

2025 COMMUNITY NEEDS ASSESESSMENT

Environmental Health &
Primary Data Review

May 15, 2025





CNA UPDATE & FEEDBACK

Jessica Grant
Executive Director
Healthy Cabarrus

2025 CHNA Assessment Timeline

- Introduction, Population Demographics, and Family and Social Support

December



- Community Safety, Early Childhood and K-12 Education

January



- Employment, Sexual Health, Health and Wellness and Physical Activity
- **Launch Community Survey**

February



- Clinical Care, Oral Health and Mental Health

March



- Substance Use, Housing and Transportation
- **Launch Focus Groups**

April



- Environmental Health
- **Survey Findings and Data Review**

May



- **Complete Primary Data Review**
- Priority Voting/Selection

June



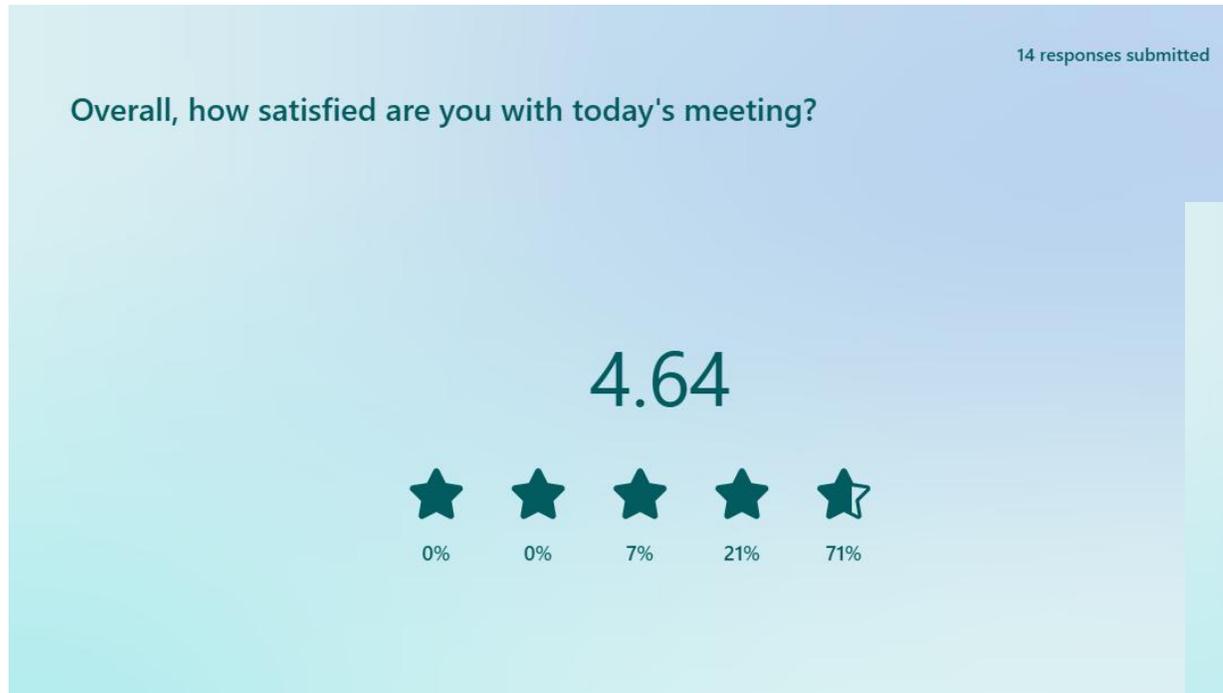
Before we dive in...



Before we dive into the community survey data, take a moment to reflect:
What am I most curious to discover in the survey results?

Session 5

Feedback and Follow-up



“Outstanding
subjection matter
experts”

“Transportation”

“Robust
dive”

“Dedicated time
for Q&A”

“Behavioral health
and substance use”

“Comparison to
surrounding areas”

“Housing and
homelessness
data”

“Impact of data on county
residents”

“All of it!”

An orange callout box with a white border and a small tail pointing downwards.

“How to address
the issues”

A red speech bubble with a white border and a tail pointing downwards.

“More time to
collaborate”

A red callout box with rounded corners, a white border, and a tail pointing downwards.

“Overall impact of the topics”

ENVIRONMENTAL HEALTH



Jennifer Hatley
Director of Environmental Health
Cabarrus Health Alliance



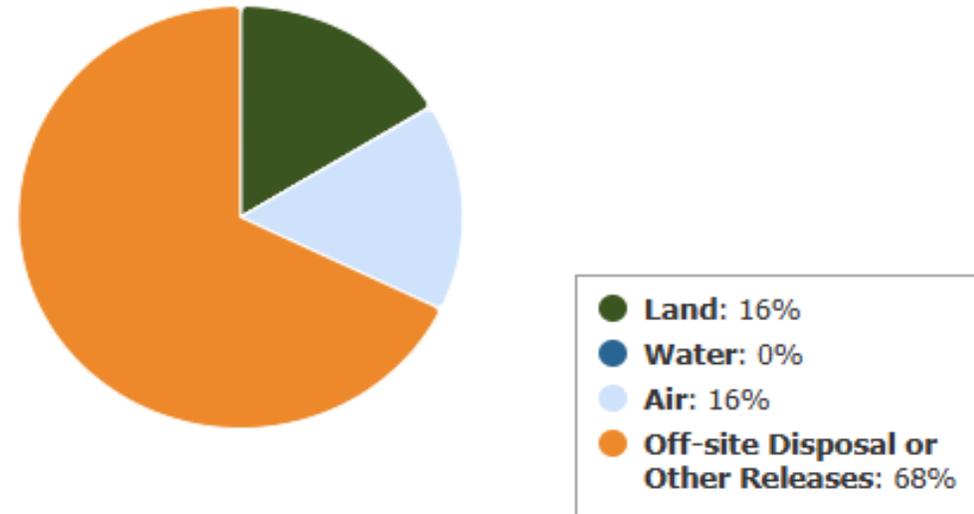
Juliann Chavez
Sustainability Coordinator
City of Concord

