

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



CHEMICAL	TRADE NAME(S)
Ammonia	Anhydrous ammonia, Aqua ammonia & Aqueous ammonia
PREPARING FOR THE INVESTIGATION	
Know the Agent	<ul style="list-style-type: none"> • Ammonia is a colorless gas with a distinct odor. <ul style="list-style-type: none"> ○ Read about ammonia in the Ammonia Fact Sheet. ○ For additional information, visit: www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=2 • Contact: <ul style="list-style-type: none"> ○ Public Health Preparedness & Response Branch (PHP&R): 888.820.0520 ○ NC 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 List
CONDUCTING THE INVESTIGATION	
Evaluate Release	<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).
Identify Route of Human Chemical Exposure	<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"> ○ Injection ● Interview responders and/or exposed individuals to obtain additional information about the ammonia release 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 Chemical Exposed Person 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 will consult with OEEB to discuss next steps to ensure no additional individuals are exposed. ● Inform residents/businesses of the ammonia release through local emergency notification system, local TV and radio. Important points to include: <ul style="list-style-type: none"> ○ Location of release. ○ 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.

	<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.
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INVESTIGATION RESULTS

<p style="text-align: right;">Case Finding</p>	<ul style="list-style-type: none"> ● During the course of the investigation, interview other exposed individuals for symptoms related to the ammonia 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. ● Advise symptomatic individuals, especially children, to see their healthcare provider immediately for evaluation. ● Once interviews are complete, communicate with: <ul style="list-style-type: none"> ○ 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.
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<p style="text-align: right;">Routine Precautions</p>	<ul style="list-style-type: none"> ● Communicate the following control measures with resident/business owners. <ul style="list-style-type: none"> ○ Open all windows once residences/businesses are re-entered. ○ Rinse all food thoroughly. Packaged food should not pose a human health threat. ○ Contact a veterinarian if pets or
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	<p>farm animals show symptoms of exposure.</p> <ul style="list-style-type: none"> ○ Contact local Cooperative Extension office if vegetable plants and vegetables are dying for unknown reasons.
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>ATSDR: Agency for Toxic Substances & Disease Registry</p> <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>

