

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



CHEMICAL	TRADE NAME(S)
Bromine	Molecular bromine, Bromine solution
PREPARING FOR THE INVESTIGATION	
<p style="text-align: center;">Know the Agent</p>	<ul style="list-style-type: none"> • Bromine is a dark red-brown, fuming liquid with suffocating, irritating odor. <ul style="list-style-type: none"> ○ Read about bromine in the Bromine Fact Sheet. ○ For additional information, visit: http://www.cdc.gov/niosh/docs/81-123/pdfs/0064-rev.pdf • 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	
<p style="text-align: center;">Evaluate Release/Exposure</p>	<ul style="list-style-type: none"> • 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).
<p style="text-align: center;">Identify Route of Human Chemical Exposure</p>	<ul style="list-style-type: none"> • Identify route of exposure: <ul style="list-style-type: none"> ○ Inhalation ○ Ingestion ○ Dermal (Skin)

	<ul style="list-style-type: none"> • Interview responders and/or exposed individuals to obtain additional information about the bromine 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) ○ 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.
<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/businesses of the bromine 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

	<p>residences/businesses.</p> <ul style="list-style-type: none"> ○ 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	
Case Finding	<ul style="list-style-type: none"> ● During the course of the investigation, interview other exposed individuals for symptoms related to the bromine release. <ul style="list-style-type: none"> ○ 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.
Routine Precautions	<ul style="list-style-type: none"> ● Communicate the following control measures with residents/business owners. <ul style="list-style-type: none"> ○ Stay upwind of the exposure if possible and ventilate enclosed areas. ○ If exposed, immediately remove any clothing that has made contact and flush the exposed areas with

	water for 20 min.
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 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>