Toxic Release Cabarrus



The Toxics Release Inventory (TRI) tracks the management of over 650 toxic chemicals that pose a threat to human health and the environment. U.S. facilities in certain industry sectors that manufacture, process, or otherwise use these chemicals in amounts above established levels must report how each chemical is managed through recycling, energy recovery, treatment, and releases to the environment.

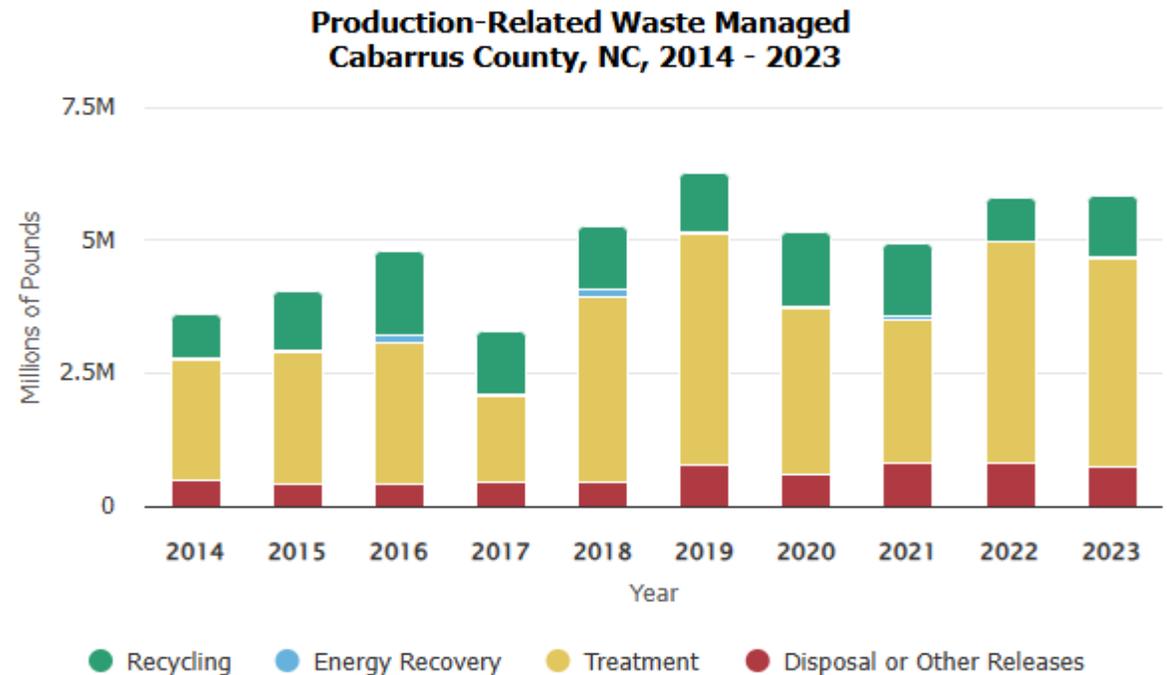
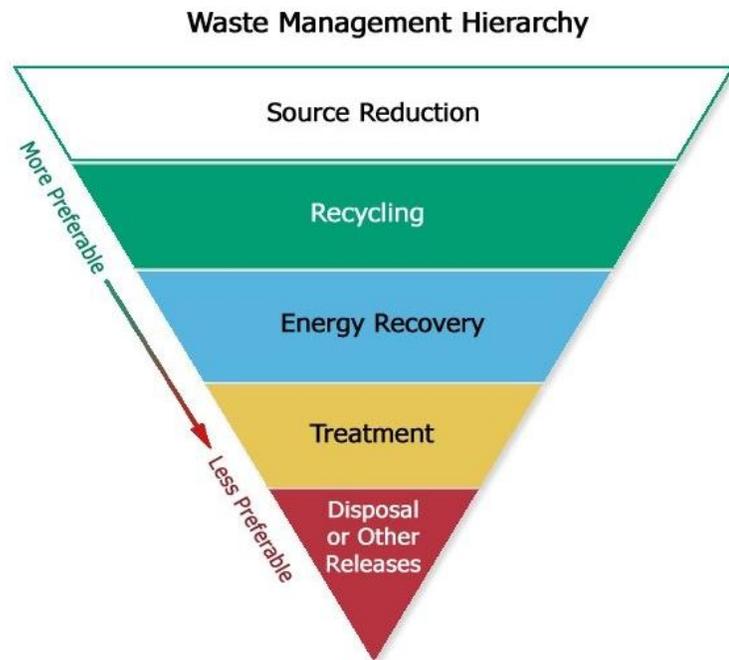
**Total Releases
Cabarrus County, NC, 2023
731.4 thousand pounds**



This chart represents releases of TRI-covered chemicals to the environment in Cabarrus County, NC. A "release" of a chemical means that it is emitted to the air or water, placed in some type of land disposal, or transferred off-site for disposal or release.

