## Scenario C13: Pesticide Incident

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| **Scenario C13: Pesticide Incident** | |
| **Complexity of the scenario: easy** | |
| **Possible application of the scenario: Topics 4.1, 5.1, 5.2, 5.6 and 6.1** | |
| **Scenario description:** | |
| A farmer’s son is calling 112 from inside his car saying he is en route to the EMS of the nearby hospital. He is worried about his father who seems to be exposed to a certain chemical inside his barn. His father is with him in the car and nearly arriving at the hospital (as self referrers). He shows mild symptoms of exposure himself and is also worried about his little brother and sister who are coming home soon.  In the emergency room of the regional hospital, the farmer's son brings his father in. The farmer has to be supported by his son and shows symptoms of organophosphate poisoning. After questioning, it appears that the farmer has been filling a pesticide sprayer with methylparathion (a banned pesticide) and that something went wrong during the filling process, which exposed him to a considerable amount of the liquid. He wore respiratory protection and gloves when filling the sprayer, but insufficient skin protection. The son also shows symptoms but does know where the exposure took place and that he is concerned about his sister and brother who will soon be back from school. On the farm there is a shed in which the sprayer is located. The farm is about 20 meters upwind of the barn.  **Things to consider:** In this scenario the father is exposed to a solution containing methyl parathion and his clothing is contaminated. It is important for the EMS personnel to quickly identify the potential risk of the contamination. Skin contact with the methyl parathion on the skin and clothing of the farmer could pose a risk to the EMS personnel. As the parathion is a solid substance the inhalation risk is limited. Off gassing of the solvent (xylene or toluene) is possible but in low concentrations unlikely to cause significant risks for EMS personnel. It is nonetheless advisable to decontaminate the patient to prevent further exposure of the farmer and son. The decontamination can be done by the EMS personnel or by assisting fire department. Removal of contaminated clothing will limit exposure risk significantly. As the barn is a closed environment, reconnaissance and clean-up of the spilled liquid should only be performed in protective clothing. Special care should be taken to receive the brother and sister before they return from school.  The trainer could consider adapting the scenario in such a way that the victims are self-referring to the GP office or staying at the location waiting for AS to allow trainees from these target audiences to perform a risk assessment and triage.  Sources:  https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-09939-0  https://www.euractiv.com/section/agriculture-food/news/a-thousand-tonnes-of-harmful-counterfeit-pesticides-seized-in-eu/ | |
| **Application: First alarm (Topic 4.1)**  **Target audience: DO, (M)P , FB, EMS, (AS and GP can be included by adapting the scenario)** | **Learning objective:** To recognize signs of a potential CBRN release and (initiate first) respond(ers).  **Aim:** The dispatch officer interacts with the caller to identify the likelihood of a possible CBRN release and to know which information should be shared with the chain of command. Use of METHANE and Four W’s protocols. |
| Example: |  |
| **Application: Arrival on scene (Topic 5.1)**  **Target audience: First responders on scene ( (M)P, FB, EMS (AS and GP can be included by adapting the scenario)** | **Learning objective:** To recognize how to carry out an on-site risk assessment, zoning of the area, and isolation and registration of victims.  **Aim:** The first responders arrive on scene, perform a risk assessment, talk with the caller, perform a reconnaissance of the incident scene and discuss actions. They apply METHANE, establish zoning, isolate people and pet animals, initiate evacuation, register persons. |
| **Example:** |  |
| **Application: Forensic awareness (topic 5.2)**  **Target audience: First responders on scene FB, (M)P, EMS (GP and AS can be included by adapting the scenario)** | **Learning objective:** To recognize how to carry out your work without forensic disruption of the scene.  **Aim**: The responders discuss the possible forensic value of the materials found on the scene and preserve the evidence. |
| **Example:** |  |
| **Application: medical treatment and triage (topic 5.6)**  **Target audience: First responders EMS FB, (M)P (AS and GP can be included by adapting the scenario)** | **Learning objective:** To recognize how to apply appropriate medical care towards patients involved in a CBRN incident.  **Aim:** The responders assess the medical conditions of the victims, perform triage on the victims and recommend possible treatment. |
| **Example:** |  |
| **Application: Alarm Protocol (topic 6.1)**  **Target audience: DO** | **Learning objective:** To differentiate a possible CBRN incident (from normal incident) and to carry out appropriate procedures & protocols.  **Aim:** The dispatch officer interacts with the caller and relays necessary information to the responders moving towards the scene. |
| **Example:** |  |