

# Respiratory Illness in New Mexico

Patrick Allen, Secretary
Daniel Sosin, MD, MPH, Medical Epidemiologist
Erin Phipps, DVM, MPH, State Public Health Veterinarian
Miranda Durham, MD, Chief Medical Officer

# Overview of Major Respiratory Virus Infectious Diseases



- Influenza
- RSV
- COVID-19
- NMDOH Response and Readiness
  - Highly Pathogenic Avian Influenza in Dairy Cattle (HPAIDC)
- NMDOH Strategies



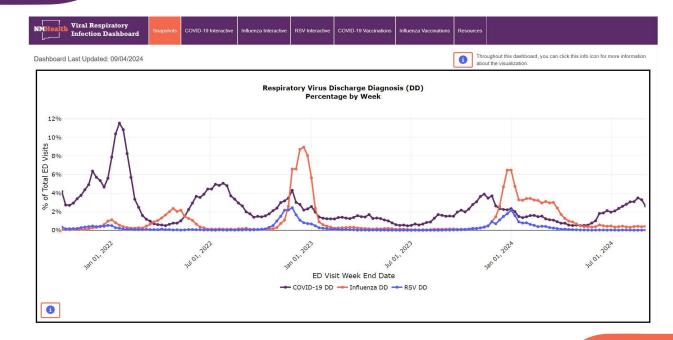
#### How do we Know?

- Public Health Surveillance = Disease Tracking
- Data Sources: laboratories, emergency departments, hospitals, health information exchange, immunization information system (NMSIIS), patient interviews/surveys
- Uses of electronic health data are increasing, yet epidemiologists are still needed to validate, investigate, and manage data that describe disease trends and risk factors
- Not all data are of equal information value and epidemiologists understand data constraints and produce visualizations to guide interpretation

#### Viral Respiratory Infection Dashboard



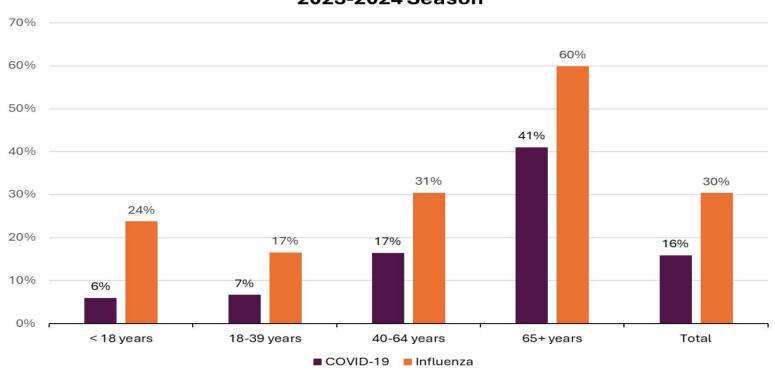
- Most current data on:
  - COVID-19
  - Influenza
  - RSV
- Includes lab results, ER visits, hospitalizations, and wastewater testing
- Vaccination info for COVID-19 and Influenza
- CDC resources on respiratory illness





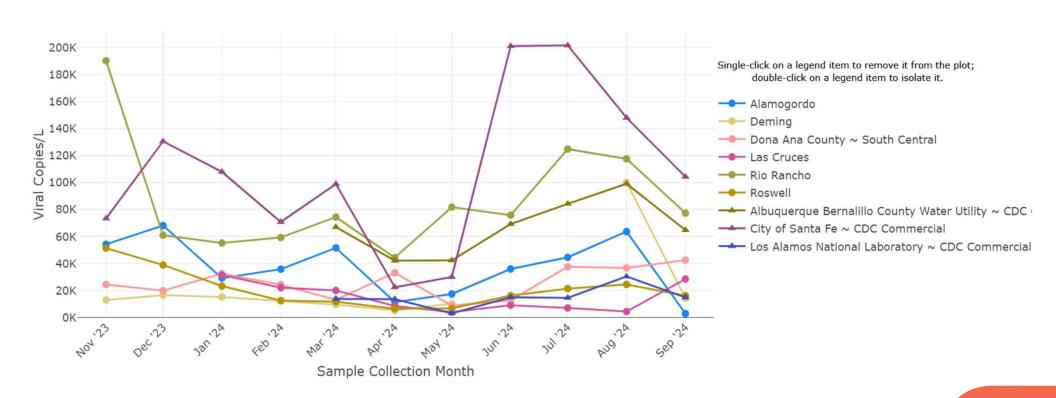


#### **COVID-19 and Influenza Vaccination Coverage Rates** 2023-2024 Season





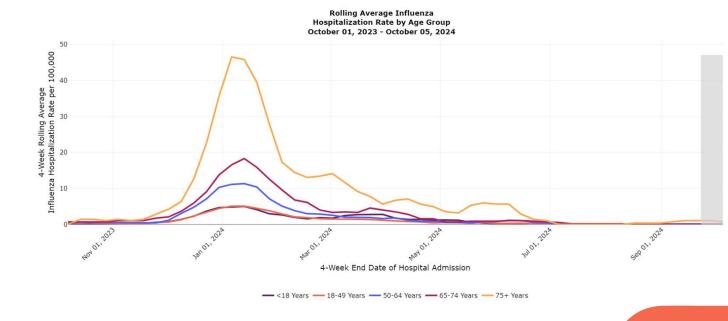
#### SARS-CoV-2 Viral Levels by Sewershed -Monthly Avg