Waste Management

Certain industrial facilities in the U.S. must report annually how much of each chemical is recycled, combusted for energy recovery, treated for destruction, and disposed of or otherwise released on- and off-site. This information is collectively referred to as production-related waste managed.



Outdoor Air Quality



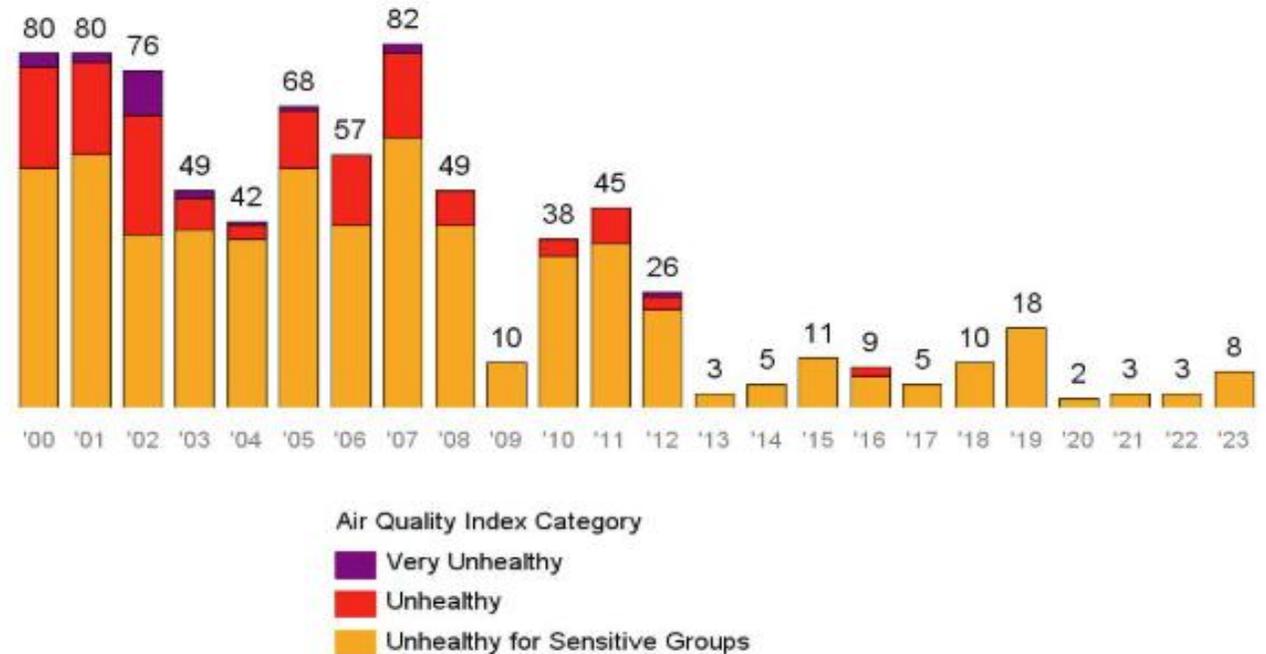
Years of scientific research have clearly established that particle pollution and ozone are a threat to human health at every stage of life, **increasing the risk of premature birth, causing or worsening lung and heart disease, and shortening lives.** Some groups of people are more at risk of illness and death than others, because they are more likely to be exposed, or are more vulnerable to health harm, or often both.

Total Cabarrus population with asthma (2025):

- Pediatric asthma: 6,875
- Adult asthma: 17,807

Charlotte-Concord-Gastonia, NC-SC

Number of Days Reaching Unhealthy for Sensitive Groups or Above on the Air Quality Index (for Ozone & PM2.5 Combined)



Data Source: Preliminary air quality data as reported to EPA's Air Quality System and AirNow.gov

Indoor Air Quality



“In the last several years, a growing body of scientific evidence has indicated that the air within homes and other buildings can be more seriously polluted than the outdoor air in even the largest and most industrialized cities. Other research indicates that people spend approximately 90 percent of their time indoors. Thus, for many people, the risks to health may be greater due to exposure to air pollution indoors than outdoors.”

-EPA, 2025

In any building, the four basic factors that affect indoor environmental quality, or IEQ, are:

1. indoor pollutant sources;
2. heating, ventilation, and air-conditioning (HVAC) systems;
3. pollutant pathways;
4. and occupants and their activities or practices.

There are no regulations that mandate specific air pollutant levels in home. The state does provide guidance for improving indoor air quality. The NC Dept. of Labor regulated indoor air quality standards for the workplace.

Tree Canopy 2023



City	Tree Canopy Cover	Trees per Person	Annual Ecosystem Service Value
Concord	44.2%	12.9	\$6,764,556
Kannapolis	45.7%	12.1	\$3,154,576
Harrisburg	49.3%	17.6	\$1,885,350

Trees provide more than beauty or a comfortable place to relax. Much like schools, streets and sewer lines, trees are essential infrastructure. They are vital to public health, well-being and climate resilience in our communities.

- Trees across the U.S. absorb 17.4 million tons of air pollutants, preventing 670,000 cases of asthma and other acute respiratory symptoms annually.
- In cities nationwide, trees prevent approximately 1,200 heat-related deaths and countless heat-related illnesses annually by lowering surface and air temperatures. The ability of trees to reduce peak temperatures is significant, given that a 10-fold increase in heat-related deaths is expected in the Eastern U.S. by 2050.
- On average, trees in the U.S. reduce energy demand for heating and cooling by 7.2%.
- Trees are a source of income. For every \$1 million invested in forest restoration, approximately 39 forest-related jobs are created in rural U.S. areas alone.

