

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



CHEMICAL	TRADE NAME(S)
Chlorine Dioxide	Chlorine oxide, Chlorine peroxide, Chlorine (IV) oxide, Chloryl
PREPARING FOR THE INVESTIGATION	
Know the Agent	<ul style="list-style-type: none"> • Chlorine dioxide is a yellow to red gas or a red-brown liquid that is not naturally found in the environment. <ul style="list-style-type: none"> ○ Read about chlorine dioxide in the chlorine dioxide Fact Sheet. ○ For additional information, visit: http://www.atsdr.cdc.gov/substance/toxsubstance.asp?toxid=108 • Contact: <ul style="list-style-type: none"> ○ Public Health Preparedness & Response Branch (PHP&R): 888.820.0520. ○ N.C. Emergency Management Desk: 1.800.858.0368. If appropriate, contact local Emergency Management. • Print and review form: <ul style="list-style-type: none"> ○ Chemically Exposed Persons Line Listing.
CONDUCTING THE INVESTIGATION	
Evaluate Release/Exposure	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Identify route of exposure: <ul style="list-style-type: none"> ○ Inhalation ○ Ingestion

	<ul style="list-style-type: none"> ○ Dermal (Skin) ○ Injection ● Interview responders and/or exposed individuals to obtain additional information about the chlorine dioxide exposure within 24-hours.
<p>Describe Exposed Population</p>	<ul style="list-style-type: none"> ● Determine the following: <ul style="list-style-type: none"> ○ Geographic area affected ○ Population affected (general population, employees and residents) ○ How population exposed (in vicinity, inhalation or direct contact) ○ Define cases within the exposed population ● Contact 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.
<p>Implement Control Measures to Prevent Additional Exposures</p>	<ul style="list-style-type: none"> ● 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 and businesses of the chlorine dioxide exposure through local emergency notification system, local TV and radio. Important points to include: <ul style="list-style-type: none"> ○ 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 and

	<p>businesses.</p> <ul style="list-style-type: none"> ○ The local incident management team will determine when residences and 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	
Case Finding	<ul style="list-style-type: none"> ● During the course of the investigation, interview other exposed individuals for symptoms related to the chlorine dioxide exposure. <ul style="list-style-type: none"> ○ Work with your local medical facilities, local incident management team 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.
Routine Precautions	<ul style="list-style-type: none"> ● Communicate the following control measures with residents/business owners: <ul style="list-style-type: none"> ○ Remove all ignition sources from areas with chlorine dioxide to minimize chances of fire. ○ Open all windows once residences and businesses are re-entered.

	<ul style="list-style-type: none"> ○ Wash any areas that have been exposed to chlorine dioxide (only with water) and remove clothing that were exposed to the chemical to prevent the tracking of chemical to other areas.
SPECIAL CONSIDERATIONS	
Risk Communication	<ul style="list-style-type: none"> ● N.C. DHHS Communications Office 919. 855.4840 is available to assist local health departments with communication efforts as needed.
ADDITIONAL INFORMATION	
Glossary of Terms	<p>DENR: Department of Environment and Natural Resources</p> <p>ED: Emergency Department</p> <p>EHS: Environmental Health Specialist</p> <p>EPA: Environmental Protection Agency</p> <p>OEEB: Occupational and Environmental Epidemiology Branch</p> <p>PHP&R: Public Health Preparedness & Response</p>

