

TOXIC SUBSTANCE RELEASES

2010 – 2012

SUMMARY



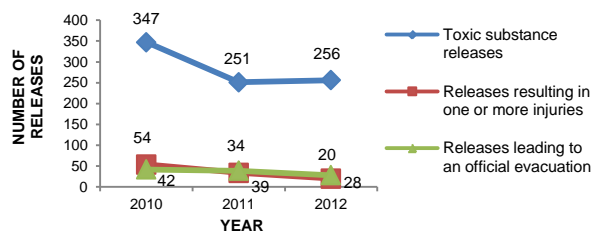
Toxic substance surveillance is conducted through the National Toxic Substance Incidents Program (NTSIP). Eligible toxic substance releases are identified through:

- National Response Center reports
- N.C. Emergency Management reports
- U.S. Department of Transportation's Hazardous Materials Incident Reports
- Media reports
- On-call notifications from the N.C. Public Health Preparedness and Response Branch and N.C. Communicable Disease Branch

From 2010 to 2012, 854 toxic substance releases were identified:

- 108 (13%) releases resulted in one or more injuries
- 109 (13%) releases led to an evacuation

Figure 1. Toxic substance releases in North Carolina, 2010–2012



183 persons were injured as a result of toxic substance releases:

- 14 of these persons were dead on scene or on arrival at hospital
 - Six were due to unintentional releases
 - Eight were as a result of chemical suicides

Table 1. Severity of injuries resulting from toxic substance releases, North Carolina, 2010–2012

Severity of injury	2010	2011	2012	Total
Death on scene or on arrival at hospital	4	5	5	14
Treated at hospital (admitted)	6	10	15	31
Treated at hospital (not admitted)	16	12	30	58
Treated on scene	26	28	3	57
Observed at hospital (not treated)	2	0	7	9
Unknown	11	1	2	14
Total injured persons	65	56	62	183

For more information on North Carolina's toxic substance surveillance program, please visit: <http://epi.publichealth.nc.gov/oeep/programs/ntsip.html>

Figure 2. Frequency of toxic substance releases by county, North Carolina, 2010–2012

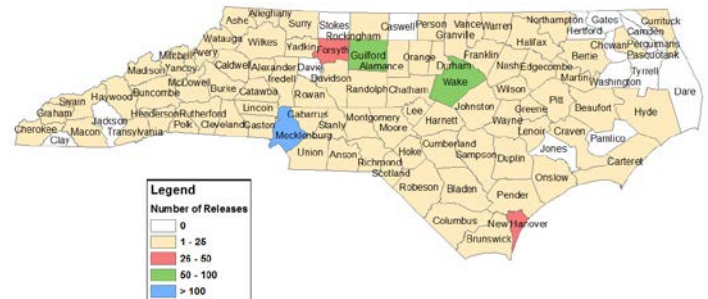


Table 2. Chemicals that contributed to >15 toxic substance releases, North Carolina, 2010–2012

Chemical	Releases
Methamphetamine chemicals	80
Ammonia	58
Natural gas	53
Sodium hydroxide	46
Mercury	23
Paint thinner	23
Sulfuric acid	23
Resin	21
Hydrochloric acid	19
Potassium hydroxide	18

Public Health Action

Based on the identification of the most common hazardous substance releases in North Carolina, a chemical release investigative kit and template (CRIKT) was developed for local health departments to use as a guide to improve the public health response in the event of a chemical release.



CRIKT is composed of a step-by-step response guide, one-page chemical fact sheets, and a line listing template. For more information on CRIKT: <http://epi.publichealth.nc.gov/oeep/chemrad/chemkit.html>

NOTE: A toxic substance release is defined as an unintentional, acute emergency release (lasting 72 hours or less) of a toxic substance that meets the National Toxic Substance Incidents Program's (NTSIP) eligibility criteria, which are based on the toxicity of the chemical and the amount released. North Carolina has participated in NTSIP since its implementation in 2010. For more information about NTSIP, please visit <http://www.atsdr.cdc.gov/ntsip/>

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