## Scenario 20-B: Bioartist calling an ambulance for collapsed wife

|  |  |
| --- | --- |
| **Scenario 20-B: Bioartist calling an ambulance for collapsed wife** | |
| **Complexity of the scenario: moderate** | |
| **Possible application of the scenario: Topics 4.1, 5.1, 5.2, 5.6 and 6.1** | |
| **Scenario description:** | |
| On a Sunday morning a man finds his wife collapsed on the kitchen floor. He immediately calls an ambulance to request medical support. The man is a renowned university professor and Bioartist known for his performances involving biological material and for his political views against genetically modified organisms. During the past he has created performances with simulants of biological warfare agents (*Serratia marcenscence* and *Bacillus atropheaus*). When the ambulance crew arrives on the scene, one of them notices some laboratory equipment, flask, graduated cylinders, vials and petri dishes in the kitchen sink. The woman died during transport in the ambulance and eventually, the autopsy revealed that the cause of death was congenital heart failure.    **Things to consider:** BioArt is an art practice where humans work with live tissues, bacteria, living organisms, and life processes. Using scientific processes such as biotechnology (including technologies such as genetic engineering, tissue culture, and cloning). The artworks are produced in laboratories, galleries, or artists' studios.  *Serratia marcescences* is a species of rod-shaped, Gram-negative bacteria in the family Yersiniaceae. It is a facultative anaerobe and an opportunistic pathogen. It is commonly found in the respiratory and urinary tracts of hospitalized adults and in the gastrointestinal systems of children. Due to its abundant presence in the environment, and its preference for damp conditions, it is commonly found growing in bathrooms (especially on tile grout, shower corners, toilet water lines, and basins), where it manifests as a pink, pink-orange, or orange discoloration and slimy film. It can be transmitted by hand-to-hand contact. It can be treated with antibiotics; however, many strains have become resistant to a wide variety of antibiotics.  *Bacillus atrophaeus* is a species of black-pigmented bacteria. It is used extensively in biomedicine as indicator strains for heat and chemical-based decontamination regimens. Most of the strains in use are derivatives of a lineage of *B. atrophaeu*s that originated at Camp Detrick in the 1950s, where many modern biocontainment procedures were developed. *B. atrophaeus* has historically been known by several other names, including *B. globigii* (the origin of its military moniker "BG") and *B. subtilis* var. niger. Its original and still most prominent use is as a surrogate organism for pathogenic B. anthracis, beginning in the U.S. bio-weapons program, as its pigmentation readily facilitated discrimination from non-pigmented background organisms in environmental samples.  The trainer should inform the trainees that conventional triage methodology is applied in this scenario. However, when the number of victims is low, such as in this case, FRs would treat each victim immediately without a real need for triage. Therefore, conventional triage is part of this scenario discussion for the sole purpose of exercising and reviewing triage methodologies.  Sources:  George J. Annas, J.D., M.P.H. - Bioterror and “Bioart” — A Plague o' Both Your Houses. June 22, 2006, N Engl J Med 2006; 354:2715-2720 DOI: 10.1056/NEJMlim060344 | |
| **Application: First alarm (Topic 4.1)**  **Target audience: DO, FB, (M)P, AS** | **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 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: FB, (M)P, AS** | **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: FB, (M)P, AS, EMS, GP** | **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: FB, (M)P, AS, EMS, GP** | **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:** |  |