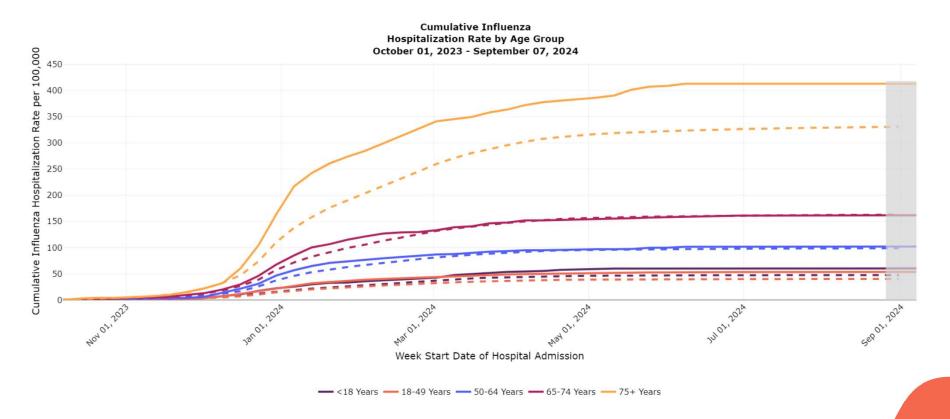
#### Influenza

- Winter peak
- Older persons and those with chronic conditions are at higher risk of severe disease
- 2,030 hospitalizations over past 11 months and 6.5% of emergency department visits at the peak
- Vaccine and antiviral use are low in New Mexico





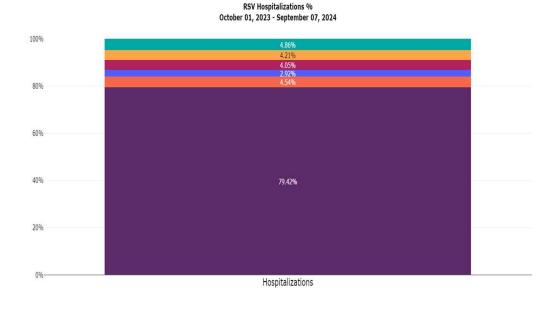
### Influenza Hospitalization





#### **RSV**

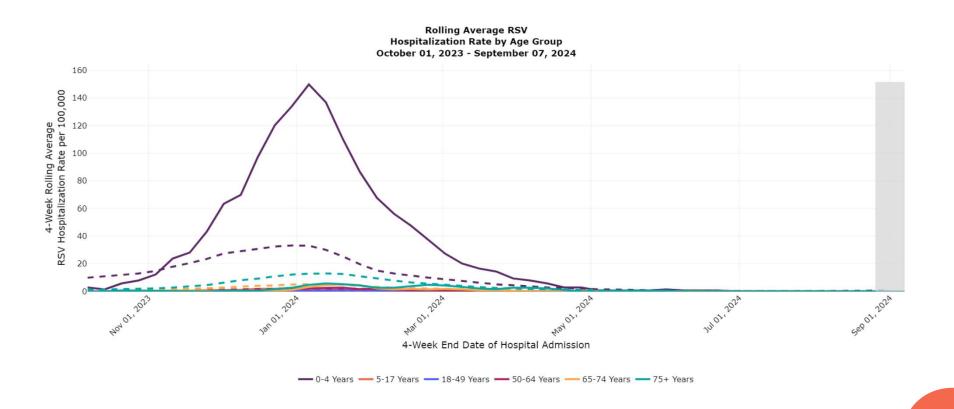
- RSV is also a seasonal virus that can cause severe disease in infants and children, older adults, and others with compromised immune systems
- RSV is the most common cause of hospitalization in infants
- 1,931 hospitalizations over past 11 months and 16.5% of emergency department visits for children less than 5 years at the peak



■ 0-4 Years ■ 5-17 Years ■ 18-49 Years ■ 50-64 Years ■ 65-74 Years ■ 75+ Years



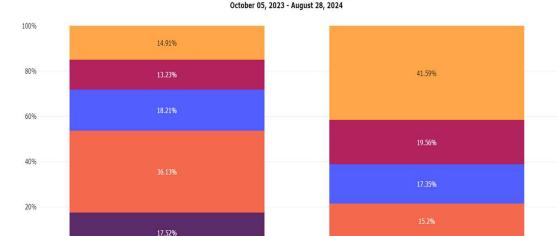
### **RSV Hospitalization by Age**





#### COVID-19

- Inconsistent waves
- Severe disease risk increases with age and with underlying medical conditions similar to influenza.
- 5,190 hospitalizations over past 11 months and 3% of emergency department visits during two separate peaks in the past 11 months.



