

CARBON MONOXIDE POISONINGS

2023 Annual Report

This report summarizes carbon monoxide (CO) poisoning cases reported in 2023 through the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT), a statewide public health syndromic surveillance system. This data includes unintentional, non-fire related CO Emergency Department visits and CO-related calls received by North Carolina Poison Control (NCPC). Occupational CO poisonings are reportable in North Carolina according to North Carolina Administrative code 10A NCAC 41C .0702 and are typically reported through NCPC.

Emergency Department Visits

219

emergency department (ED) visits were for unintentional, non-fire related carbon monoxide (CO) poisonings in North Carolina.

40%

of all ED CO poisoning visit patients were transported to the hospital by ambulance.

50%

of all ED CO poisoning visits were among female patients.

Figure 2. Payment type for ED visits for unintentional, non-fire related CO poisonings – NC, 2023 (n=219)

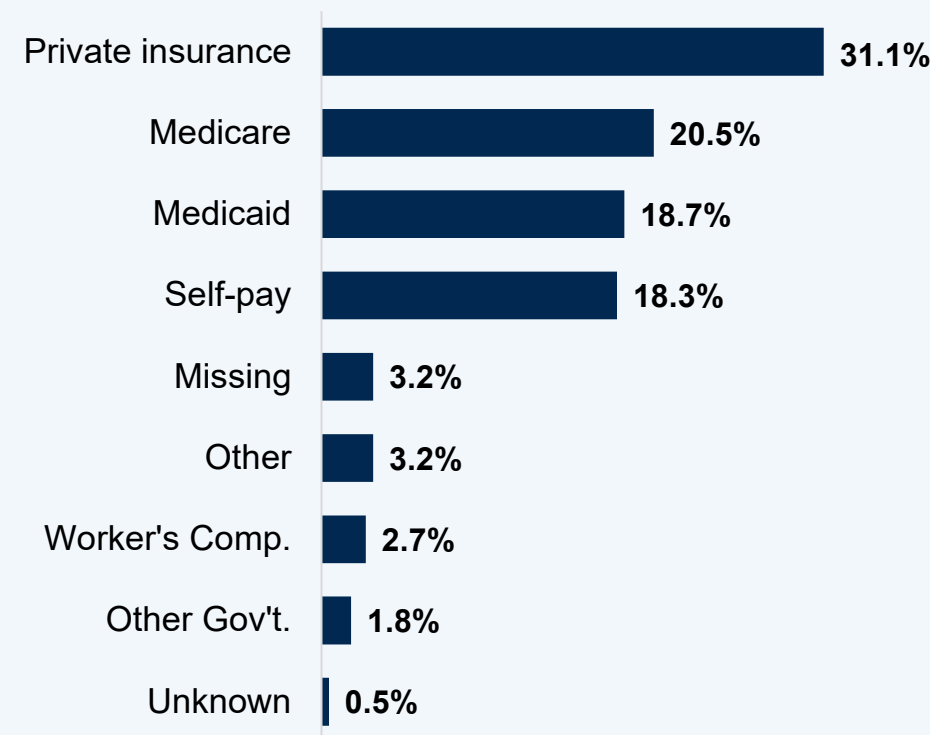


Figure 4 .Number of ED visits for unintentional, non-fire related CO poisoning by month and year – NC, 2021 – 2023

