

# Chemical Release Investigation Kit & Template (CRIKT) For Local Health Departments



<b>CHEMICAL</b>	<b>TRADE NAME(S)</b>
Manganese	Manganese metal, Colloidal manganese, Manganese-55
<b>PREPARING FOR THE INVESTIGATION</b>	
<b>Know the Agent</b>	<ul style="list-style-type: none"> <li>• Manganese is silver-colored in its pure form, which closely resembles iron. <ul style="list-style-type: none"> <li>○ Read about manganese in the Manganese Fact Sheet.</li> </ul> </li> <li>• For additional information, visit: <a href="http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=23">http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=23</a></li> <li>• Contact: <ul style="list-style-type: none"> <li>○ Public Health Preparedness &amp; Response Branch (PHP&amp;R): 888.820.0520.</li> <li>○ N.C. Emergency Management Desk: 1.800.858.0368. If appropriate, contact local Emergency Management.</li> </ul> </li> <li>• Print and review form: <ul style="list-style-type: none"> <li>○ Chemically Exposed Persons Line Listing.</li> </ul> </li> </ul>
<b>CONDUCTING THE INVESTIGATION</b>	
<b>Evaluate Release/Exposure</b>	<ul style="list-style-type: none"> <li>• 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).</li> </ul>
<b>Identify Route of Human Chemical Exposure</b>	<ul style="list-style-type: none"> <li>• Identify route of exposure: <ul style="list-style-type: none"> <li>○ Inhalation (as dust)</li> <li>○ Ingestion</li> <li>○ Dermal (skin) &amp; eye contact</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Interview responders and/or exposed individuals to obtain additional information about the manganese exposure within 24 hours.</li> </ul>
<p><b>Describe Exposed Population</b></p>	<ul style="list-style-type: none"> <li>• Determine the following: <ul style="list-style-type: none"> <li>○ Geographic area affected</li> <li>○ Population affected (general population, employees and residents)</li> <li>○ How population exposed (in vicinity, inhalation or direct contact)</li> <li>○ Define cases within the exposed population.</li> <li>○ Contact OEEB (919.707.5900) to assist in developing a risk assessment to be shared with officials.</li> <li>○ Once completed, provide OEEB with the Chemically Exposed Persons Line Listing.</li> </ul> </li> </ul>
<p><b>Implement Control Measures to Prevent Additional Exposures</b></p>	<ul style="list-style-type: none"> <li>• Decide on measures to protect citizens and the surrounding communities.</li> <li>• The environmental health specialist should consult with OEEB to discuss next steps to ensure no additional individuals are exposed.</li> <li>• Inform residents/businesses of the manganese exposure through local emergency notification system, local TV and radio. Important points to include: <ul style="list-style-type: none"> <li>○ Location of release/exposure</li> <li>○ Geographic area affected</li> <li>○ Shelter-in-place instructions</li> <li>○ Where to evacuate if needed</li> <li>○ Where to find shelter</li> <li>○ Where to seek medical care</li> </ul> </li> <li>• For more information, please listen to your local radio station or watch your local news channel.</li> <li>• Work with your local incident management team and local health director to determine steps to be taken to re-enter</li> </ul>

	<p>residences/businesses.</p> <ul style="list-style-type: none"> <li>○ 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.</li> <li>○ Your local health director will then communicate with the on-scene coordinator.</li> <li>○ The on-scene coordinator will then communicate to the community when they are permitted to return home or to their place of employment.</li> </ul>
<b>INVESTIGATION RESULTS</b>	
<b>Case Finding</b>	<ul style="list-style-type: none"> <li>● During the course of the investigation, interview other exposed individuals for symptoms related to the manganese exposure. <ul style="list-style-type: none"> <li>○ Work with your local medical facilities, local incident management team and/or the first responders to compile the exposed persons' information.</li> <li>○ Contact local hospitals to determine total number injured, hospitalized, ED visits and deceased.</li> <li>○ Contact N.C. DETECT, North Carolina's state syndromic surveillance system for additional information: 919.843.2361.</li> </ul> </li> <li>● Advise symptomatic individuals, especially children, to see their healthcare provider immediately for evaluation.</li> </ul>
<b>Routine Precautions</b>	<ul style="list-style-type: none"> <li>● Communicate the following control measures with residents/business owners. <ul style="list-style-type: none"> <li>○ Remove all ignition sources from the immediate area.</li> <li>○ Ventilate the area after cleanup is complete.</li> <li>○ Restrict access to the immediate</li> </ul> </li> </ul>

	area around the spill or leak unless wearing protective equipment.
<b>SPECIAL CONSIDERATIONS</b>	
<b>Risk Communication</b>	<ul style="list-style-type: none"> <li>N.C. DHHS Communications Office is available to assist local health departments with media inquiries as needed 919. 855.4840.</li> </ul>
<b>ADDITIONAL INFORMATION</b>	
<b>Glossary of Terms</b>	<p><b>DENR:</b> Department of Environment and Natural Resources</p> <p><b>ED:</b> Emergency Department</p> <p><b>EHS:</b> Environmental Health Specialist</p> <p><b>EPA:</b> Environmental Protection Agency</p> <p><b>OEEB:</b> Occupational and Environmental Epidemiology Branch</p> <p><b>PHP&amp;R:</b> Public Health Preparedness &amp; Response</p>

