

# Colorado Radon Data

Margaret Horton, MPH | April 20, 2023



**COLORADO**  
Department of Public  
Health & Environment

# Overview

- Background information
- Radon data process
- Live demonstration
- Data deep dive

# Background



## Radon

- Hazardous Materials and Waste Management Division
- Radiation control program
- Emergency reporting
- Public notices
- Radon**
- Colorado radon poster and video contest
- Understanding radon
- Radon and your health



Radon is the leading cause of lung cancer among non-smokers in the United States and is responsible for approximately 500 lung cancer deaths annually in Colorado. It is a naturally occurring radioactive gas that comes from the breakdown of uranium in the soil that can enter your home from the soil beneath it.

Search

## Home radon test results by county, 2005-2021

Percent of pre-mitigation home radon tests with results over the action limit (4 pCi/L)

Filter the map by county or by the percent of tests over 4 pCi/L. Hover over the map to learn more. Click on the map to filter the chart and table below.

Percent of tests over 4 pCi/L

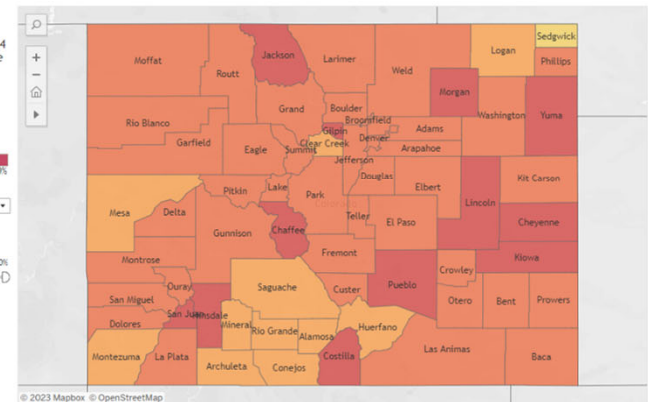


Filter by county

(All)

Select a range: percent of tests over 4 pCi/L

0.00% 100.00%



- CDPHE Radon Program and Environmental Public Health Tracking (EPHT) Partnership
- Websites:
  - [CDPHE Radon Program](#)
  - [CDPHE EPHT Radon Data](#)
  - [CDC Environmental Public Health Tracking data portal](#)

# Data process

## Receive data from labs

The Colorado Radon Program receives radon data from 8 labs:

- Accustar
- Airchek
- AlphaEnergy
- EMSL
- Prolabs
- Radonova
- RSI
- RTCA

## Clean and standardize

EPHT prepares data according to CDC radon data standards.

## Add to dashboards

Radon data is shared with CDC for inclusion in the national Tracking Network.

Data is also added to the Colorado radon data dashboard.



**COLORADO**  
Department of Public  
Health & Environment

# About the radon dataset

## What's included in the dataset?

- All valid, indoor air radon test results with a Colorado address
- Short- and long-term *passive* test kit types (e.g. processed by a lab)

## What's **not** included in the dataset?

- Radon in water test results
- *Active* test results (e.g. testing methods that deliver an immediate, on-site result to a certified professional)

## What can we conclude with this data?

- This data best represents radon **testing** in Colorado.
- This data should be used cautiously when discussing “average radon levels” in a community.
  - Household radon levels can vary significantly within the same neighborhood.



**COLORADO**  
Department of Public  
Health & Environment

# Radon dashboard demonstration

## Home radon test results by county, 2005-2021

Percent of pre-mitigation home radon tests with results over the action limit (4 pCi/L)

Filter the map by county or by the percent of tests over 4 pCi/L. Hover over the map to learn more. Click on the map to filter the chart and table below.