2024 IMPACT REPORT



2,414 lbs
AIR POLLUTANTS
ABSORBED*



1.3 MILLION lbs
CARBON SEQUESTERED/
AVOIDED*



300
TREES PLANTED



\$15,000
INVESTED



\$152,125
IN COMBINED ENERGY
AND COMMUNITY BENEFITS*



735,931 kWh
SAVED*



300
HOMEOWNERS ENGAGED



6,377,513 gal.
STORMWATER FILTERED*



Established Fall 2019
*projected 20-year cumulative values

LP40177209



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LP40177209



Habitat Impact

Ecosystem services depend on healthy ecosystems which depend on high biodiversity.

- Pollination, erosion & flood control, nutrient cycling, clean water, climate stabilization, clean air, oxygen production, carbon sequestration, etc.

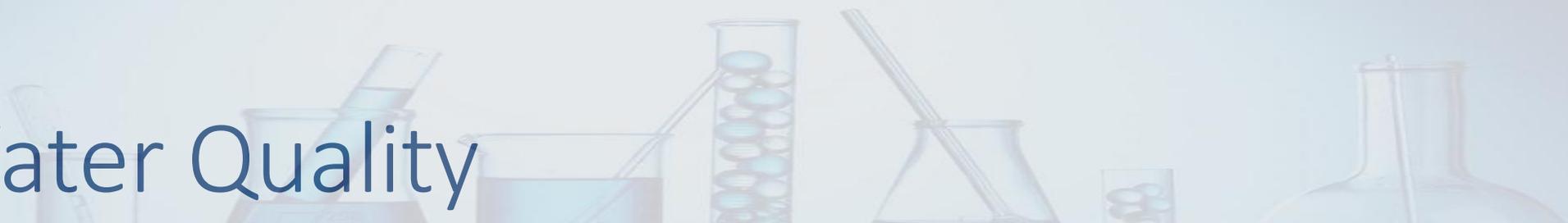
Threats to biodiversity and ecosystem services in Cabarrus County

- Soil loss & erosion
- Exotic, invasive plants (kudzu, English ivy, Chinese wisteria, Bradford pear, etc.)
- Abundance of turfgrass lawns where native plant communities could be

Solutions

- Create habitat by increasing native plants in the area, nursery stock and installations along:
 - Landscapes, vacant properties, rights of way
- Remove exotic, invasive plants
- Follow Green Growth guidelines for development

Water Quality



Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Compliance with EPA Standard for PFAS “Forever Chemicals”



PFAS, known as “forever chemicals,” are a family of thousands of compounds that do not break down naturally in the environment or in the human body. The City of Concord proactively monitors for more than 70 PFAS chemicals and results show low or undetectable amounts. Any detections found are within the four parts per trillion (ppt) maximum contaminant level (MCL).

Stormwater Pollution



Storm water is defined by the U.S. Environmental Protection Agency as: ***Rainwater and melted snow that runs off streets, lawns, farms, and construction and industrial sites.*** Stormwater flows over impervious surfaces (those that do not allow water to pass through), carrying pollution we leave behind to our lakes, rivers, creeks, streams, and ponds.

Our storm drains lead directly into waters we use for swimming, fishing and drinking.

