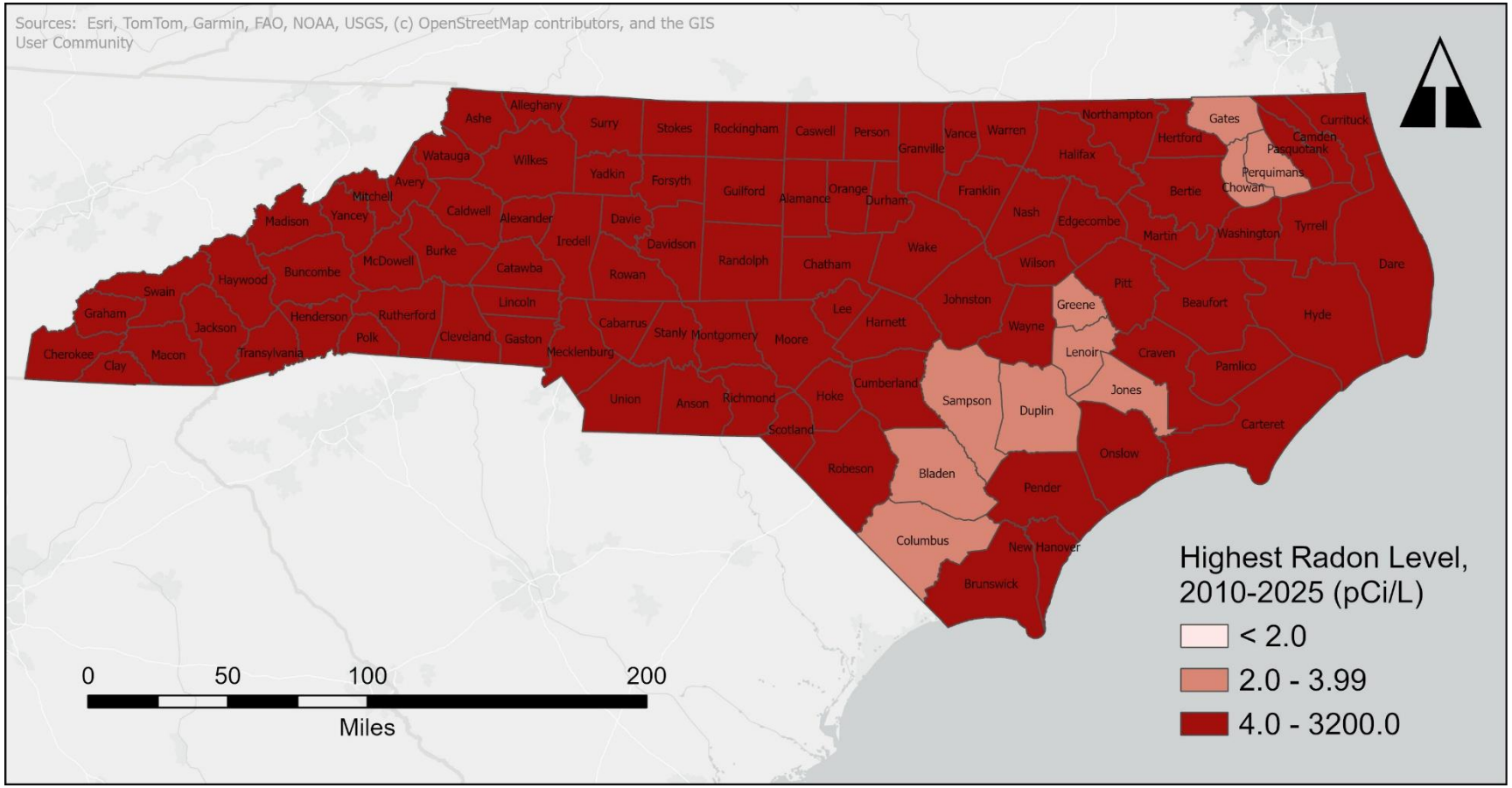
NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

