Occupational & Environmental Epidemiology

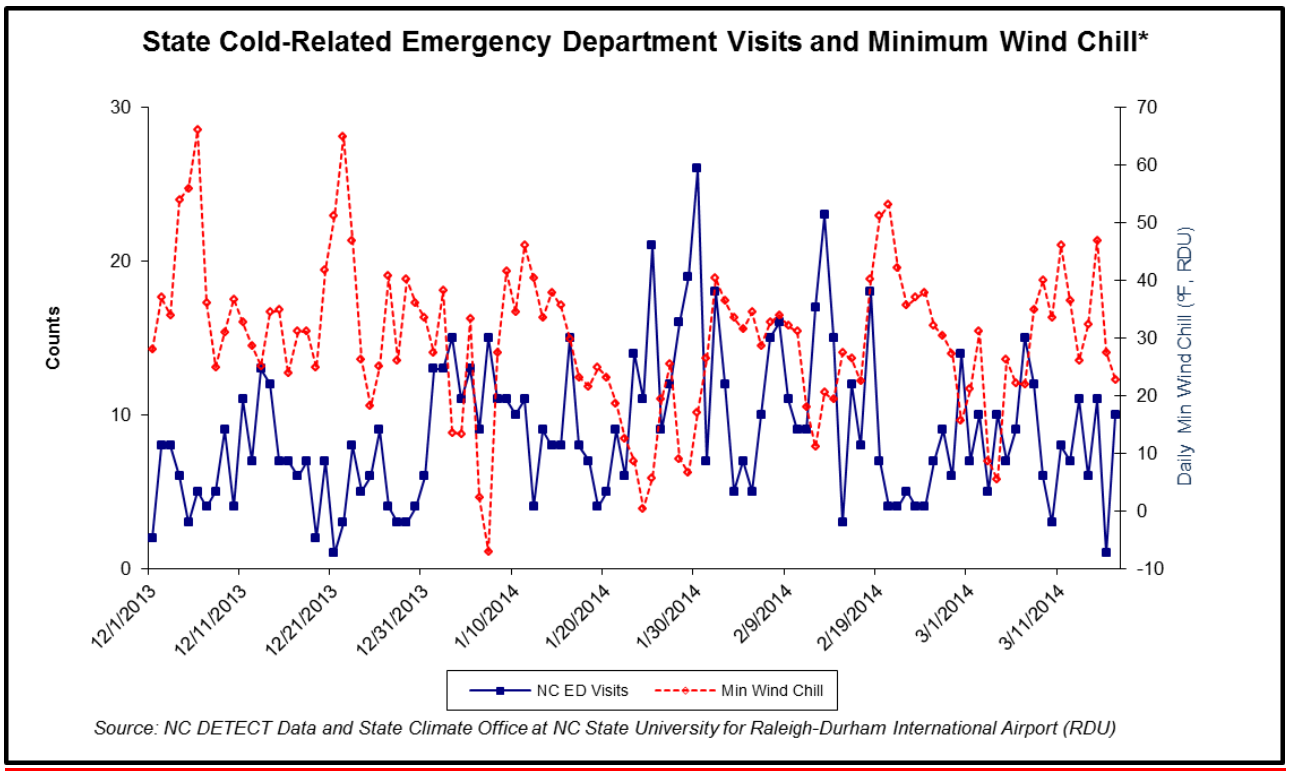
The 2014 North Carolina Cold Report

Cold Weather-Related Illness (12/1/13 – 3/17/14):

- Approximately 945 cold-related illnesses were identified in emergency department visit records (Figure 1)
- Majority of illness (57%) among males, with most male visits among those over the age of 30
- Daily minimum wind chill* temperatures down to -7ºF were observed
- Common references in triage notes were for alcohol or drug use (e.g., intoxication, overdose), frostbite (e.g., hands, toes), and falls
- Carbon monoxide emergency department visits saw a large spike in January and February surrounding outages from winter weather (Figure 2)