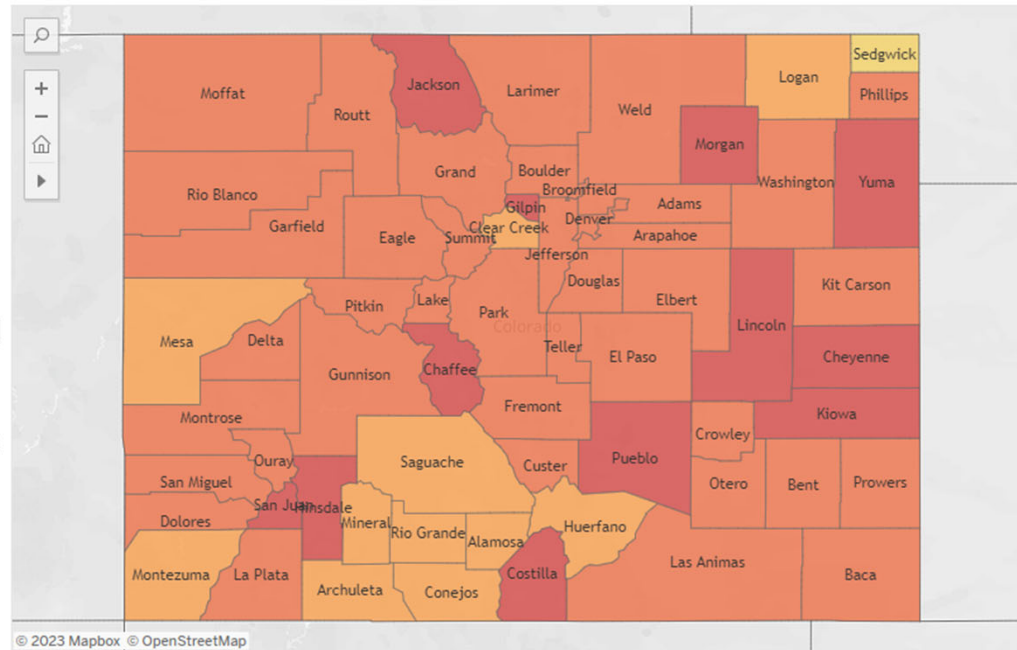
Percent of tests over 4 pCi/L



Filter by county

(All)