Radon Data for NC CHAs and NC CHIPs

Phillip Ray Gibson
NC Radon Program Coordinator
NC Radiation Protection Section
NC Department of Health and Human Services

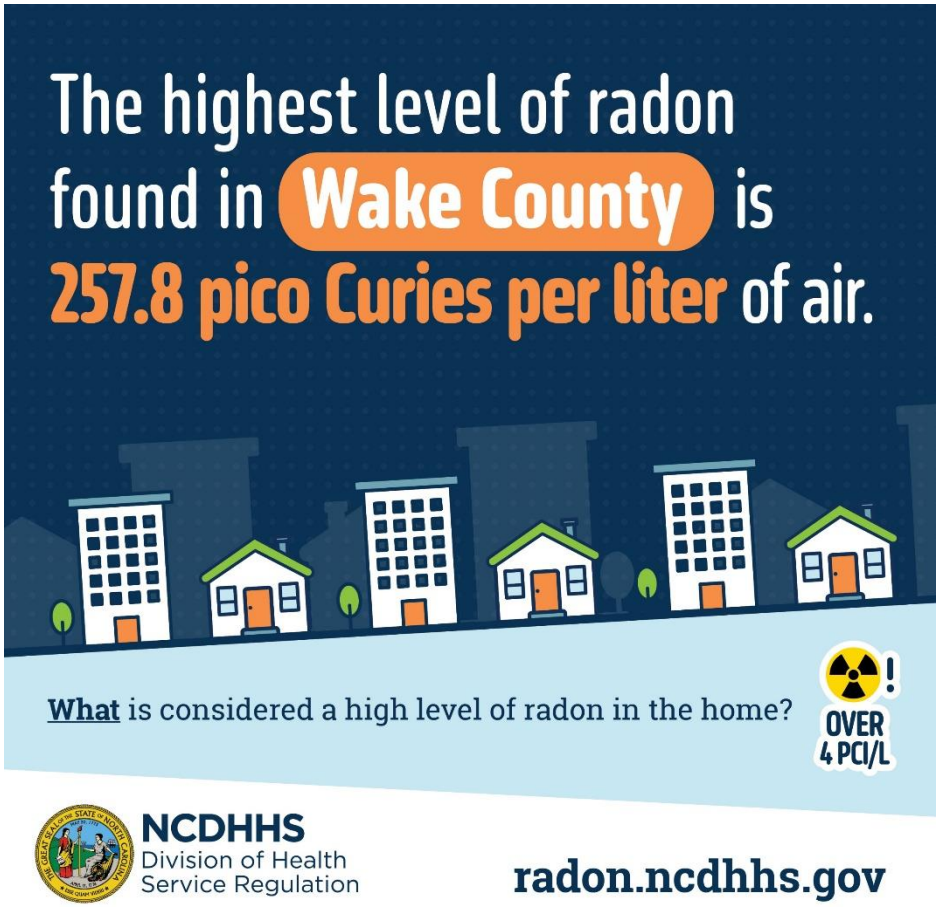
Maximum Radon Level by County (2010 to 2025)