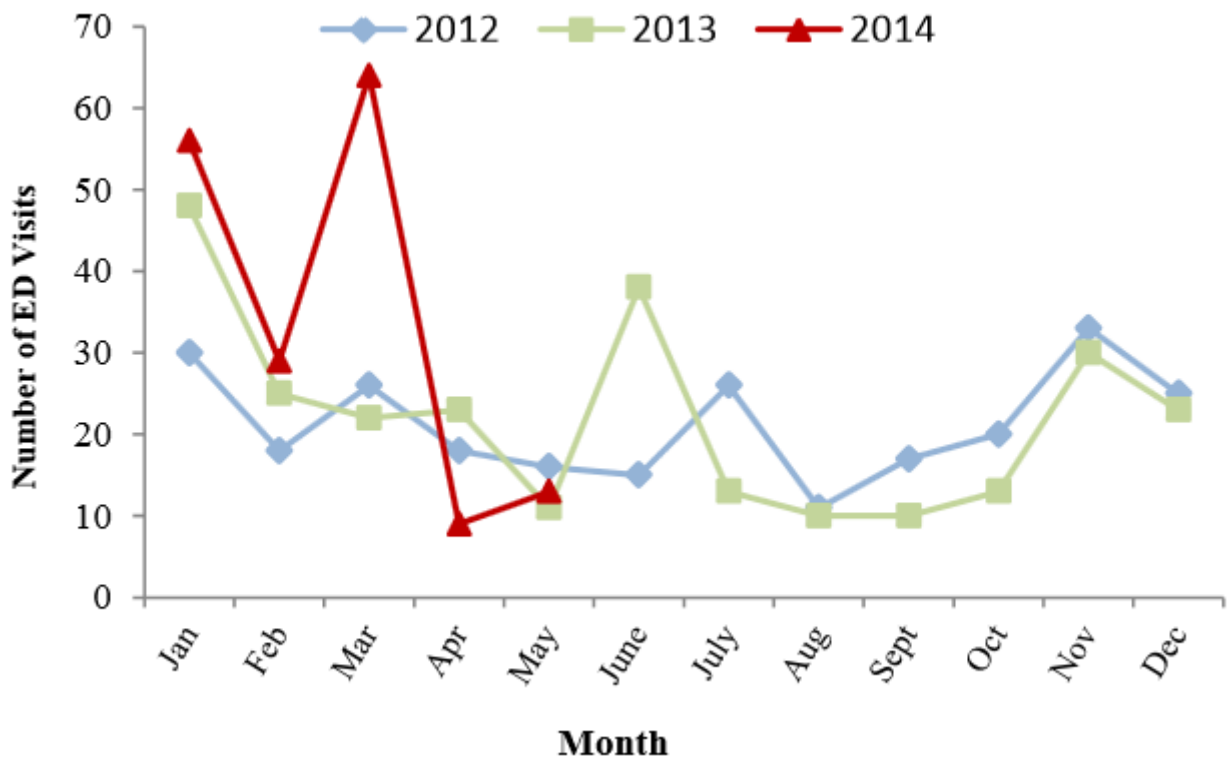
Notes: These data and this graph are from NC DETECT. Cold-related illness is captured through a near real-time keyword search for 'frostbite,' 'frostnip,' 'hypothermia,' 'cold exposure,' 'out in the cold,' and 'frozen' in chief complaint and triage notes of emergency department records or a diagnosis code for hypothermia or cold-related illness. These numbers under-estimate the true number of cold-related illness hospital visits. Please contact lauren.thie@dhhs.nc.gov for more information.

Figure 1. Emergency department visits for hypothermia and cold-related illness with minimum wind chill*, 12/1/13 to 3/17/14, North Carolina.



*Minimum wind chill describes the apparent temperature when it is lower than the air temperature by accounting for wind velocity.

Figure 2. Emergency department visits related to unintentional non-fire-related carbon monoxide poisoning by month and year, North Carolina. Source: NC DETECT data.



For more information on carbon monoxide poisonings, visit the North Carolina Environmental Public Health Tracking site: http://epi.publichealth.nc.gov/oee/a_z/co.html.

The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) is an advanced, statewide public health surveillance system. NC DETECT is funded with federal funds by North Carolina Division of Public Health (NC DPH), Public Health Emergency Preparedness Grant (PHEP), and managed through a collaboration between NC DPH and the University of North Carolina at Chapel Hill Department of Emergency Medicine's Carolina Center for Health Informatics (UNC CCHI).