Select a range: percent of tests over 4 pCi/L

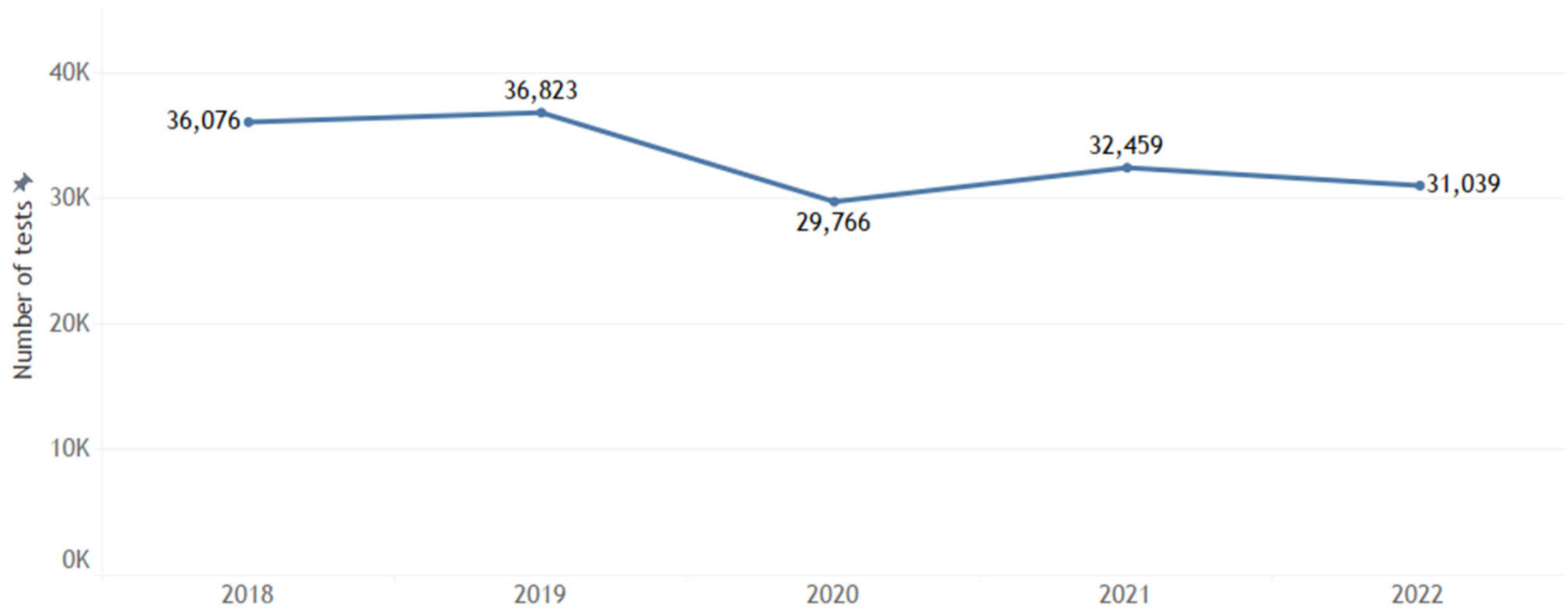


[CDPHE radon data website](#)



