UL Standards & Engagement

Carbon monoxide poisoning is a pervasive yet preventable threat in the United States, causing significant harm each year. UL Standards & Engagement has developed the CO Risk Readiness Assessment to evaluate how effectively each U.S. state addresses CO risks.

The labels "Worst" and "Best" correspond to the lowest and highest scores states achieved within each category: code and regulatory strength, public awareness, and incidence prevention.

North Carolina Recommendations:

- **Mandate Regular Alarm Maintenance:** Require periodic inspections and maintenance of CO alarms by landlords, property owners, or certified technicians to ensure ongoing functionality.

- **Broaden Stakeholder Involvement:** Engage local governments, community organizations, and industry stakeholders in regular training and awareness sessions to further integrate CO safety into everyday practices.

- **Confirm Alarm Longevity/ Reliability:** Promote adoption of CO alarms that adhere to safety standards.

- **Expand Tracking and Information:** Increase tracked details of CO poisonings and publish reports for public use (sources, severity, other determinants).

See the next page for more information on tier recommendations.

CO SAFETY LEADER
North Carolina

● North Carolina Average   ◑ U.S. Average
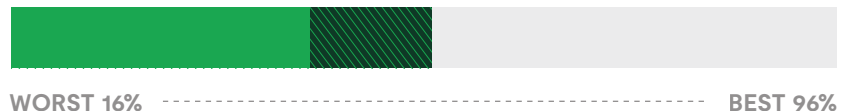
Health Outcomes Score   ● 63%   ◑ 41%

WORST 3% - BEST 79%

Code & Regulatory Strength Score   ● 85%   ◑ 72%

WORST 0% - BEST 100%

Public Awareness & Behavior Score   ● 36%   ◑ 51%

WORST 16% - BEST 96%

Quick North Carolina Stats:

Average winter temperature:	**40.9°F**
Population:	**10,439,388**
Median household income:	**$70,804**
Households using a fuel source potentially putting residents at risk of CO exposure:	**84%**
January 2024 heating degree days: *HDD shows how cold a month was based on days below 65°F—higher values mean more heating needed*	**741**

Recommendations	States

CO Safety Champion

Sustain and Evolve Public Awareness Campaigns: Continue public education on CO risks, symptoms, and prevention measures via social media, schools, community events, and regular public service announcements during high-risk times for your state, updating content as new risks and technologies emerge.

Expand Technology Integration: Promote the adoption of smart CO alarms that integrate with home automation systems, enabling real-time alerts and remote monitoring.

Conduct Regular Regulation Reviews: Periodically assess CO safety regulations to incorporate emerging technologies, address identified gaps, and align with evolving industry standards.

Advance Data Collection: Study CO poisonings that otherwise are missed by standard tracking techniques.

States:
- New Jersey
- Virginia
- Vermont
- Alabama
- California
- Arkansas

CO Safety Leader

Mandate Regular Alarm Maintenance: Require periodic inspections and maintenance of CO alarms by landlords, property owners, or certified technicians to ensure ongoing functionality.

Broaden Stakeholder Involvement: Engage local governments, community organizations, and industry stakeholders in regular training and awareness sessions to further integrate CO safety into everyday practices.

Confirm Alarm Longevity/Reliability: Promote adoption of CO alarms that adhere to safety standards.

Expand Tracking and Information: Increase tracked details of CO poisonings and publish reports for public use (sources, severity, other determinants).

States:
- Washington
- New York
- Maryland
- Wisconsin
- North Carolina
- Utah
- Arizona
- New Hampshire
- Mississippi
- Pennsylvania
- Michigan
- Connecticut

CO Safety Advocate

Build on Mandatory Installations: Continue enforcing basic alarm requirements as established at the Starter level.

Enhance Public Outreach: Launch targeted campaigns to educate vulnerable populations (e.g., renters, elderly, and low-income households) and stakeholders (doctors, HVAC technicians, construction, firefighters) and establish statewide CO awareness programs.

Encourage Alarm Installation: Offer financial incentives for low-income or vulnerable households to install CO alarms that adhere to safety standards.

Strengthen Enforcement Mechanisms: Implement penalties for non-compliance with CO safety regulations to ensure accountability.

States:
- Washington, D.C.
- Indiana
- Oregon
- Massachusetts
- Colorado
- Georgia
- Ohio
- Wyoming
- Iowa
- Minnesota
- Tennessee
- Idaho
- Kentucky
- Oklahoma
- New Mexico
- Maine
- Florida
- South Carolina
- Rhode Island
- Montana

CO Safety Starter

Mandate Basic CO Alarm Requirements: Require CO alarms that adhere to safety standards in all new and existing commercial, mixed-use, and residential buildings.

Launch Initial Public Outreach: Launch targeted campaigns to educate vulnerable populations (e.g., renters, elderly, and low-income households) and establish statewide CO awareness programs.

Develop Emergency Response Programs: Train first responders and healthcare professionals to handle CO poisoning cases effectively.

Collaborate with Federal Agencies: Seek guidance and resources from organizations like the CDC to develop robust CO safety initiatives.

Monitor and Evaluate Progress: Establish systems to track CO-related incidents and measure the effectiveness of new policies.

States:
- Alaska
- Nevada
- Illinois
- West Virginia
- Delaware
- North Dakota
- South Dakota
- Louisiana
- Hawaii
- Texas
- Nebraska
- Kansas
- Missouri

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National Carbon Monoxide Awareness Association

IAFSM