# Chemical Release Investigation Kit & Template (CRIKT)

## For Local Health Departments

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>TRADE NAME(S)</th>
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<tbody>
<tr>
<td>Cadmium</td>
<td>Colloidal cadmium</td>
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## PREPARING FOR THE INVESTIGATION

### Know the Agent
- Cadmium is an odorless blue-white metal or grayish-white powder.
  - Read about cadmium in the Cadmium Fact Sheet.
- Contact:
  - Public Health Preparedness & Response Branch (PHP&R): 888.820.0520.
- Print and review form:
  - Chemically Exposed Persons Line Listing.

## CONDUCTING THE INVESTIGATION

### Evaluate Release/Exposure
- Define scale/scope of exposure (work with N.C. Emergency Management, HazMat, an Environmental Health Specialist at the local or state level, N.C. Department of Environment and Natural Resources [N.C. DENR], and U.S. Environmental Protection Agency [U.S. EPA] if applicable).

### Identify Route of Human Chemical Exposure
- Identify route of exposure:
  - Inhalation
  - Ingestion
  - Dermal (Skin)
  - Injection
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<th>Chemical Release Investigation Kit &amp; Template for Local Health Departments</th>
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<tr>
<td><strong>Cadmium Investigation Steps</strong></td>
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<td><strong>April 2015</strong></td>
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- Interview responders and/or exposed individuals to obtain additional information about the cadmium exposure within 24-hours.

### Describe Exposed Population

- Determine the following:
  - Geographic area affected.
  - Population affected (general population, employees, and residents)
  - How population exposed (in vicinity, inhalation, or direct contact)
  - Cases within the exposed population
  - The contact at OEEB (919.707.5900) to assist in developing a risk assessment to be shared with officials.
  - Once completed, provide OEEB with the Chemically Exposed Persons Line Listing.

### Implement Control Measures to Prevent Additional Exposures

- Decide on measures to protect citizens and the surrounding communities.
- The environmental health specialist should consult with OEEB to discuss next steps to ensure no additional individuals are exposed.
- Inform residents/businesses of the cadmium exposure through local emergency notification system, local TV and radio. Important points to include:
  - Location of release/exposure.
  - Geographic area affected.
  - Shelter-in-place instructions.
  - Where to evacuate if needed.
  - Where to find shelter.
  - Where to seek medical care.
- For more information, please listen to your local radio station or watch your local news channel.
- Work with your local incident management team and local health director to determine steps to be taken to re-enter
residences/businesses.
  - The local incident management team will determine when residences/businesses are acceptable for re-entry and alert the local health director, who will then participate in the final decision.
  - Your local health director will then communicate with the on-scene coordinator.
  - The on-scene coordinator will then communicate to the community when they are permitted to return home or to their place of employment.

### INVESTIGATION RESULTS

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<th>Case Finding</th>
<th>Routine Precautions</th>
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| • During the course of the investigation, interview other exposed individuals for symptoms related to the cadmium exposure.  
  - Work with your local medical facilities, local incident management team and/or the first responders to compile the exposed persons’ information.  
  - Contact local hospitals to determine total number injured, hospitalized, ED visits, and deceased.  
  - Contact N.C. DETECT, North Carolina’s state syndromic surveillance system for additional information: 919.843.2361.  
  • Advise symptomatic individuals, especially children, to see their healthcare provider immediately for evaluation.  
| • Communicate the following control measures with residents/business owners.  
  - Remove all ignition sources from areas with cadmium dust to minimize chances of fire.  
  - Open all windows once residences/businesses are re- |
entered.

- Wash any areas that have been exposed to cadmium dust and remove clothing that were exposed to the powder to prevent the tracking of powder to other areas.

**SPECIAL CONSIDERATIONS**

**Risk Communication**

- N.C. DHHS Communications Office 919.855.4840 is available to assist local health departments as needed.

**ADDITIONAL INFORMATION**

**Glossary of Terms**

**DENR**: Department of Environment and Natural Resources

**ED**: Emergency Department

**EHS**: Environmental Health Specialist

**EPA**: Environmental Protection Agency

**OEEB**: Occupational and Environmental Epidemiology Branch

**PHP&R**: Public Health Preparedness & Response