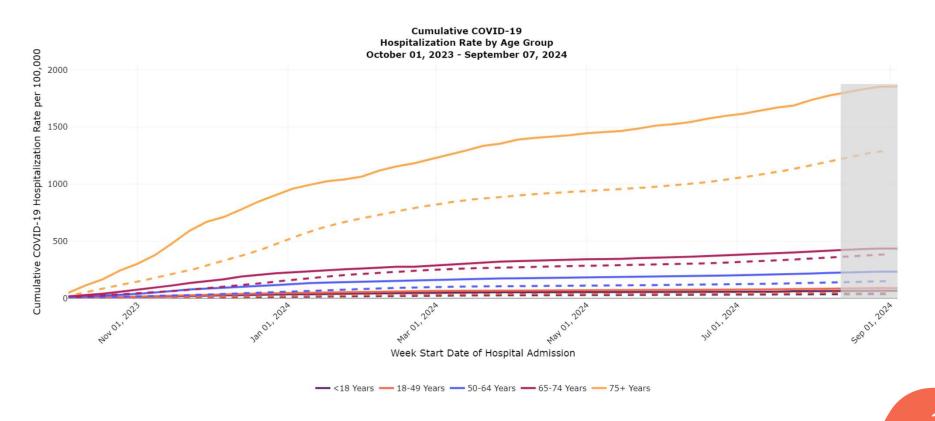
Cases

COVID-19 Cases and Hospitalizations %

Hospitalizations



### **Cumulative Hospitalization Rate**





#### **Outbreak Readiness**

#### **Opportunities**

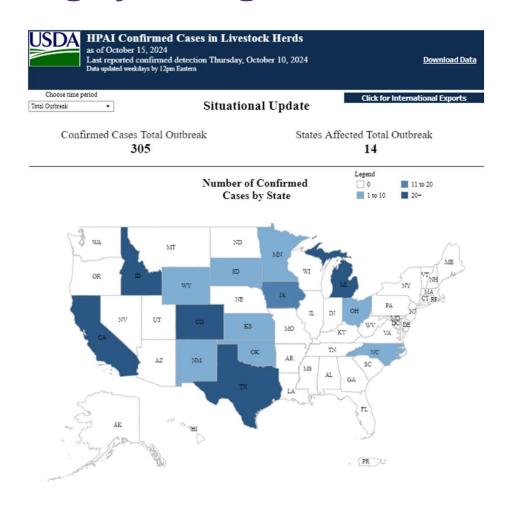
- Outstanding public health laboratory
- Robust public health surveillance
- Strong inter-agency collaboration
- Evolving health information technology

#### **Vulnerabilities**

- Federal grant funding that is unstable
- Loss of trust in public health recommendations, particularly behavioral interventions
- Turnover in experienced subject matter experts

#### Highly Pathogenic Avian Influenza (HPAI) H5N1





- Outbreak in US dairy cattle beginning March 2024
- Identified in 9 NM dairy herds in April 2024
- High levels of virus excreted in milk
  - Pasteurized milk is safe
- Livestock surveillance hindered by business concerns
- Wildlife and domestic animals, primarily cats, can be infected



#### HPAI H5N1: Human Infections

- Twenty-five human cases identified in US since April 2024
  - Fifteen with exposure to sick cattle
  - Nine with exposure to sick poultry
  - One with no risk factors
    - Identified through routine influenza surveillance
    - Their virus was closely related to isolates from Texas cattle
- All infections have been mild

- Underserved communities with limited healthcare access may be disproportionally affected
- Current risk to humans is low but continued monitoring is critical to promptly detect changes in the virus' ability to transmit between humans





#### **Strengths**

- Excellent relationships with the NM Department of Agriculture (NMDA) and NM Livestock Board (NMLB)
  - Successful Unified Command response to initial H5N1 cases in cattle
  - Ongoing meetings and One Health Tabletop Exercise
  - Well-positioned to launch coordinated response to zoonotic disease threats

#### Challenges

- Producers' and farmworkers' lack of trust in state and federal government
- Economic interests not necessarily aligned with recommendations to protect public health
- Federal mandates complicate local response





- Provider map to find a vaccine location.
- Respiratory campaign consists of marketing toolkits, commercials, radio ads, social media etc.
- NMDOH conducting mobile vaccine clinics.
   Schedule is posted to VaccineNM.org



### NMDOH Helpline







nmhealth.org



### NMDOH Strategy and Response

- Improve access to vaccination and address issues around vaccine hesitancy
  - Working directly with clinicians to understand and address hesitancy
  - Work with trusted community members to provide accurate information
- Continued development of tools for disease tracking
- Increase availability of disease tracking data to inform public and clinical decision making
- Strengthen and use infectious disease emergency response platforms and interagency collaboration to respond to the next emergency
- For HPAI
  - Prioritize developing relationships between local public health staff and producers/farmworkers.
  - Expand NMDOH outreach and engagement with industry groups and New Mexico State University Extension





## Thank you!