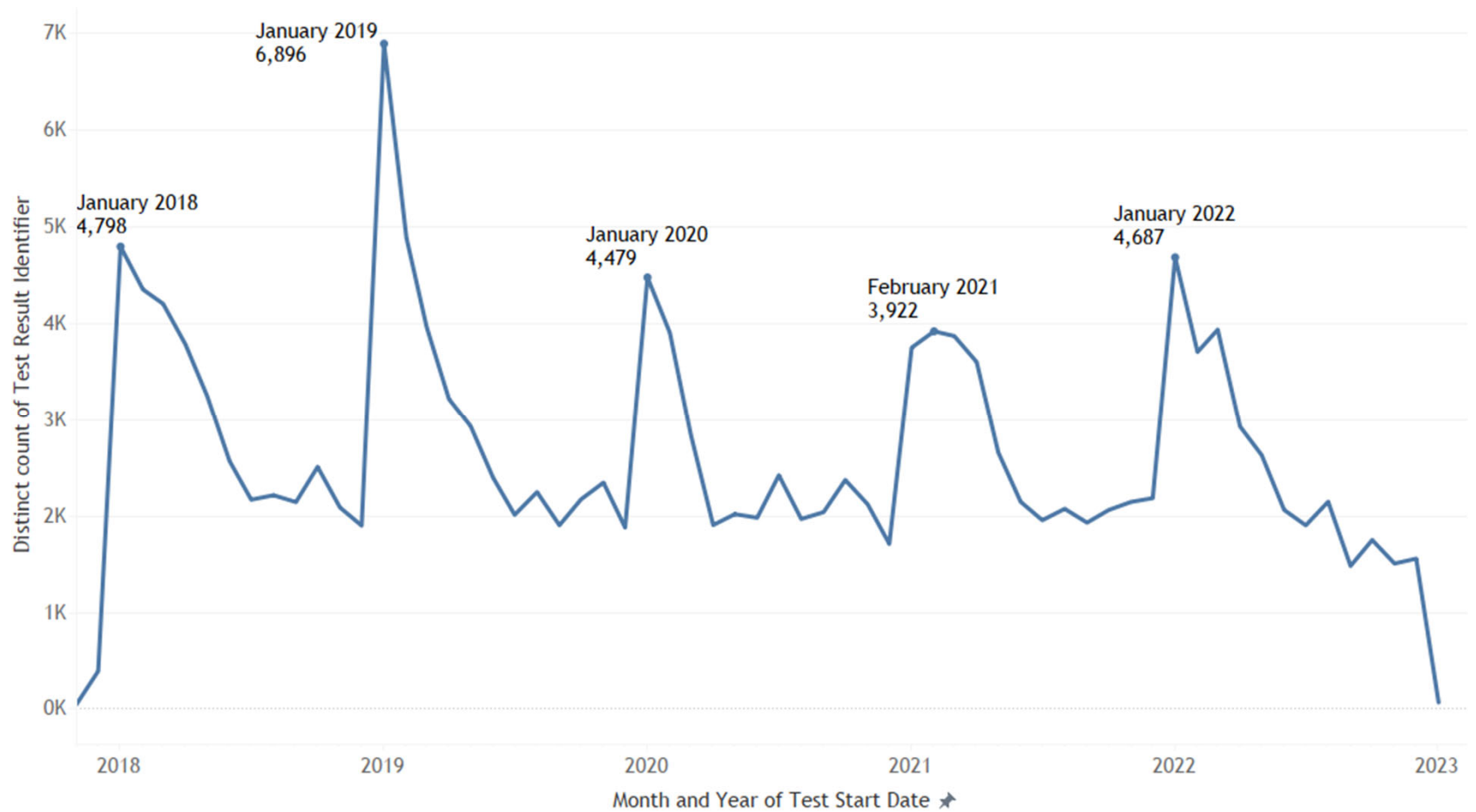
**COLORADO**  
Department of Public  
Health & Environment