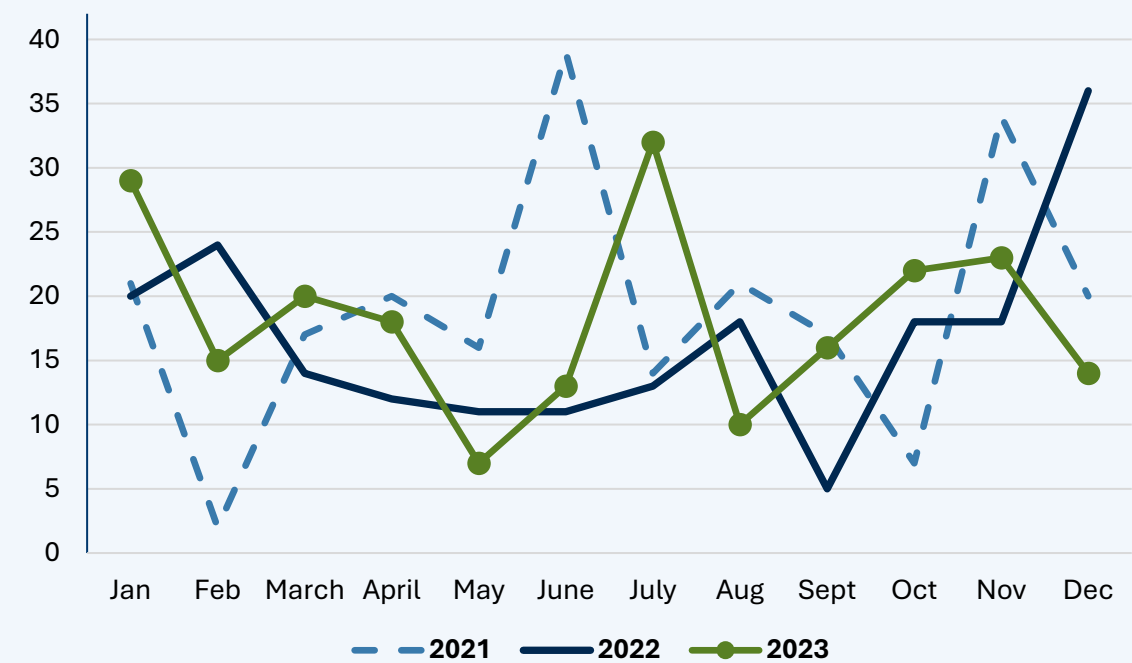


Figure 1. Rate of ED visits¹ per 100,000 people for unintentional, non-fire related CO poisoning by county – NC, 2023

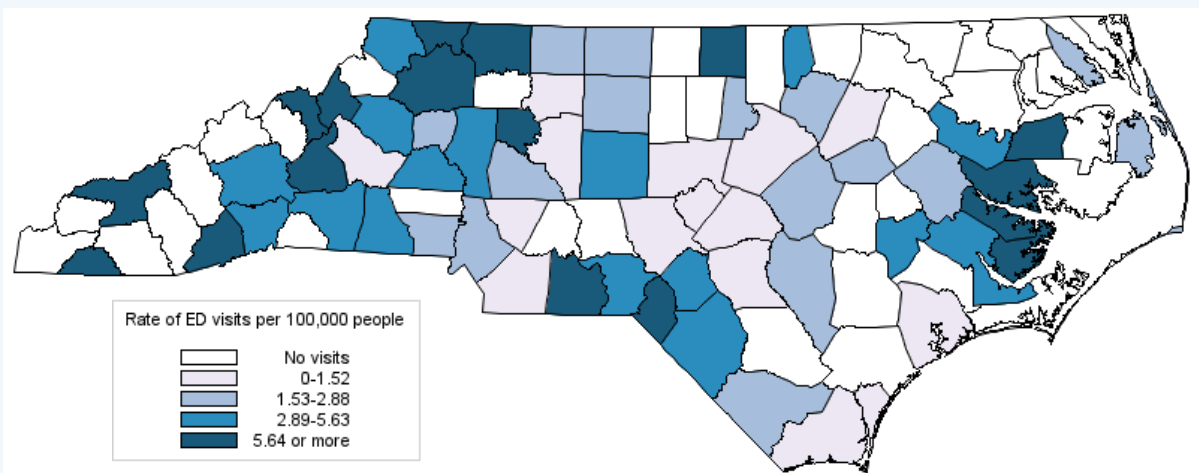


Figure 3. Disposition for ED visits for unintentional, non-fire related CO poisonings – NC, 2023 (n=219)

