## CARBON MONOXIDE POISONINGS

2014

## **Emergency Department (ED) Visits**

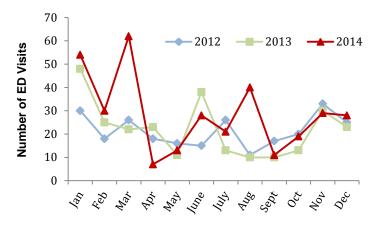
342 ED visits related to unintentional, non-fire related carbon monoxide (CO) poisoning were identified in North Carolina in 2014

	N (%)
Sex	
Female	168 (49)
Male	174 (51)
Age Group (Yrs.)	
0–17	58 (17)
18–34	105 (31)
35–64	142 (41)
65+	37 (11)
Exposure Site	
Home	86 (25)
Public Building	6 (2)
School	1 (<1)
Unspecified	168 (49)
Vehicle	14 (4)
Workplace	67 (20)

	N (%)
Disposition	11 (70)
Admitted	34 (10)
Discharged	266 (78)
Left without advice	7 (2)
Observation	3 (<1)
Other / Unknown	4 (1)
Transferred	28 (8)
Insurance	
Medicaid	70 (20)
Medicare	48 (14)
Other / Unknown	43 (13)
Private	74 (22
Self-Pay	56 (16)
Worker's Compensation	51 (15)

Percentages may not add to 100 due to rounding

<u>Figure 1.</u> ED visits related to unintentional, non-fire related CO poisoning by month and year, North Carolina, 2012–2014



## **Summary of ED Visits**

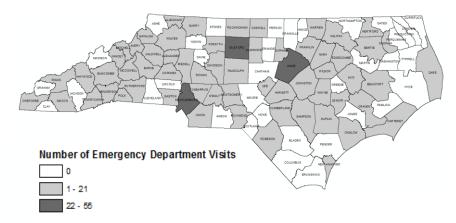
- Age group 35–64 was admitted or transferred<sup>1</sup> more often (51%) compared to other age groups in 2014.
- A greater number of ED visits for CO poisoning occurred in 2014 compared to 2013 (266) and 2012 (255).
- March 2014 had highest number of ED visits, potentially due to a high occurrence of ice and snow storms.
- Common reported exposure sources were gas generators and portable heaters.

Figure 2. 2014 North Carolina ED Visits by County

## **Carolinas Poison Center (CPC) Calls**

CPC received 202 calls<sup>2, 3</sup> related to unintentional CO exposure in North Carolina, 18 calls requesting CO information, and 12 calls related to CO alarm use.

- A total of 345 exposed people were mentioned:
  - o 179 (47%) Female
  - o 163 (52%) Male
  - o 3 (<1%) Unknown
- · Site of exposure:
  - o 16 (5%) Other
  - o 2 (1%) Public area
  - o 271 (78%) Residence
  - o 1 (<1%) School
  - o 55 (16%) Workplace



<sup>&</sup>lt;sup>1</sup>Hospital admission or transfer disposition can be used as a possible indicator of severity of ED visit.

NOTE: NC DETECT (<a href="https://www.ncdetect.org">www.ncdetect.org</a>) search criteria for ED visits: ICD-9-CM diagnostic code 986 or external cause of injury code E868.3, E868.9, E982.1, E868.2 or E982.0 for North Carolina residents who visited North Carolina hospitals. ED visits related to self-inflicted or fire-related exposures were excluded. CPC calls were filtered by substance and included when unintentional CO exposure, CO alarm use or a request for CO information was documented.

NC DETECT is a statewide public health syndromic surveillance system, funded by the N.C. Division of Public Health (NC DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between NC DPH and UNC-CH Department of Emergency Medicine's Carolina Center for Health Informatics. The NC DETECT Data Oversight Committee is not responsible for the scientific validity or accuracy of methodology, results, statistical analyses, or conclusions presented.







<sup>&</sup>lt;sup>2</sup>We do not have ability to determine extent of overlap between CPC calls and ED visits. Therefore, they are analyzed separately.

<sup>&</sup>lt;sup>3</sup>We do not have ability to determine if CPC calls were related to fires.