

Checklist 7: Evacuations vs sheltering-in-place considerations

<p>Key considerations</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Did the release cause a fire or explosion or is fire or explosion possible? <input type="checkbox"/> Is the release possible, ongoing, or over? <ul style="list-style-type: none"> <input type="checkbox"/> If continuing, how quickly can the release be stopped? <input type="checkbox"/> If possible, can measures be taken to significantly reduce the possibility of release? <input type="checkbox"/> What are the physical properties of the hazardous material released? <input type="checkbox"/> Does the material present a toxic, flammable, or explosive hazard or a combination of these? <input type="checkbox"/> Did the release occur in a rural or urban area? <input type="checkbox"/> How many people are affected? <input type="checkbox"/> What shelters are available? <input type="checkbox"/> Can the people be safely evacuated in time? <input type="checkbox"/> What are the meteorological forecasts to estimate airborne contaminants dispersion to inform evacuation and sheltering decisions?
<p>Evacuation is the better option over sheltering-in-place, if</p>	<ul style="list-style-type: none"> <input type="checkbox"/> The risk of fire or explosion exists; <input type="checkbox"/> Area is not yet exposed, but will be after a certain time (e.g., due to an anticipated shift in wind direction) when the time to exposure is longer than the time required for the evacuation; <input type="checkbox"/> The likely duration of exposure is such that the protection offered by in-place sheltering may become insufficient; <input type="checkbox"/> The chemicals are widely dispersed and contamination is extensive and persistent; <input type="checkbox"/> The chemicals are suspected to be hazardous, but cannot be readily identified; <input type="checkbox"/> The chemical is highly hazardous; <input type="checkbox"/> The concentration in the air will be hazardous for a prolonged period; <input type="checkbox"/> The number of evacuees is relatively small; <input type="checkbox"/> Air quality monitoring indicates harmful levels of hazardous chemicals (hydrogen sulfide, volatile organic compounds, poly- aromatic hydrocarbons); and <input type="checkbox"/> It will take some time to remediate soil contamination. [WHO, 2009, HMG 2014]
<p>Public Instructions when sheltering in a building</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Shut and lock all doors and windows; <input type="checkbox"/> Shut the heating, ventilating, and air conditioning (HVAC) system down; <input type="checkbox"/> If there is danger of explosion, close window shades, blinds, or curtains; <input type="checkbox"/> Take everyone, including pets, into an interior room with no or few windows and shut the door; <input type="checkbox"/> Take essential disaster supplies (e.g., non-perishable food, bottled water, battery-powered radios) into the room; and <input type="checkbox"/> Listen to your radio and other media (i.e., TV and social media) until the incident commander or the responsible authority tells you all is safe or orders you to evacuate. <p>[CDC, 2014a; CDC, 2017b]</p>

Checklist 8: Human decontamination and treatment considerations**Decontamination**

- Casualties must be decontaminated before being transferred to a hospital/medical facility.
- Casualties can receive immediate life-saving treatment providing the responders are trained and equipped to provide the treatment without endangering themselves or further harming the casualty.
- Decontamination is necessary if the casualty requires oxygen or if a defibrillator is going to be used so that the possibility of accidental ignition is eliminated.
- Decontamination procedure:
 - Carefully remove all contaminated clothing. Clothing must NEVER be pulled over the head and should be cut off if necessary;
 - Wipe oil off the casualty, particularly from the head, neck, and trunk; and
 - Bag and label clothing as contaminated and stored outside [Lake, 2013; CDC, 2010b].

Treatment considerations

- Seek medical attention if symptoms are evident or if exposure has or is suspected to have occurred**

For skin exposure:

- Wash the area with soap and water, baby oil, petroleum jelly, or a widely used, safe cleaning compound, such as the cleaning paste sold at auto parts stores.
- Avoid using solvents, gasoline, kerosene, diesel fuel, or similar products on the skin. These hydrocarbon-based products, when applied to skin, may present a greater health hazard than oil itself.

For eye (ocular) exposure:

- Immediately flush the eye with copious amounts of water for 15 minutes.
- Hold eyelids apart to **ensure** complete irrigation of the eye.
- Remove and discard contact lenses, if worn, after initial flushing.
- Do not use eye ointment.

For ingestion:

- DO NOT INDUCE VOMITING in casualties as this may lead to aspiration of the crude oil into the lung.
- If spontaneous vomiting occurs, lean the casualty forward to reduce risk of aspiration.
- Do not give anything by mouth.
- If casualty is drowsy or unconscious and vomiting, place on the left side with the head down.
- Monitor for breathing difficulties.

For inhalation exposure:

- Remove casualty to fresh air.
- If the casualty is not breathing, give artificial respiration.
- Give additional oxygen once breathing is restored.

[CDC, 2010b; DHHS, 2014; DHS, 2014]