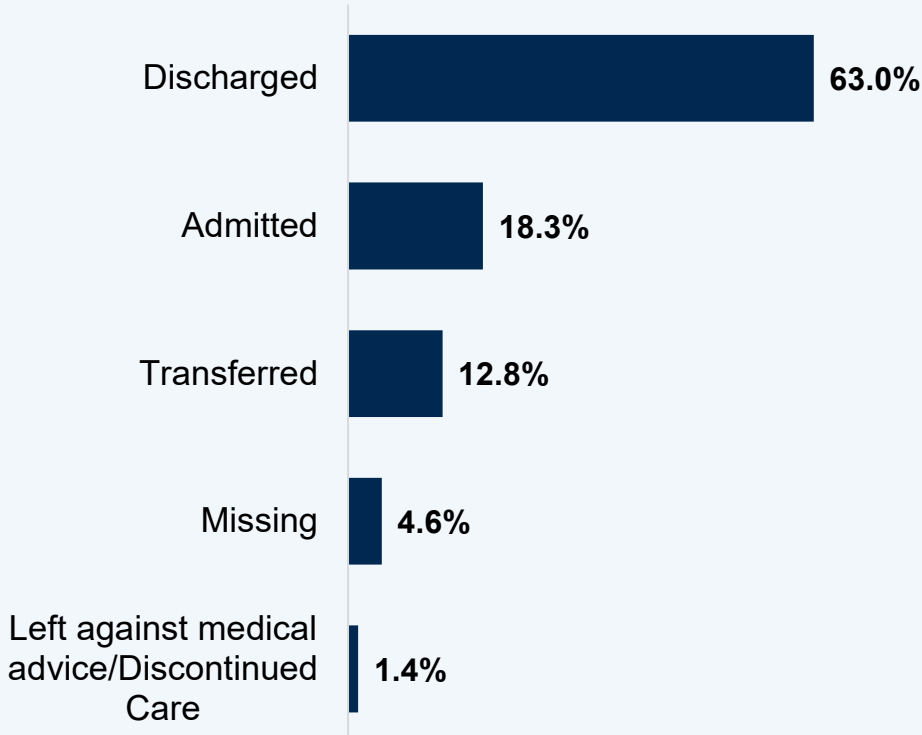
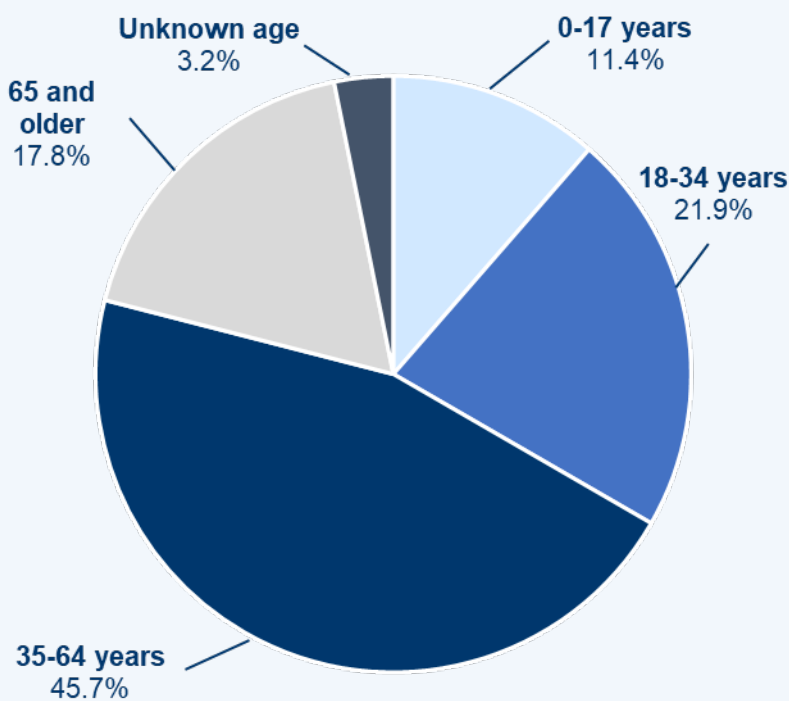


Figure 5. Age groups of ED visits for unintentional, non-fire related CO poisoning – NC, 2023 (n=219)



NOTE: North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) is a statewide public health syndromic surveillance system, funded by the NC Division of Public Health (NC DPH) Federal Public Health Emergency Preparedness Grant and managed through collaboration between NC DPH and the 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.