Sediment

Oil and Grease

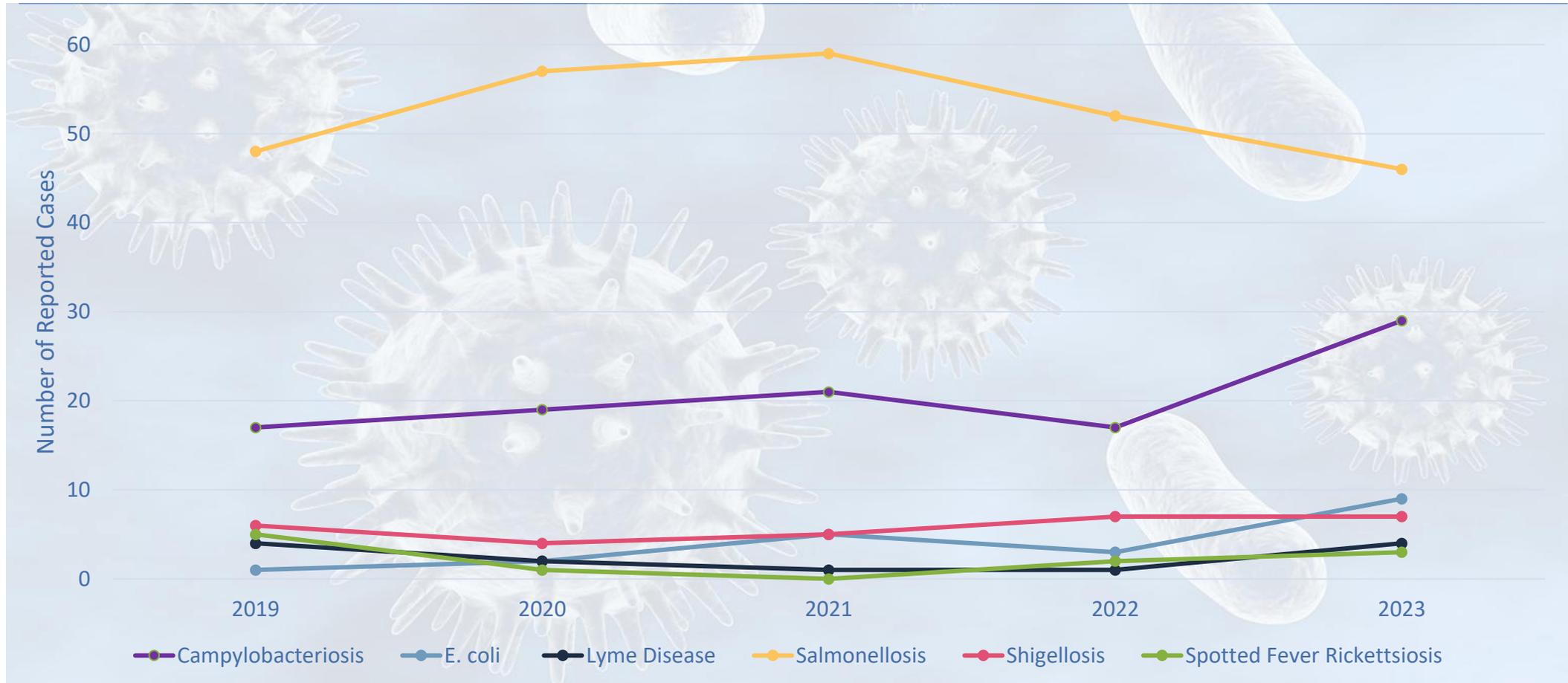
Yard Waste

Pesticides,
Herbicides and
Fertilizers

Machine/Vehicle
Fluids and Other
Chemicals

Pet Waste

Food, Water and Vector Borne Diseases Cabarrus



Food, Water and Vector Borne Diseases Cabarrus

Disease	2018	2019	2020	2021	2022	2023	Change from previous year	N.C (2023)	U.S (2022)
Campylobacter	11.8	7.9	8.4	9.1	7.2	12.1	↑	23.9	17.2
Cryptosporidiosis	1.4	0.5	0.9	0.4	2.5	2.9	↑	3.6	3.8
Cyclosporiasis	0.0	0.0	0.0	1.3	2.5	0.0	↓	1.4	1
E. coli, Shiga toxin-producing	1.9	0.5	0.9	2.2	1.3	3.7	↑	5.2	4.4
Hepatitis A	1.4	1.4	0.4	15.1	1.3	0.0	↓	0.3	0.68
Legionellosis	1.4	0.0	0.0	0.9	0.4	1.2	↑	1.7	2.3
Listeriosis	0.9	0.5	0.0	0.0	0.0	0.4	↑	0.4	0.29
Salmonellosis	28.4	22.2	25.2	25.5	22.0	19.2	↓	21.1	16.84
Shigellosis	6.6	2.8	1.8	2.2	3.0	2.9	↓	4.1	4.42
Typhoid, Acute	0.1	0.1	0.0	0.1	0.0	0.0	→	0	*
Malaria	0.9	0.5	0.4	0.0	0.0	0.8	↑	0.7	0.5
Lyme Disease	0.5	1.8	0.9	0.4	0.4	1.7	↑	2.1	0.6

Lead Exposure

Exposure to lead can seriously harm a child's health.

The infographic consists of four circular icons arranged in a 2x2 grid, each with a corresponding text label to its right. The background is a light teal color with vertical lines.

- Damage to the brain and nervous system**: Icon shows a profile of a head with a brain and spinal cord.
- Slowed growth and development**: Icon shows a profile of a head with a vertical bar representing growth.
- Learning and behavior problems**: Icon shows a profile of a head holding a piece of paper with a red 'D' on it.
- Hearing and speech problems**: Icon shows a profile of a head with a question mark and a magnifying glass over the ear area.

COMMON SOURCES

(HIGHEST TO LOWEST)