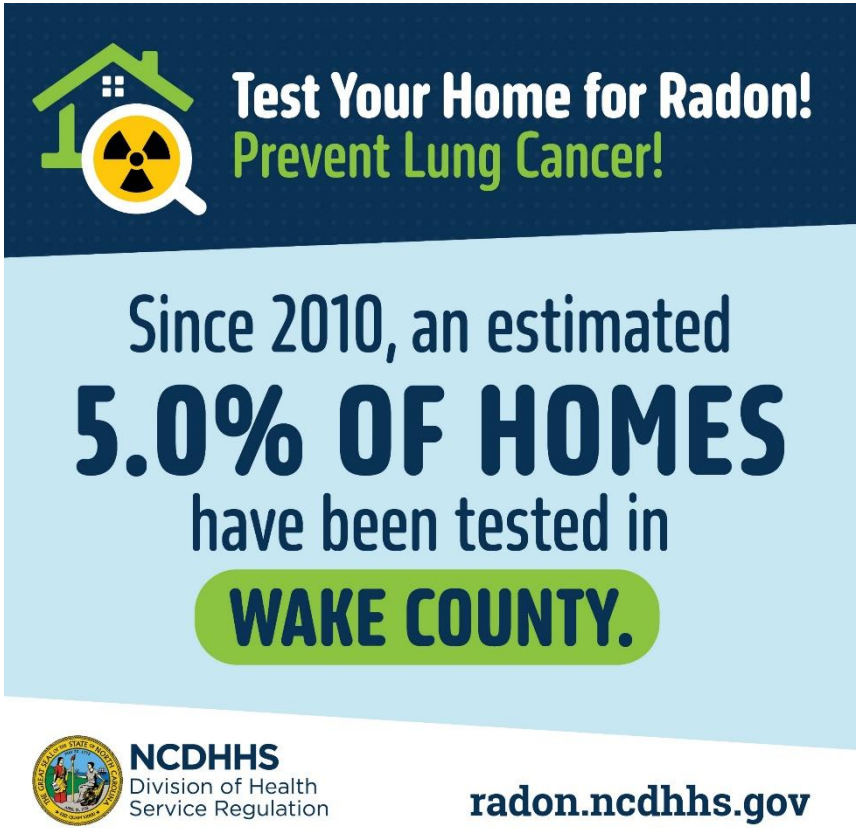
Issues

- Level of awareness about radon
  - BRFSS data
  - 2015 (38% White, 18% Black, 14% Hispanic)
  - 2019 (70% White, 38% Black, 14% Hispanic)
- The amount of testing that has occurred over the past 15 years
  - 170,000 radon test results from five radon test laboratories
  - 2010 there were 4,327,528 total housing units
  - 2025 there were 5,168,052 total housing units
- The amount of data accessible annually to the NC Radon Program
  - RadaLink, AirChek, Accustar, ProLab, RSSI, Alpha Energy

Maximum Level (2010 – 2025)



Proportion Homes Tested (2010–2025) (2024 Census)



North Carolina SHIP to CHA

- Radon has been a priority issue in the NC Cancer Control Plan for 14 years.
- Three years ago, the NC Radon Program requested and the NC State Health Improvement Plan included radon in the SHIP process.
- Two years ago, the NC Radon Program began the process of working with the NC Data Portal to include radon testing data.

North Carolina SHIP to CHA

1. The SHIP sets broad statewide health goals.
2. The CHA identifies local health needs.
3. The CHIP creates local action plans.
4. The SOTCH reports local progress between assessment cycles.

New Pathway for Raising Awareness

- Community Health Assessment is a collaborative process that helps a county understand the health of its people, identify major health concerns, and set priorities for action through a Community Health Improvement Plan.
  - The CDC strongly recommends and supports CHA/CHIP processes and supports accreditation standards through the Public Health Accreditation Board (PHAB).
  - Each of the EPA Region 4 states has either a State Health Assessment (SHA) and/or an Improvement Plan (SHIP)

Our Goals

Increase awareness of radon

Increase testing of radon indoors and mitigation

Lower the incidence of radon-induced lung cancer

Get everyone to test at least once every two to five years

- 2 years for homes without mitigation systems
- 5 years for homes with mitigation systems

Community Health Assessments are every 3 years

North Carolina Radon Program

Development of Radon Education Tools

PURPOSE: Create clear, accurate, and actionable radon education tools to inform, empower, and protect North Carolinians.

1. FACTORS THAT INFLUENCE THE DEVELOPMENT OF TOOLS

Consumer Journey & Key Information Needs

- Increasing consumer awareness of radon as well as radon testing and mitigation.
- The process of purchasing a radon test kit and/or identifying and hiring a radon measurement certified professional.
- Understanding risk assessment for the level measured.
- If your radon level is elevated, understanding the process of identifying and hiring a radon mitigator.
- Providing information to improve consumer awareness and consumer protection.