NC DETECT (www.ncdetect.org) search criteria for Carbon Monoxide Poisoning - Confirmed/Probable ED visits: ICD-10-CM diagnostic code 'T58.XX' for North Carolina residents who visited hospitals in NC. ED visits related to self-inflicted or fire-related exposures were excluded. NC Poison Control (NCPC) calls were filtered by substance and included when unintentional CO exposure was documented.

North Carolina Poison Control Calls

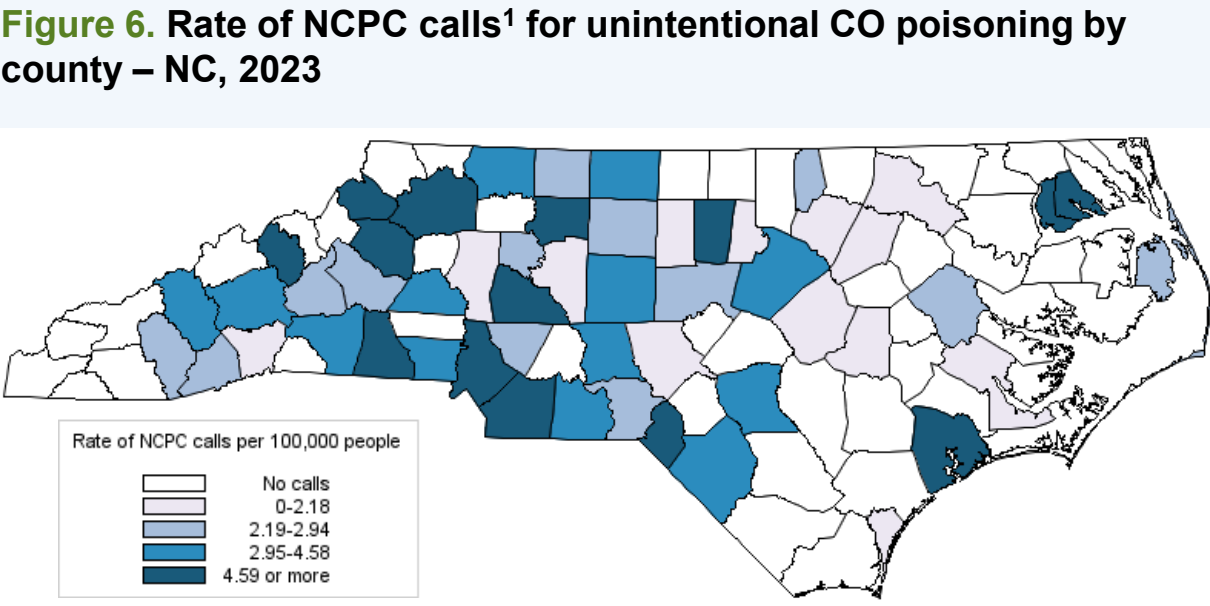
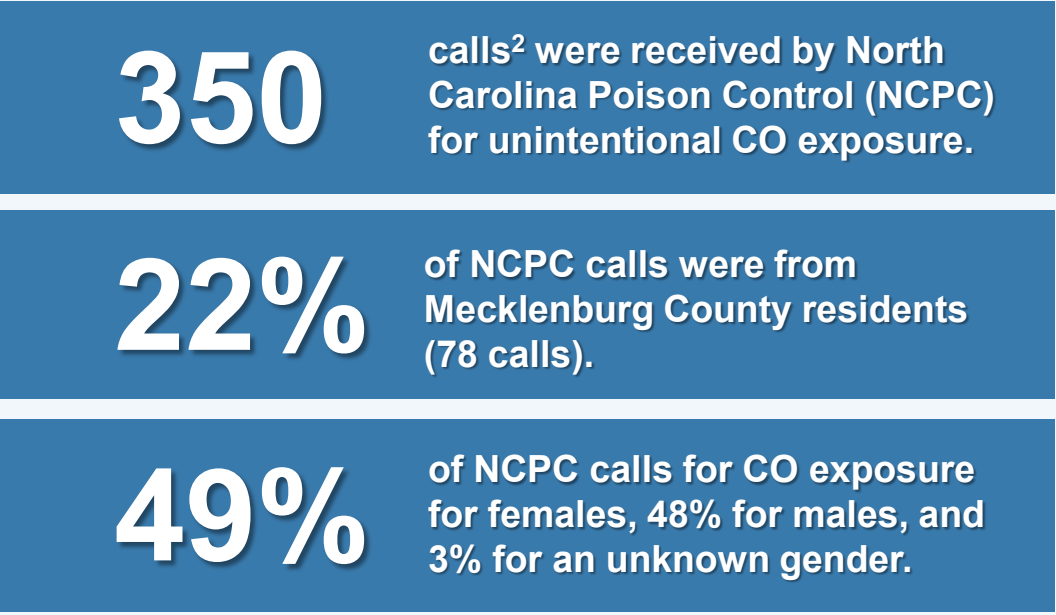