Cultural spices/foods from other countries

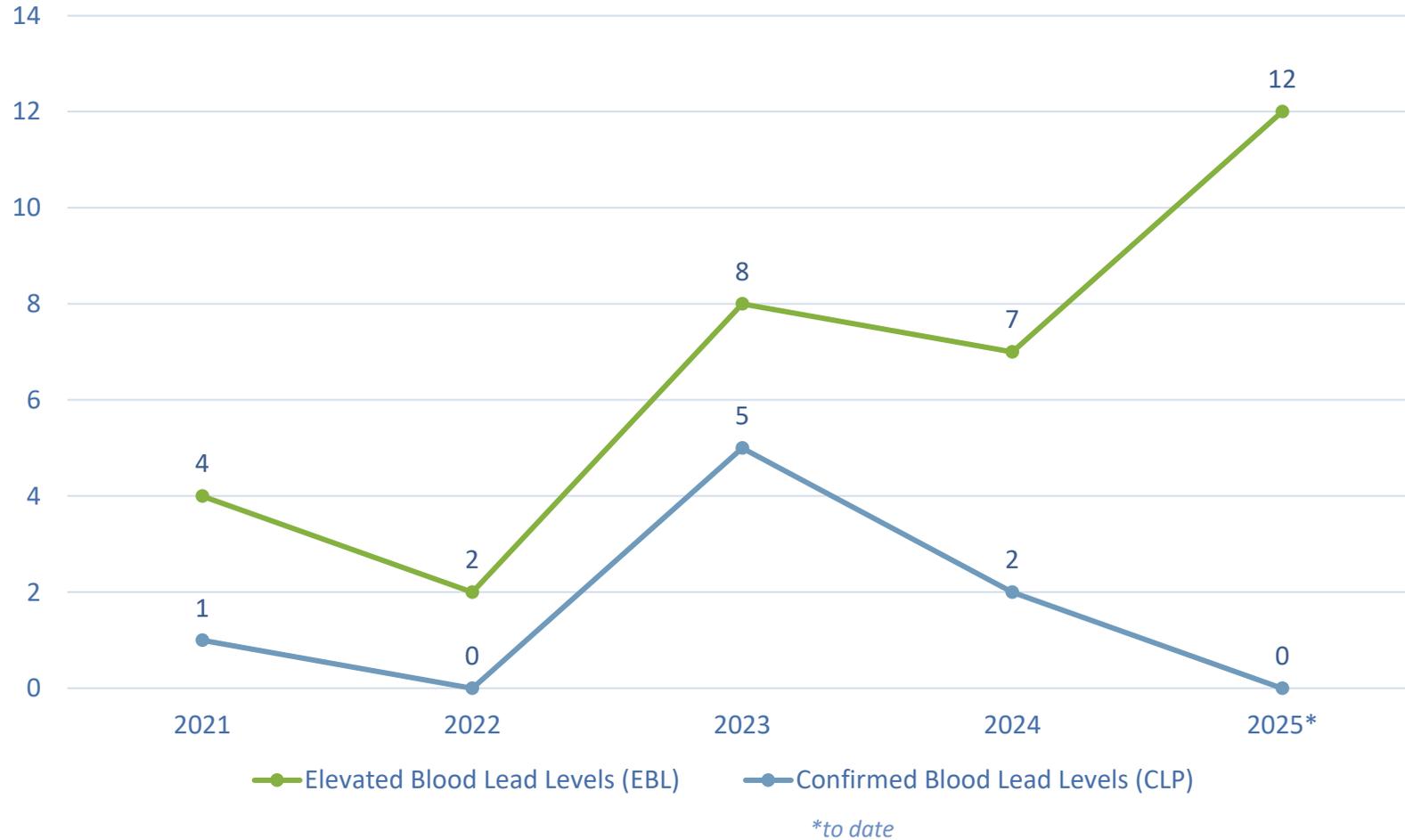
Brass cultural items

Dust wipe samples on floor (lead dust)

Lead-based paint

Keys, Soil, Clothing items, other items (clay pot, painted mug)

Lead Investigation Cases, CHA



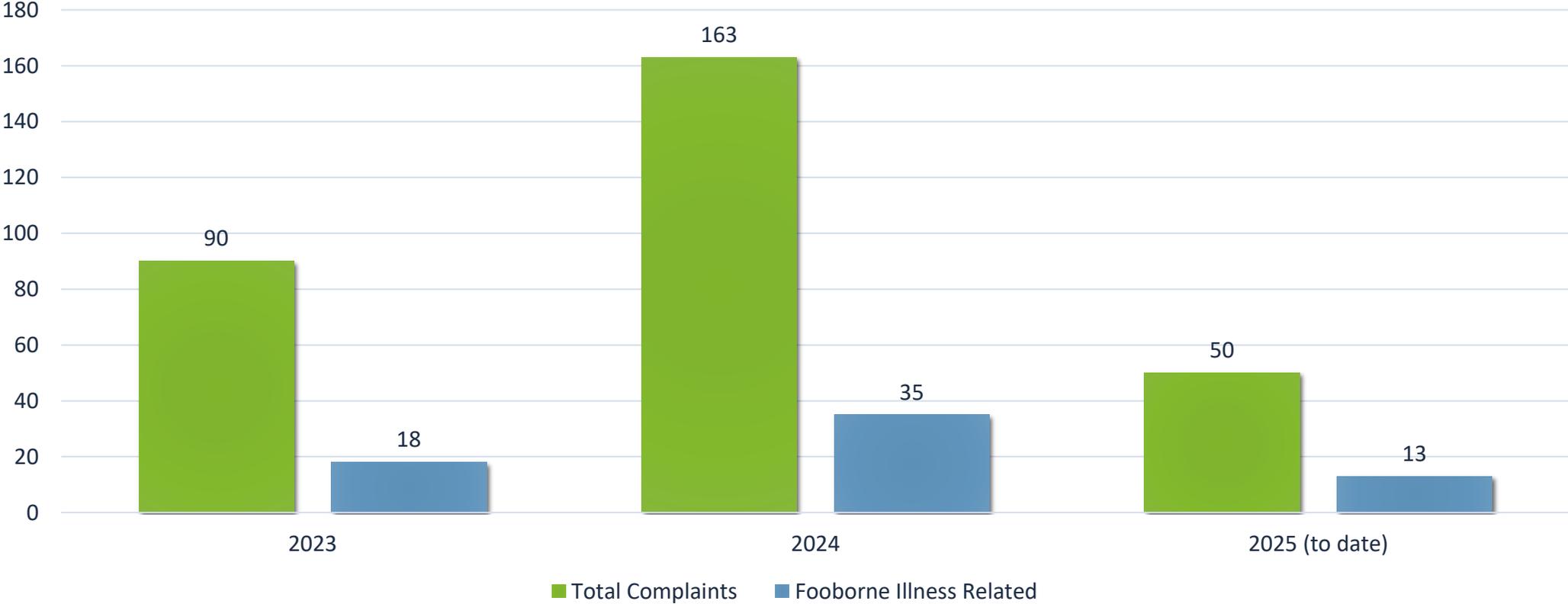
- **EBL**
 - 2 results 5.0-9.99 ug/dL
 - Offer to family for an investigation
- **CLP**
 - 2 results >10.0 ug/dL
 - Required to do an investigation