# Colorado radon testing by year



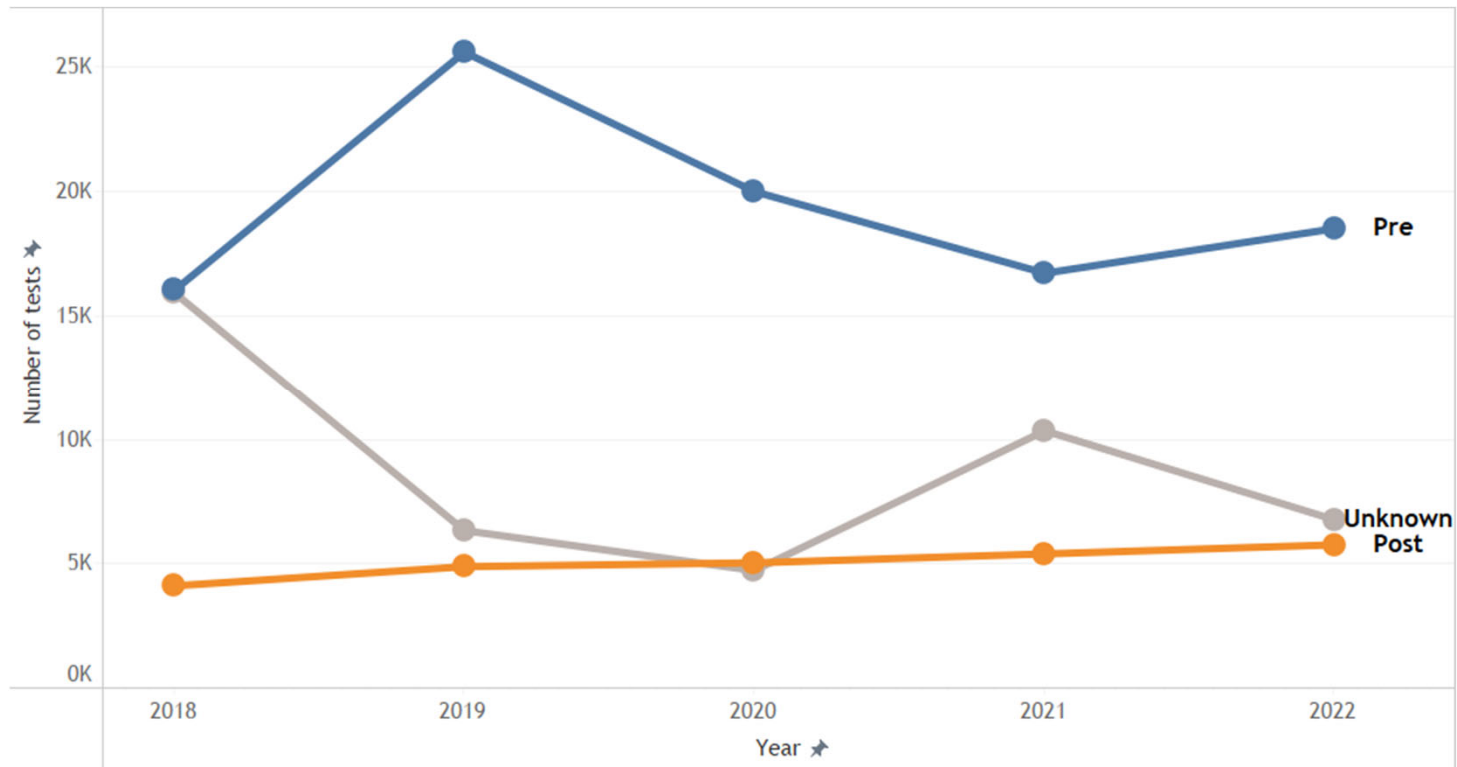
**COLORADO**  
Department of Public  
Health & Environment