Figure 7. Age groups of NCPC calls for unintentional CO poisoning – NC, 2023 (n=350)

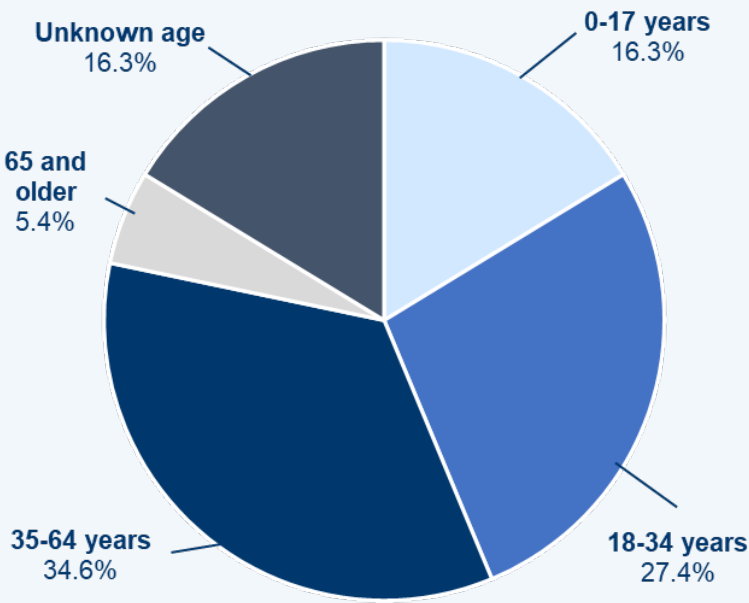


Figure 8. Exposure location for NCPC calls for unintentional CO poisonings – NC, 2023 (n=350)