Inspection Violations

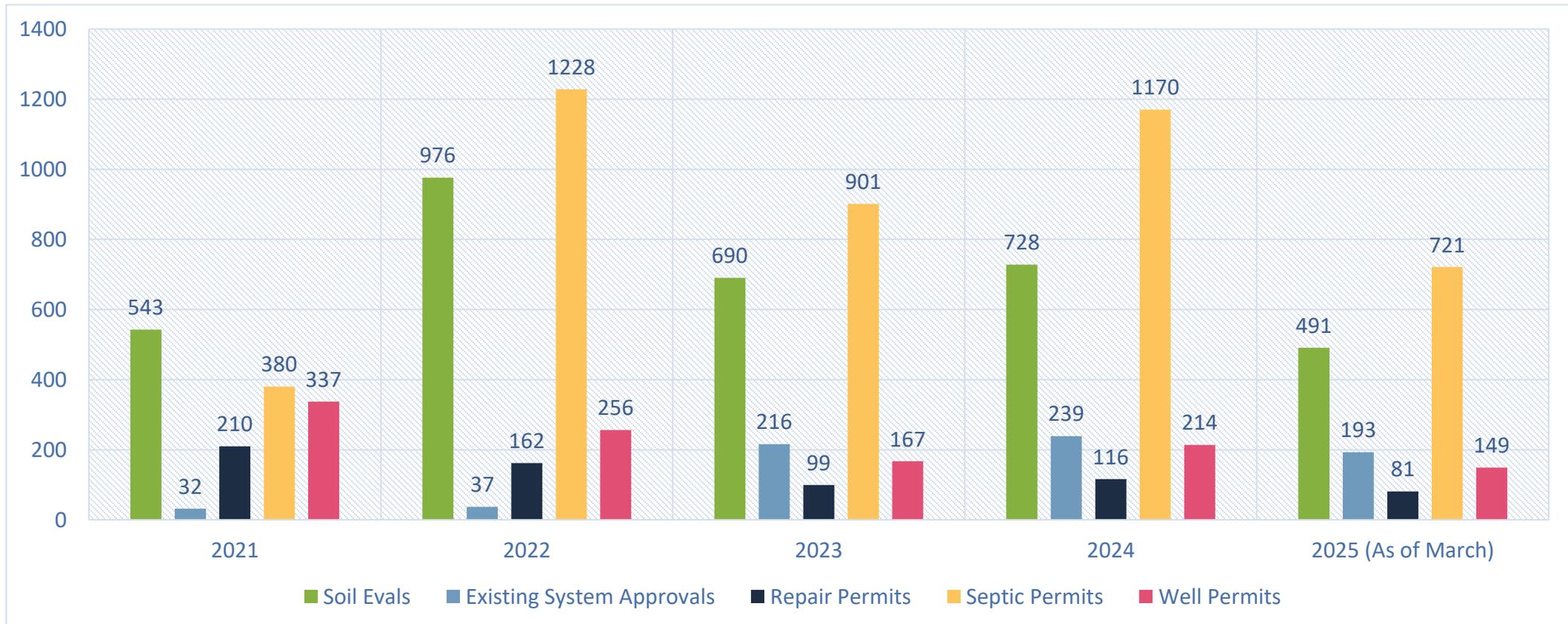
CHA, (2023-2025 to date)

Indicators	Total
Inspections Completed	6926
Priority Violations (must be corrected within 72 hours)	232
Priority Foundation Violations (must be corrected within 10 days)	464
Inspections with Priority Violations	209
Inspections with Priority Foundation Violations	386
Permits Issued	479

Food, Lodging, Institution, Public Swimming Pool Complaints Investigated (CHA)



On-site Wastewater and Wells CHA



The background consists of a repeating pattern of colorful speech bubbles in shades of light blue, yellow, pink, and orange. Each bubble contains a light blue question mark. The bubbles are arranged in a grid-like pattern, overlapping slightly.

Questions?

Community Needs Survey Results



Small Group Data Dive



Data Dive

Instructions



- Each group will receive a folder with survey data for one topic area.
- Assign roles within your group: **Facilitator, Notetaker, Reporter**
- Review data and discuss the reflection questions in your folder. The notetaker should complete the reflection sheet.
- After 8-10 minutes, we will rotate your folder to the next group. You'll review all four topic areas by the end of the rotations.
- After the final rotation, each group will select one insight or “aha” they want to share with the larger group.