Data & Community Input

- Data collected from surveys (e.g., NC Behavioral Risk Factor Surveillance System).
- Data from community engagement (homeowners and renters).
- Data collected from NC Real Estate Brokers and other real estate–related industries.

Policy & Priority Drivers

- NC Cancer Control Plan and NC State Health Improvement Plan list radon-induced health risks as a priority issue.
- The NC Real Estate Commission recognizes a measured level of 4 pCi/L of air to be a material fact.

2. DEVELOPMENT PROCESS

- **2.1 Collect & Review Information** — Analyze data, community input, policies and best practices.
- **2.2 Identify Key Messages & Topics** — Determine priority education needs and knowledge gaps.
- **2.3 Develop Educational Content** — Create accurate, clear, culturally appropriate, and actionable content.
- **2.4 Review & Refine** — Internal review by program staff and partners; incorporate feedback.
- **2.5 Finalize Education Tools** — Ensure accuracy, readability, and usability.

3. OUTPUT: RADON EDUCATION TOOLS

Created for the Public and Professionals

- Web content & fact sheets
- Brochures & tip sheets
- Videos & social media content
- Toolkits for professionals (testers, mitigators, real estate professionals, health departments)
- Outreach materials for community events
- Consumer protection information

4. DISTRIBUTION & USE

- Posted on NC Radon Program website and linked from NC Data Portal and OEE Environmental Health Dashboard.
- Shared with local health departments, community partners, real estate stakeholders, and professional organizations.
- Used in outreach, training, and community engagement activities.
- Used by Local Community Health Assessment Administrators to inform evaluations and implementation plans.

5. EVALUATION & CONTINUOUS IMPROVEMENT

- Monitor data trends and emerging needs.
- Gather feedback from communities and partners.
- Update and improve tools regularly.
- **GOAL:** Increase radon awareness, promote testing and mitigation, protect consumers, and reduce radon-related health risks.

Feedback informs future development

OVERALL GOAL:
Empower North Carolinians with the knowledge and tools they need to make informed decisions about radon, protect their families, and support healthier homes and communities.

North Carolina Radon Program

Data Collection, Distribution, and Use to Inform Community Health

1. DATA COLLECTION

The North Carolina Radon Program collects radon testing data.

Passive Radon Test Kit Manufacturers & Analytical Laboratories

- AirChek
- Alpha Energy
- RSSi
- ProLab
- Accustar

Provide passive radon test results (zipcode based)

Radalink (CRM Leasing Program)

Provide continuous radon monitor (CRM) data

Other Companies Leasing CRMs

Requested CRM data

Data not provided

2. DATA INTAKE & MANAGEMENT

Data received is compiled, quality-checked, and stored securely.

North Carolina Radon Program Data Repository

Consolidates and manages all received data

3. DATA PROCESSING & DISTRIBUTION

Data is formatted and distributed to partners and platforms.

NC Occupational & Environmental Epidemiology Branch (OEE)

Receives dataset (zip code based) and formats the data

OEE Environmental Health Dashboard

Utilizes formatted data

Center for Disease Control and Prevention (CDC)

Receives formatted data

North Carolina Data Portal Administrators

Receives formatted data

4. DATA USE

Data is used to inform local assessments and planning.

Local Community Health Assessment Administrators

Utilize data from:

- OEE Environmental Health Dashboard
- North Carolina Data Portal

to inform community health assessments (CHAs) and implementation plans (CHIPs).

Use local testing data from the previous three years to set goals for the next three years.

5. GAPS / DEFICIENCIES

Not all radon testing data conducted in North Carolina is collected.

Identified Gap:

We are unable to collect data from other companies that lease CRMs.

