



Chemical Leak Incident December 2023

Surry County, North Carolina

- Late on a Friday night, September, 2021: Surry County, North Carolina
- Multiple volunteer fire departments were dispatched to a cloud of smoke coming from a private citizen's barn
- Upon arriving at the scene, responders quickly realized the cloud was not smoke from a structure fire, but rather chemical fumes from a leak originating inside the building
- The HAZMAT team was immediately contacted to respond
- There was concern the chemical cloud may move to the next town, as the chemical substance was still unknown
- They used social media and a mass notification system to alert residents within 5 miles of the cloud
- The area around the barn was evacuated and a perimeter was set up
- The road the barn was on was closed and traffic rerouted
- HAZMAT along with the fire department determined the cloud was a hydrochloric acid leak inside the building
- The HAZMAT technicians neutralized the acid leak enough to lessen the chemical fumes and a cleaning company specializing in HAZMAT situations was called to finish cleaning the area
- Lessons learned:
 - Using social media and the county's mass emergency notification system to alert residents of the incident worked well, however, there were still some residents who were unaware that the chemical emergency was happening
 - It was identified later, that the mass notification system only enrolled residents with a landline, and those with cell phones needed to self-register
 - To remedy this, they worked with the communication center to identify households without a landline and did outreach and education about signing up for alerts from the notification system
 - It was also noted how important it was to have strong relationships with responding partners – for example the HAZMAT team had an existing relationship with a cleaning company that cleaned up the response area

Impacts:

- Potential evacuation
- Potential medical surge of contaminated patients
- Possible burn surge
- Rural responders may lack experience with chemical incidents – training is critical
- Mass public emergency notification

Preparedness:

- Determine notification systems in the community to alert residents of incidents; review how the contacts are added to the system, such as whether cell phones are included or only landlines
- Develop and or review community evacuation plans
- Develop/maintain strong relationships with area HAZMAT teams to support quick and easy flow of communication in response

Sources:

- [Acid Leak Demonstrates Necessity of Strong Partnerships in Surry County, North Carolina](#)

Resources:

- [Preparing for and Responding to Chemical Incidents](#) (ASPR TRACIE)
- [Chemical Emergencies](#) (CDC)
- [PRISM: Primary Response Incident Scene Management](#) (ASPR)