Information note on chemical release No 2

May 2017

What to do in case of a chemical release

If the release is inside a building or a closed space, you should do whatever it takes to find clean air quickly: exit the building without passing through the contaminated area or break a window to access clean air.

If you are out of doors in an area where a chemical has been released, you should:

1. Avoid any obvious plume or vapour cloud. Cover your mouth and nose and, if possible, any exposed skin (e.g. roll down sleeves, button up coat/jacket).
2. Move away from the source, try and move upwind from the agent (so the wind is blowing the chemical away from you) or crosswind.
3. Go into a building in order to shelter-in-place. Select a room with the following characteristics:
   - on a high floor and with as few windows as possible
   - if possible the room should have access to a bathroom and should have a telephone,
4. If you may have been exposed to a chemical then you must decontaminate yourself before entering the room
5. Try to seal the room to create a temporary barrier between clean air inside and contaminated air outside:
   - Close all windows, doors, air vents, and fireplace dampers and seal, if possible, with plastic sheeting and duct tape or improvise a seal with whatever is to hand e.g. wet towels
   - Turn off fans, air conditioning, and forced air heating systems
   - NB in a completely sealed room the air will eventually become depleted of oxygen, therefore after a few hours you will need to open a source of ventilation or leave the room – use your judgement about this.
   - Do not burn a carbon-based fuel, i.e. paper, coal, wood, gas or oil for heating or cooking since, if the fresh air supply is restricted, burning these fuels will produce carbon monoxide, which is poisonous.
6. Watch TV, listen to the radio, or check the Internet often for official news and instructions as they become available.
7. Evaluate your situation and, when you judge it to be safe, evacuate the area and relocate to a safer place.

If you are contaminated or exposed to chemical agents avoid contact with others as you may cause secondary contamination. Take the following steps:

1. Remove your clothing as quickly as possible. Avoid pulling clothing over your head – cut the clothes off if necessary.
2. Wash your whole body, including your hair, with soap (preferably liquid soap) and tepid water, or with water alone. Rinse skin with copious amounts of water.
3. Rinse your eyes with water.
4. Put on clean clothes.
5. Place contaminated clothes in a strong plastic bag. Avoid touching contaminated clothes with your bare hands – use an implement or wear thick rubber gloves. Put any contaminated personal effects or other objects into the same bag. Close and seal this bag securely and, if possible, put the bag into another bag and close that tightly. The contents of the bag are contaminated so put a warning on the bag and put the bag in a secure place outside until it can be disposed of.
6. Seek medical attention if you have been exposed, even if you have no immediate symptoms.

How this advice was developed
This advice was developed by a small working group convened by WHO. The group included national experts from Germany, Norway and the UK who work on CBRN preparedness and response, and occupational health and safety professionals with expertise in protection from chemical weapons exposure. Reference was also made to Patient Decontamination in a Mass Chemical Exposure Incident: National Planning Guidance for Communities. Washington (DC): US Department of Health and Human Services and US Department of Homeland Security; 2014.