# Radon testing by month



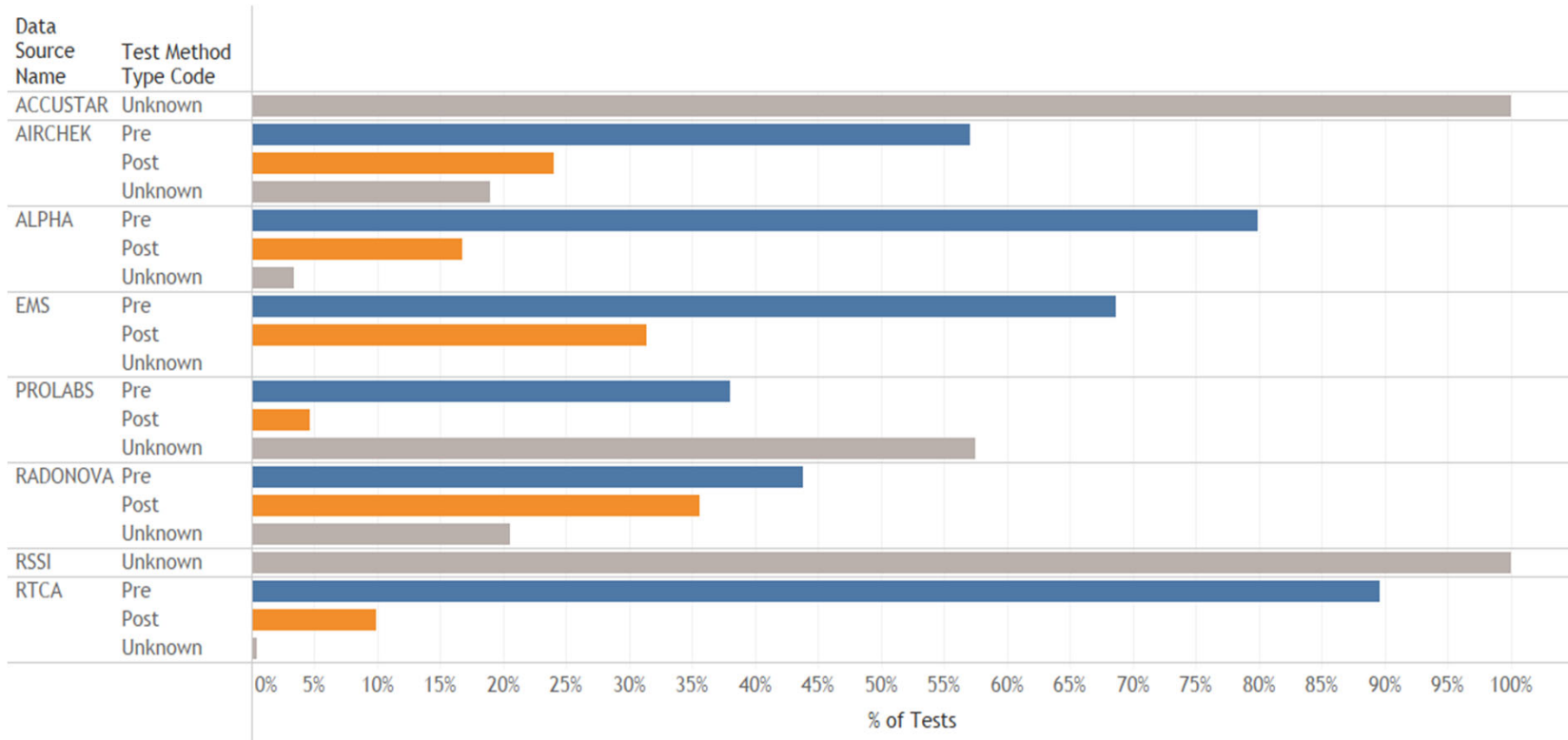


# Radon tests by mitigation status over time



**COLORADO**  
Department of Public  
Health & Environment

# Mitigation status by lab



# Radon data in action

Targeted radon outreach through  
the NextDoor app

# Low Income Radon Mitigation Assistance Program

- Created by Colorado HB 16-1141:
  - Provides funding to assist low income individuals with the installation of radon mitigation systems in their homes.
- Program qualifications (simplified):
  - Radon test result above 4 pCi/L
  - House is owner-occupied
  - Owner meets the low income limits



**COLORADO**  
Department of Public  
Health & Environment

# Nextdoor app

**Get the most out of your neighborhood with Nextdoor**

It's where communities come together to greet newcomers, exchange recommendations, and read the latest local news. Where neighbors support local businesses and get updates from public agencies. Where neighbors borrow tools and sell couches. It's how to get the most out of everything nearby. Welcome, neighbor.



### **Essential**

Relevant news and information from neighbors, businesses, and public agencies in real time.



### **Local**

The only way to instantly connect to the people, businesses, and happenings near your home.



### **Trusted**

A secure environment where all neighbors are verified.

**Instantly connect with your neighborhood**

Sign up

*Nextdoor for Public Agencies program allows various government entities to launch information to Nextdoor neighborhoods across their municipality.*



**COLORADO**  
Department of Public  
Health & Environment

## Targeted outreach on Nextdoor

- Colorado Tracking analyzed Census data to identify census tracts with the highest proportion of owner-occupied housing units AND the highest proportion of low-income residents.
  - Identified 4 census tracts to use for the pilot initiative
  - Translated census tracts to zip codes with HUD USPS zip code crosswalk files.
- Nextdoor post included information about radon, a link to request a free radon test kit, and information on the LIRMA program
  - The post was primarily in English with key information repeated in Spanish