Impact:

Incomplete understanding of radon levels and trends across the state; limits surveillance, outreach targeting, and data-driven decision making.

6. RESPONSIBILITY

Addressing the gap is a shared effort.

Responsible Parties:

- North Carolina Radon Program
- State Leadership & Policy Makers
- Radon Industry Partners
- Data Portal Administrators
- Local Community Health Assessment Administrators
- Stakeholders & Advocacy Groups

Actions:

Continue outreach to data holders, promote data sharing benefits, explore policy options to improve participation.

7. COMMUNICATION & PARTNERSHIP GOAL

The North Carolina Radon Program communicates directly with Community Health Assessment Administrators to empower them with data and technical expertise.

Goal: To see radon included in Community Health Assessments and Community Health Implementation Plans.

This supports healthier communities by using local radon data to drive action and reduce radon exposure.

LEGEND

- Data Provided
- Data Provided
- Data/Information Flow
- Data Requested but Not Provided

All datasets are zipcode based.

Note: Data flows represent current processes. Outreach to additional CRM leasing companies is ongoing.

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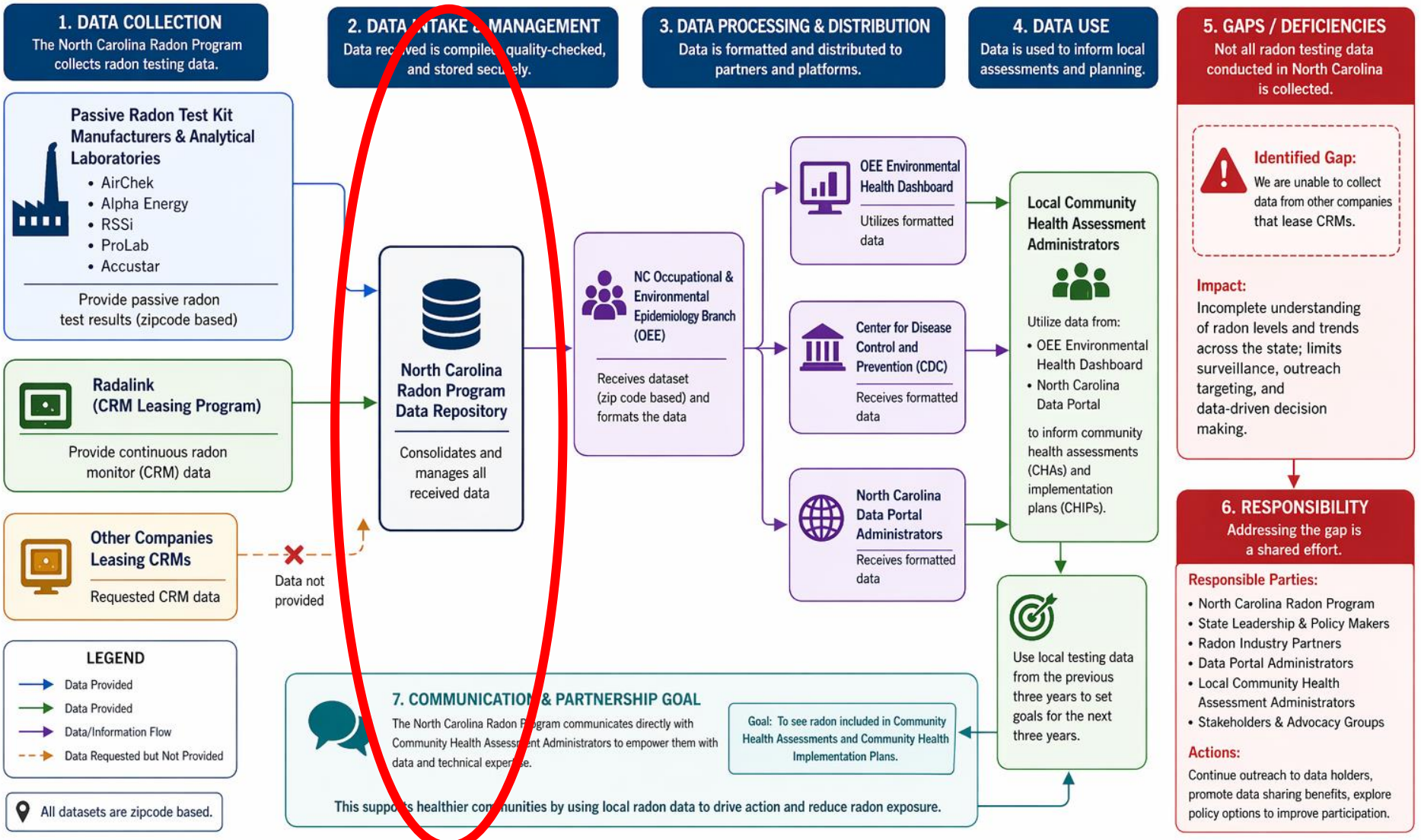
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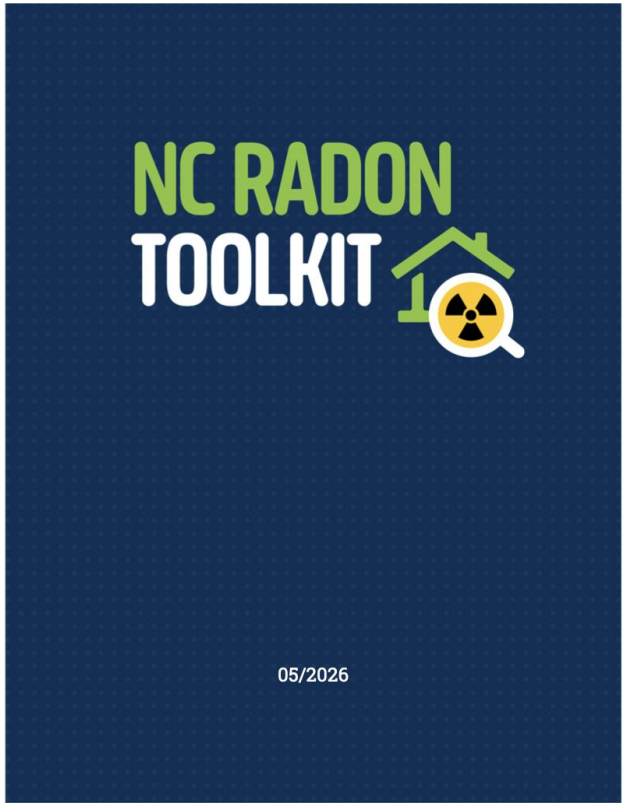
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CHA Toolkit
CHIP Template



Radon Indicators
Indicators used to assess radon testing activity and potential exposure in [County Name] may include:

Radon Testing Activity
- Number of residential buildings tested for radon
- Radon tests per 10,000 housing units

Radon Test Results
- Median radon level among tested buildings
- Maximum radon level detected

Radon Risk Indicator
- Percentage of tests ≥ 4 pCi/L (EPA action level)

These indicators describe indoor radon conditions among tested buildings and provide environmental context when considering lung cancer risk within the community.

RECENT RADON TESTING DATA (LAST 3 YEARS)

Insert the most recent three years of available radon testing data.

Year	Buildings Tested	Median Radon Level (pCi/L)	% Tests ≥ 4 pCi/L
Describe community health conditions using credible data	NC CHA Guidebook	CHAs incorporate credible quantitative and qualitative data to describe community health conditions and contributing factors.	Radon testing data from NC Environmental Health Data Dashboard (EHDD) or NC Data Portal may provide environmental health context related to indoor air quality and lung cancer risk.
Year 1	Insert text here.	Insert text here.	Insert text here.
Year 2	Insert text here.	Insert text here.	Insert text here.
Year 3	Insert text here.	Insert text here.	Insert text here.

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