### 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>Hydrogen Peroxide</td>
<td>Dihydrogen dioxide, Hydrogen dioxide, Hydroperoxide, and Peroxide</td>
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#### PREPARING FOR THE INVESTIGATION

**Know the Agent**
- Hydrogen peroxide is a colorless liquid with a bitter taste.
  - Read about hydrogen peroxide in the Hydrogen Peroxide Fact Sheet.
  - For additional information, visit: [www.atrsd.cdc.gov/substances/toxsubstance.asp?toxid=55](http://www.atrsd.cdc.gov/substances/toxsubstance.asp?toxid=55)
- 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**
- Define scale/scope of release (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
| Describe Exposed Population | • Determine the following:  
  o Geographic area affected.  
  o Population affected (general population, employees, and residents).  
  o How population exposed (in vicinity, inhalation, or direct contact).  
  o Define cases within the exposed population.  
  o Contact OEEB (919.707.5900) to assist in developing a risk assessment to be shared with officials.  
  o 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 will consult with OEEB to discuss next steps to ensure no additional individuals are exposed.  
• Inform residents/businesses of the hydrogen peroxide release through local emergency notification system, local TV and radio. Important points to include:  
  o Location of release.  
  o Geographic area affected.  
  o Shelter-in-place instructions.  
  o Where to evacuate if needed.  
  o Where to find shelter.  
  o Where to seek medical care.  
  o 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.  
  o The local incident management team
hydrogen peroxide investigation steps

### INVESTIGATION RESULTS

#### Case Finding

- During the course of the investigation, interview other exposed individuals for symptoms related to the hydrogen peroxide release.
  - Work with your local medical facilities, local incident management team and/or the first responders to compile the exposed persons’ information.
  - Local hospitals to determine total number injured, hospitalized, ED visits, and deceased.
  - 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.

#### Routine Precautions

- Communicate the following control measures with residents/business owners.
  - Open all windows once residences/businesses are re-entered.
  - Wash skin thoroughly with soap and water if you come into contact with hydrogen peroxide.
### SPECIAL CONSIDERATIONS

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<th>Risk Communication</th>
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<tr>
<td>• N.C. DHHS Communications Office 919. 855.4840 is available to assist local health departments as needed.</td>
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### ADDITIONAL INFORMATION

#### Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>ATSDR</strong>:</td>
<td>Agency for Toxic Substances &amp; Disease Registry</td>
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<td><strong>DENR</strong>:</td>
<td>Department of Environment and Natural Resources</td>
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<tr>
<td><strong>ED</strong>:</td>
<td>Emergency Department</td>
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<tr>
<td><strong>EHS</strong>:</td>
<td>Environmental Health Specialist</td>
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<td><strong>EPA</strong>:</td>
<td>Environmental Protection Agency</td>
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<td><strong>OEEB</strong>:</td>
<td>Occupational and Environmental Epidemiology Branch</td>
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<tr>
<td><strong>PHP&amp;R</strong>:</td>
<td>Public Health Preparedness &amp; Response</td>
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