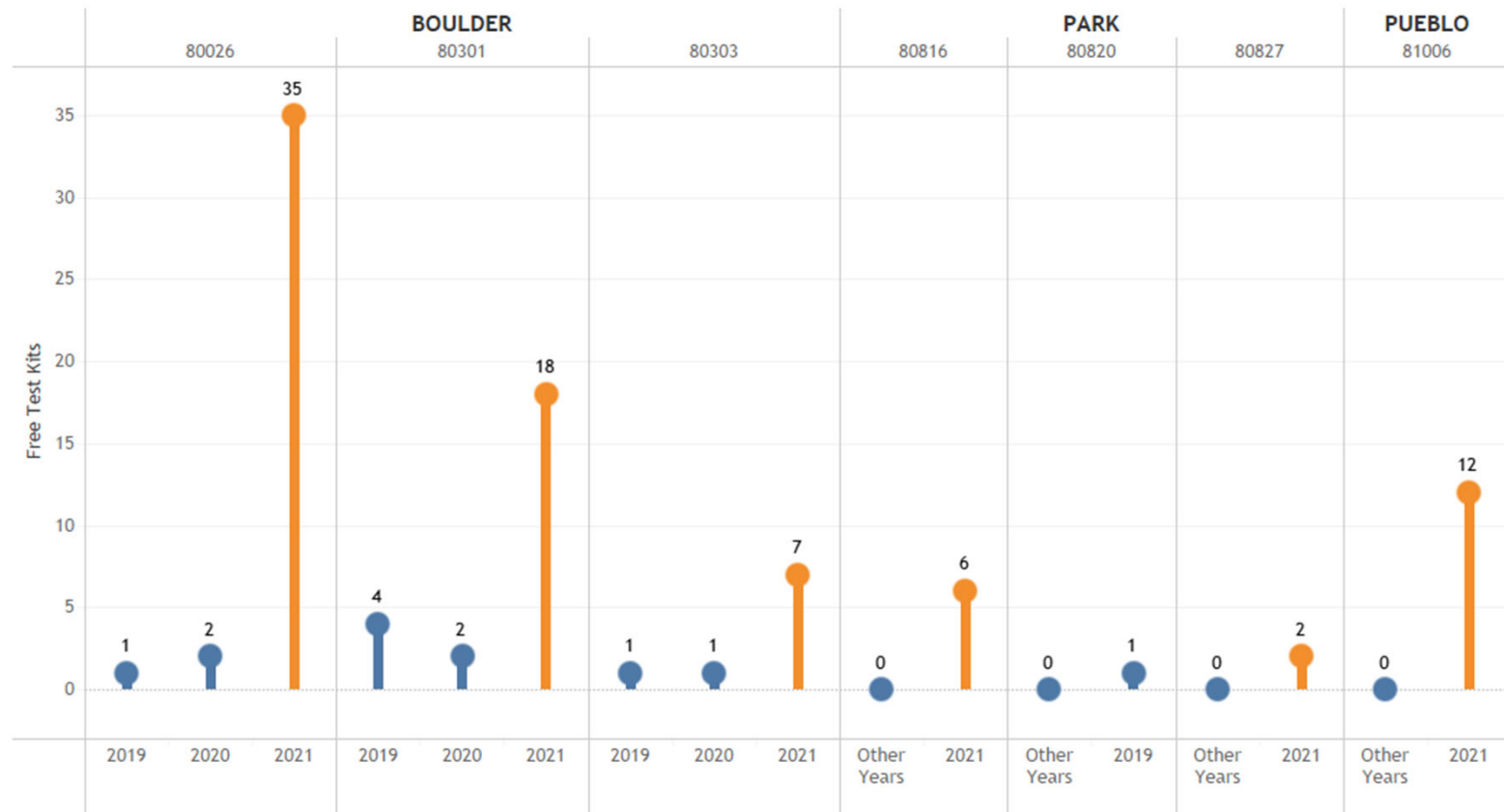
**COLORADO**  
Department of Public  
Health & Environment

## Targeted outreach on NextDoor

- CDPHE ran two ad campaigns on Nextdoor in February and March 2021, targeting all zip codes that were associated with the four target census tracts.
  - Using zip codes expanded the area beyond the target census tracts.
- 107 free test kits were distributed through the Nextdoor link
  - 80 test kits went to the targeted zip codes (74.8%)
    - 7 free test kits were sent to these zip codes during the same time period in 2019 and 5 were sent in 2020
  - 27 test kits were sent to non-targeted zip codes (25.2%)



Free test kits sent to targeted zip codes by year, February 25-June 1  
 Previous years vs. **NextDoor outreach**



**COLORADO**  
 Department of Public  
 Health & Environment



# Questions?



**COLORADO**  
Department of Public  
Health & Environment

# Thank you!

Margaret Horton  
margaret.horton@state.co.us



**COLORADO**  
Department of Public  
Health & Environment