Data Dive

Topic Areas

Survey Demographics

Healthcare Access & Challenges

Mental/Emotional Well-Being & Substance Use

Community & Social Environment



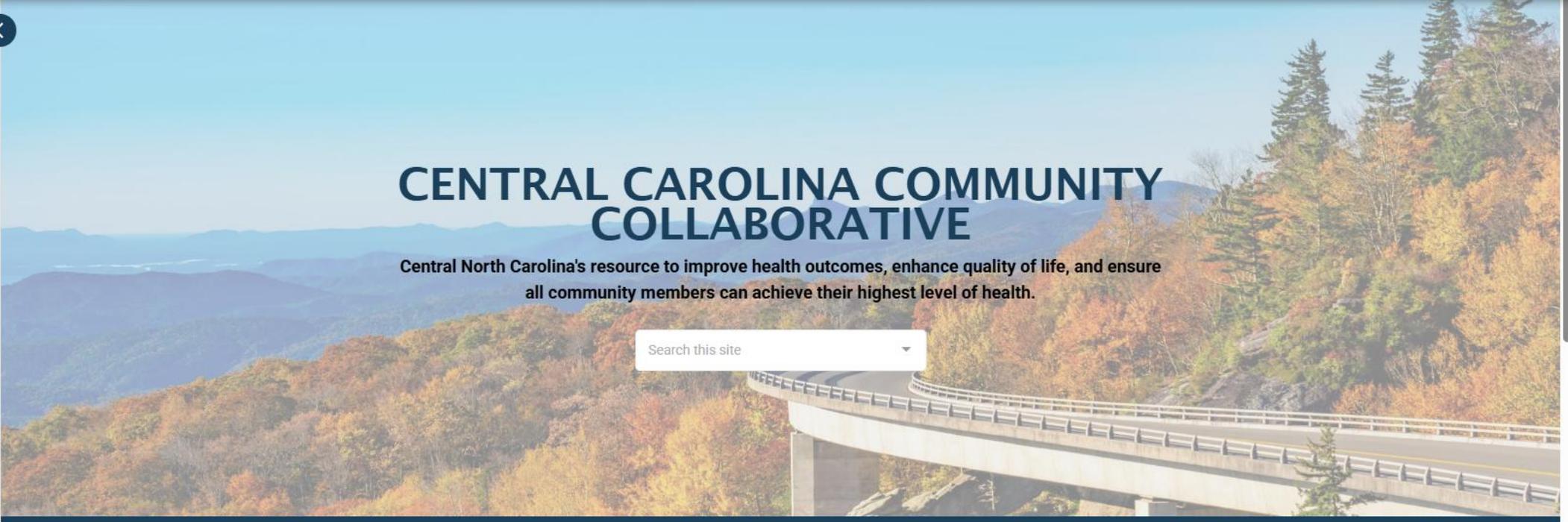
10:00

Focus Groups



-  Home
-  How To Use
-  Places
-  Topics
-  Community Health Reports and Plans
-  Download

-  Help & Tools
-  Powered by Metopio



About the Central Carolina Community Collaborative

The Central Carolina Community Collaborative launched in 2024, is funded by the Duke Endowment to amplify our local community voice through the Community Health Needs Assessment process. The members of the collaborative are dedicated to improving health outcomes, enhancing the quality of life in Central North Carolina and ensuring all community members can achieve their highest level of health. We bring together diverse voices including health systems, public health departments, academic institutions, United Way agencies and other community-based organizations to identify needs, share resources, and implement meaningful solutions.

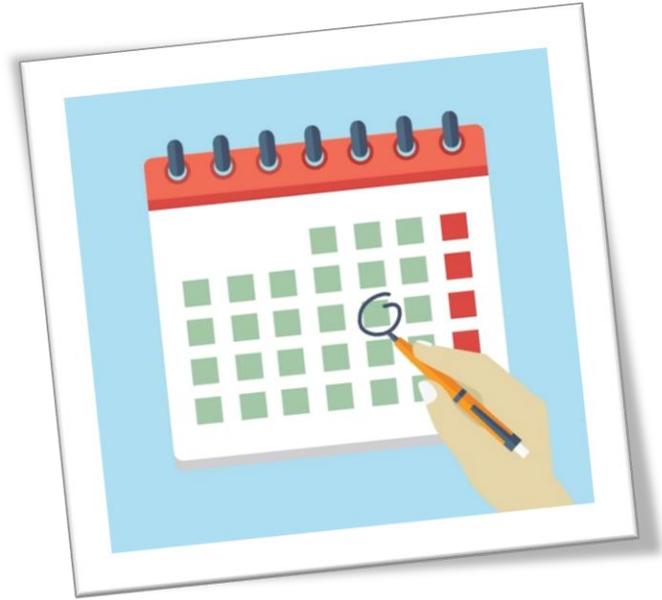
Our Collaborative strives to become a national visionary through shared decision making, cost efficiencies, and

QUICK START

Select **both a place and a topic** to launch a map or chart.

[VIEW MAP](#) [VIEW CHART](#)

Final Meeting...



Consider this...



Magnitude of the Issue

- How many people are affected?
- Is the issue increasing in prevalence or severity?

Seriousness of the Impact

- How severe are the health, economic, or social consequences?

Health Disparities / Equity Impact

- Are certain populations more affected (e.g., by race, income, geography)?
- Will addressing this issue help reduce inequities?

Community Perception and Concern

- Was the issue frequently mentioned in surveys, focus groups, etc?
- Do community members feel strongly about this issue?

Feasibility / Capacity to Address

- Are there resources, partnerships, or infrastructure in place to make progress?
- Are there evidence-based or promising strategies available?

Potential for Measurable Impact

- Can progress be tracked with available data?
- Can you realistically expect to make a difference in 3–5 years?

**WE WANT
TO HEAR
FROM YOU!**

<https://forms.office.com/r/u0CkxJVcXW>

Community Planning Council
Meeting Feedback - Session 6



Healthy Cabarrus

**THANK
YOU!**

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Healthy Cabarrus
Partnerships for Life