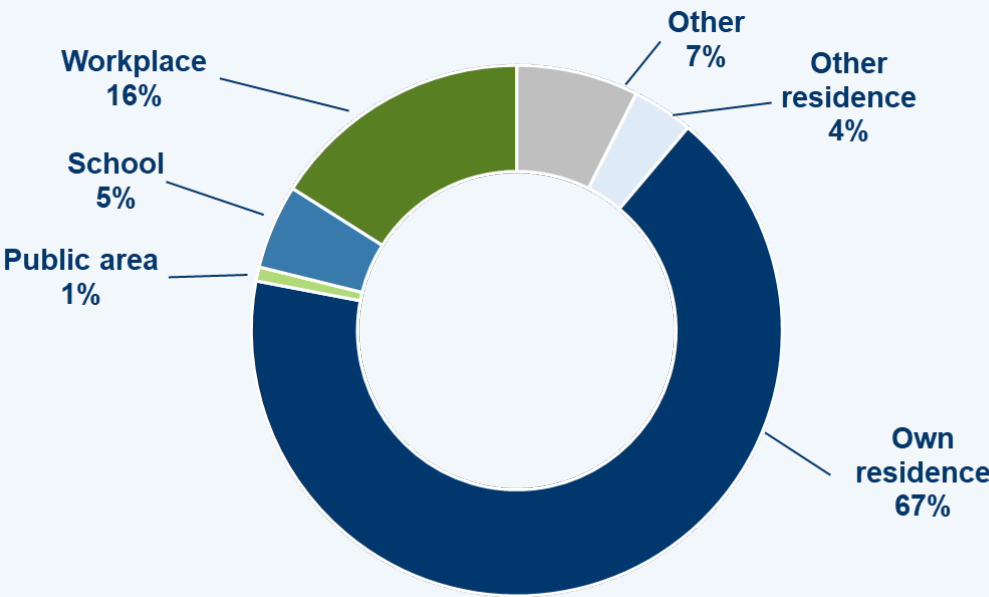
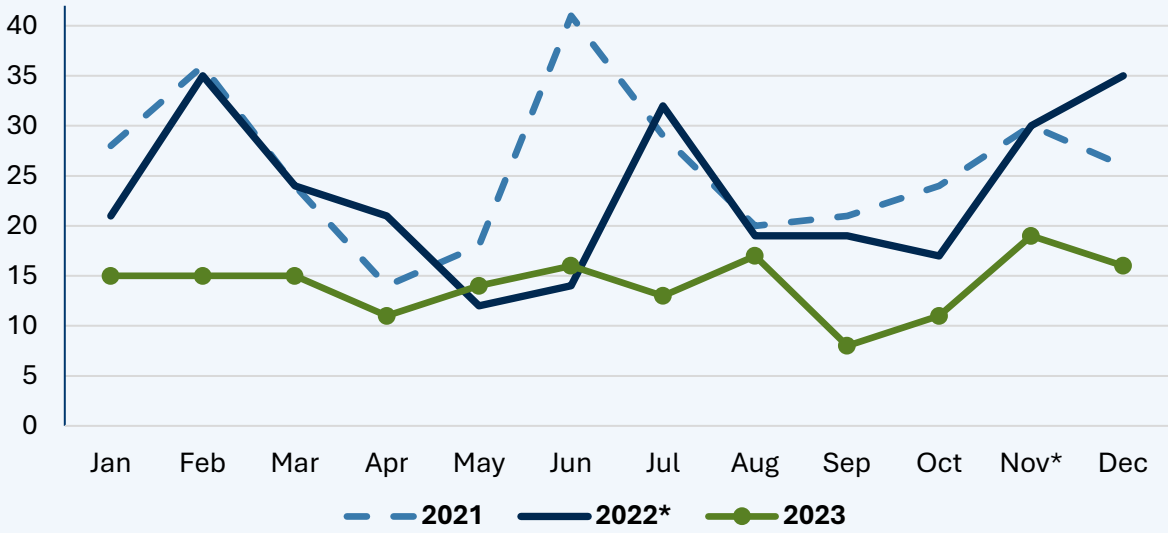


Figure 9. NCPC calls for unintentional CO poisoning by month and year – North Carolina, 2021 – 2023



**Note: To prevent distortion of the trend and improve readability, 261 additional calls related to a single event in November 2022 were excluded.*

For more information about CO poisoning prevention, visit https://epi.dph.ncdhhs.gov/oe/a_z/co.html

Visit the [Division of Public Health](#) webpage to learn more about how to prevent CO poisonings and to access prevention materials:

- [CO Poisoning Prevention Poster](#)
- [Workplace CO prevention posters](#)
- Carbon Monoxide Safety Bulletin for [Firefighters](#) and [EMS Personnel](#)
- Infographics available in: [Arabic](#), [Chinese](#), [Farsi](#), [Russian](#), [Spanish](#) and [Vietnamese](#)

¹ Rates are based on 2023 U.S. Census Bureau County Populations
² We do not have the ability to determine extent of overlap between CPC cases and ED visits. Therefore, they are reported separately.

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