ventilation if needed
 -Do not use gas powered fans as they will generate CO
 -Ensure the vented gases are not impacting other populated areas
 -Ensure the scene is safe for other personnel to enter in street clothes
 -Wait for medical examiner to document scene if deceased
 -If victim is transported ensure they are treated outside or in negative pressure room. DO NOT bring the container into the ER.

PHOSPHIDE (ALUMINUM OR ZINC PHOSPHIDE INGESTED)

Q: Do you feel ok? Back out.
 Q: Do you have any eye irritation?
 Q: Warning signs
 Q: Suicide note
 Q: Smell of dead fish
 Q: Did you see any gray tablets
 Q: Rodent control containers
 Q: Pictures of gophers on containers
 Q: Name Phostoxin

-Approach from uphill/upwind
 -Evacuate building in FFTO/SCBA
 -Set a 300' perimeter
 -Eliminate ignition sources
 -Secure HVAC
 -Interview all witnesses
 -If aluminum/zinc phosphide suicide is suspected initiate a hazmat call
 -Notify area hospitals of possible self transports-dorm rooms/hotel
 -if victim is transported do so in an open vehicle with PPE. Ensure they are treated outside or in negative pressure room. DO NOT bring the container into the ER.

-Recon in FFTO & SCBA
 -Look for secondary devices
 -Monitor with phosphine sensor, 4-gas, PID (Can coat PID), tubes/chips
 -Monitor deceased for continued phosphine production
 -if high levels of phosphine still present begin ventilation and isolate victim
 -Do not use gas powered fans as they will generate more CO
 -Ensure the vented gases are not impacting other populated areas
 -Containerize aluminum/zinc phosphide to prevent moisture absorption
 -Wait for medical examiner to document scene if deceased
 -If victim is transported ensure they are treated outside or in negative pressure room. DO NOT bring the container to the ER.

AZIDES (SODIUM AZIDE INGESTED)

Q: Do you feel ok? Back out.
 Q: Eye irritation?
 Q: Warning signs
 Q: Suicide note
 Q: Pungent smell
 Q: Did you see any white powders
 Q: Sodium azide?

-Approach from uphill/upwind
 -Evacuate building in FFTO/SCBA
 -Set a 300' perimeter
 -Eliminate ignition sources
 -Secure HVAC
 -Interview all witnesses
 -If sodium azide suicide is suspected initiate a hazmat & bomb squad call
 -If victim is transported do so in an open vehicle with PPE. Ensure they are treated outside or in negative pressure room. DO NOT bring the container into the ER.

Combination level "B" CPC/flash suit.
 -Look for secondary devices
 -Monitor with standard equip but pH paper will be key for acids generated
 -Monitor deceased for continued hydrozoic acid production
 -if acid is present begin ventilation and isolate victim
 -Do not use gas powered fans as they will generate more CO
 -Ensure the vented gases are not impacting other populated areas
 -Containerize sodium azide
 -Wait for medical examiner to document scene if deceased
 -If victim is transported ensure they are treated outside or in negative pressure room. DO NOT bring the container to the ER.

