Mortuary Response Solutions

Human Remains Storage Fact Sheet

The Good Ideas

WHY REFRIGERATION IS RECOMMENDED

- Refrigeration between 38° and 42° Fahrenheit is the best for remains cooling.
- Refrigeration slows down decomposition and can preserve a body for up to three months.
- Large refrigeration containers (generally used by commercial shipping companies) may be used to store bodies but enough transport containers are seldom available on the site of a disaster.
- Space is limited in these containers unless temporary cadaver storage racking is used.
- Most hospital morgues have large, ready-to-use refrigeration units; however, the capacity of these units are generally exceeded during a disaster; especially if there are an immeasurable number of bodies or remains recovered in the first several hours of a disaster.
- Refrigeration can sometimes lead to mold. This problem can make identification more difficult.

WHY DRY ICE IS RECOMMENDED

- Dry ice [carbon dioxide (CO_2) frozen at –78.5° Celsius] may be suitable for short-term remains storage simply because it can provide the desired temperature.
- Depending on the outside temperature, approximately 22 pounds of dry ice per remains, per day is needed in order to maintain target temperature.
- Because of potential damage, dry ice should not be placed directly on top of the remains (even when the remains are wrapped). A low wall of dry ice should be built around groups of remains and then covered with a plastic sheet.
- Dry ice is very expensive and difficult to obtain in large quantities, especially during an emergency.
- Dry ice also requires handling with gloves to avoid any potential cold burning or blistering.
- Areas where dry ice is used should be properly ventilated to release the toxic carbon dioxide gas that is produced as the dry ice begins to melt.

Resource: Los Angeles County Mass Fatality Incident Management: Guidance for Hospitals and Other Healthcare

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The Bad Ideas

WHY STACKING IS NOT RECOMMENDED

- Stacking bodies delivers a disrespect for individuals and families of the deceased.
- A body lying on top of another can cause distortion of the faces or facial features of the deceased which can in turn lead to difficulty in visual identification.
- Stacking bodies also makes them very difficult to manage; especially if someone needs a set of remains that are on the bottom of a stack.

WHY PACKING IN ICE IS NOT RECOMMENDED

- Freezing bodies causes a change in tissue color through dehydration. The change can cause serious problems as medical examiners begin to interpret bodily injuries.
- Freezing bodies can also cause post-mortem injuries such as fractures. These injuries can also be caused by general handling of the frozen remains. These can also hinder the medical examiner's interpretation.
- By freezing remains and then thawing them, the rate of decomposition is accelerated.

WHY FREEZING IS NOT RECOMMENDED

- Packing remains in ice increases weight and complicates transport tasks.
- Remains require massive amounts of ice to preserve—even for a short time. Long term cooling becomes a major problem.
- Packing remains in ice results in run-off water due to melting. Keeping the contaminated water away from everything else poses a challenge.
- Large amounts of ice probably will not be a readily available resource during an emergency or disaster. Ice is often a priority for emergency medical units as well.

Resource: Los Angeles County Mass Fatality Incident Management: Guidance for Hospitals and Other Healthcare