Dispatch Triage

First Responder

Haz-Mat Teams



CHEMICAL SUICIDE GUIDANCE

DISPATCHERS FIRST RESPONDERS HAZ-MAT TEAMS MEDICAL PROFESSIONALS

	DETERGENT (HYDROGEN SULFIDE)	HABICHI (CARBON MONOXIDE)	PESTICIDE (BASED ON MALATHION)	CYANIDE (SODIUM & POTASSIUM CYANIDE SALTS INGESTED)	PHOSPHIDE (ALUMINUM OR ZINC PHOSPHIDE INGESTED)	AZIDES (SODIUM AZIDE INGESTED)
Indicators/Red Flags	Warning signs on window, suicide note, rotten egg odor, buckets with yellow liquids, acid & pesticide containers	Warning signs, suicide note, small BBQ, Hibachi grill, formic acid, sulfuric acid	Warning signs, suicide note, pesticide containers, skunk/garlic odor, amber containers	Warning signs, suicide note, Bitter almond odor, sodium or potassium cyanide containers, white powders	Warning signs, suicide note, eye irritation, fishy/garlic smell, gray round pellets, rodent control containers	Warning signs, suicide note, pungent odor, sodium azide container, white crystals,
Chemical Description	Colorless toxic flammable gas with sewer gas odor. (Rotten eggs)	Colorless, odorless flammable gas	Deep-brown to yellow liquid with a skunk/garlic like odor.	Colorless toxic flammable gas	Colorless toxic flammable gas	Colorless to white, odorless, crystalline solid. Hydrozoic acid is produced when ingested.
Odor	Rotten egg odor	None	Pungent-skunky	Bitter almonds	Fish or garlic odor	Pungent/obnoxious (Hydrozoic acid HN ₃)
Odor Threshold	<1 ppm (Good warning properties) (Sense of smell lost at >100 ppm)	None	13.5 mg/m ³ (0.99 ppm-Good warning properties)	0.58 ppm (Genetic trait ~40% population cannot smell HCN)	0.15 ppm (poor warning properties)	A severe irritant to skin, eyes, and mucous membranes.
Warning Properties						
Evacuation & Isolation Distance	If the suicide incident occurs indoors consider immediate evacuation of the building, toxic/flammable gases may be carried throughout the structure					
Flammability	150 Feet based on San Diego study data	150 Feet	150 Feet	300 Feet	300 Feet	75 Feet
PPF First Responders	YES - Flammable range 4 - 40% Eliminate ignition sources Study data indicates atmosphere will not be flammable in a small car	YES - Flammable range 12.5 - 74% Eliminate ignition sources Incomplete combustions will produce toxic but not normally flammable environments	NO - Combustible carrier (Xylene/Toluene) Flash point at or above 200°F, may be difficult to ignite	YES - Flammable range 5.6 - 40% Suicide victims will continually off gas Hydrogen Cyanide gas from the stomach at toxic but not normally flammable levels	YES - Flammable range 1.79 - 7% Suicide victims will continually off gas phosphine until the product is fully reacted. Previous incidents: 112 ppm exhaled from victim (2 x IDLH values. Not flammable at this concentration)	No - Combustible Solid if heated above 572°F, also forms explosive salts on contact with metals
PPE Hazmat Teams	First Responders should don FireFighter Turnouts and SCBA for recon; victim triage/assessment/treatment. Avoid contact with all chemical containers, contamination.	Firefighter Turnouts	Level B CPC	Combination level "B" CPC/flash suit.	Firefighter turnouts	Level "B" CPC/flash suit Absorption by skin may readily exceed vapor inhalation exposure
Instrumentation	-Firefighter Turnouts for recon -Level B CPC for chemical handling & neutralization of spent mixture	4-Gas meter with CO sensor Sensors typically max out at 500 ppm CO Tube 5-700ppm	4-Gas Photo ionization detector M8/M9 paper	Cyanide specific sensor (WMD) Colorimetric: HCN PH Paper, low pH ~2	Phosphine sensor Phosphine colorimetric tubes/chips 4-Gas Photo ionization detector(Coats lamp)	pH paper for Hydrozoic acid Draeger-Tube@ Acetic Acid 5/a, 5-80 ppm- Hydrozoic acid is indicated at approximately the same sensitivity.
Toxicity	-Low conc. 4-Gas with H2S Sensor -High conc. PID RAE CF 3.3 Colorimetric tube: H2S 0.2-7% Lead Acetate Paper & PH Paper Lethal 800-1000 ppm IDLH 100 PPM, Fed OSHA C20 PPM Extremely lethal method, typically body recovery	Lethal 12,800 ppm (1.28%) @ 3 min IDLH 1200 ppm Fed OSHA PEL 50 ppm Lethal method, typically body recovery	IDLH 250 mg/m ³ OSHA PEL 15 mg/m ³ [skin] Xylene=OSHA PEL 100 ppm, IDLH Toluene=OSHA PEL 200 ppm,IDLH 500 Victims often survive this type of event.	3500 ppm lethality/1 min. IDLH 50 ppm OSHA PEL 10 ppm [skin] Fatal dose 1.5 mg/kg body wt Extremely lethal-typically body recovery	IDLH 50 ppm NIOSH ST 1 ppm OSHA PEL 0.3 ppm Extremely lethal, may be alive for hours after ingestion	NIOSH REL C 0.1 ppm (as HN ₃) [skin] C 0.3 mg/m ³ (as NaN ₃) [skin] Lethal method. Rare method but typically body recovery
Deceased Skin Color	Grayish to green	Red	No change	Pink/mauve	Blue or purple	No color documented
Molecular Weight / RgasD/Vapor Pressure	This is a gas that will mix with air Gas density 1.19 (Air =1)	This is a gas slightly lighter than air Gas density 0.97 (Air=1)	MW 330, vapor pressure is very low 0.00004 mm/Hg (Slug, but stinks)	Almost a true gas up and around you, slightly lighter than air.	This gas will mix with air, slightly heavier than air. Gas density 1.18 (Air=1)	This will be up and around you 484 mm/Hg
Symptoms	Coma, convulsions, dizziness, headache, lassitude, irritability, insomnia; death Eyes: discomforting to the eyes. Skin: Little effect on the skin therefore FETO	Headache, nausea, weakness, exhaustion, dizziness, confusion, cyanosis, death	SLUDGE symptoms, blurred vision, nausea, vomiting, abdominal cramps, dizziness, confusion; chest tightness, wheezing	Coma with seizures, apnea and cardiac arrest, with death in minutes, death	Eye irritation - Nausea, vomiting, abdominal pain, diarrhea; thirst; chest tightness, muscle pain, chills; stupor, pulmonary edema; death	Dizziness, headaches, chest pain, blurred vision, low blood pressure, bradycardia
Emergency Decontamination	Remove clothes ER-Decon with Water and soap if necessary for solids	Fresh air, gas will dissipate, remove clothes	Must decontaminate prior to transport, soap & water. Be prepared for victim vomiting which will lead to recontamination.	Gas will dissipate, remove clothes Decon with Soap and Water if contaminated,	Fresh air, gas will dissipate. Strip clothes	Remove clothes, dry decon as much as possible. Caution: water contact with Azides produces acids and toxic gases. Sol. 42%.
Transport & ER Considerations	LOW RISK - Monitor for Hydrogen Sulfide prior to transport.	LOW RISK - if needed monitor for Carbon Monoxide prior to transport.	HIGH RISK - Victims may vomit in route causing contamination of responders/ambulance. Off gassing from internal contamination may be an issue. Treat outside or in negative pressure room.	HIGH RISK - Victims may vomit in route causing contamination of responders/ambulance. Off gassing from internal contamination may be an issue. Treat outside or in negative pressure room.	HIGH RISK - Victims may vomit in route causing contamination of responders/ambulance. Off gassing from internal contamination may be an issue. Treat outside or in negative pressure room.	HIGH RISK - Victims may vomit in route causing contamination of responders/ambulance. Off gassing from internal contamination may be an issue. Treat outside or in negative pressure room.

Victim Clothing: is a source of ongoing contamination. Contaminated clothing should not be taken into the ambulance or ER. Separate clothing from valuables, bag separately and have Hazmat monitor prior to returning to victim.