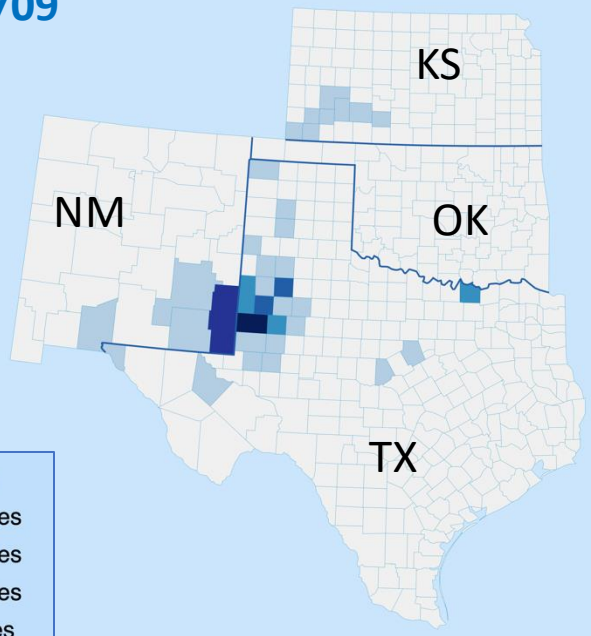
YALE SCHOOL OF PUBLIC HEALTH - ESF-8 VIRTUAL MEDICAL OPERATION CENTER SPECIAL REPORT

MEASLES OUTBREAK - SOUTHWEST U.S. - 2025

TOTAL: 709



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MORBIDITY AND MORTALITY

STATE	CASES	HOSPITALIZATIONS	DEATHS
TX	597 (+36)	62 (+4)	2
NM	63	6 (+1)	1
OK	12	0	0
KS	37	1	0
TOTAL	709 (+36)	69 (+5)	3

*The situation is still developing. Numbers are expected to increase.

4/19/2025
1300 HRS EDT

RISK ASSESSMENT IN OUTBREAK AREAS

Risk for Localized Spread	Risk to unvaccinated populations in and around the outbreak areas	Risk to Children	Potential for sustained transmission
HIGH	HIGH	HGH	HIGH

LINKS

TEXAS LINKS
- TEXAS DEPARTMENT OF STATE HEALTH SERVICES

FACEBOOK | X
- HEALTH ALERTS
- THE SOUTH PLAINS PUBLIC HEALTH DISTRICT

NEW MEXICO LINKS
- NEW MEXICO DEPARTMENT OF HEALTH

OKLAHOMA LINKS
OKLAHOMA STATE DEPARTMENT OF HEALTH

KANSAS
KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

RESOURCES FOR HEALTHCARE PROVIDERS
- CDC – MEASLES FOR THE HEALTHCARE PROFESSIONALS
- CDC VIDEO: MEASLES CLINICAL FEATURES AND DIAGNOSIS
- CDC CLINICAL IMAGES OF MEASLES
- CDC LABORATORY TESTING FOR MEASLES
- CDC ROUTINE VACCINATION RECOMMENDATIONS
- CDC ISOLATION RECOMMENDATIONS
- CDC: MEASLES CONTROL IN HEALTHCARE SETTINGS
- CDC ALERT SIGN INFOGRAPHIC
- CDC POSTER FOR OFFICE DISPLAY
- NY HEALTH; RECOGNIZING MEASLES FACT SHEET
- NY HEALTH: DEALING WITH VACCINE HESITANCY
- MEASLES POST-EXPOSURE PROPHYLAXIS
- MEASLES REVIEW FOR PROVIDERS

MEASLES TESTING LABORATORIES
- CDC MEASLES VIRUS LABORATORY

RESOURCES FOR THE PUBLIC
- CDC – MEASLES
- MEASLES CASES AND OUTBREAKS
- NYSDOH: YOU CAN PREVENT MEASLES
- CDC VIDEO: GET VACCINATED AND PREVENT MEASLES
- CDC VACCINE SHOT FOR MEASLES
- DIRECTORY FOR LOCAL HEALTH DEPARTMENTS

RESOURCES FOR EMS PROVIDERS
- GUIDANCE FOR SUSPECTED MEASLES PATIENT
- NYSDOH POLICY STATEMENT

PORTALS, BLOGS, AND RESOURCES
- CIDRAP
- CORI
- FORCE OF INFECTION
- KAISER HEALTH NEWS
- MEDPAGE TODAY
- NY STATE GLOBAL HEALTH UPDATE
- THE PANDEMIC CENTER TRACKING REPORT
- YOUR LOCAL EPIDEMIOLOGIST

Yale SCHOOL OF PUBLIC HEALTH

BACKGROUND

TYPE OF PUBLIC HEALTH EMERGENCY: LARGE REGIONAL MEASLES OUTBREAK

OVERVIEW:
A measles outbreak originating in **West Texas** has spread in the US to **New Mexico, Oklahoma, and Kansas**, resulting in **69 hospitalizations** and **3 confirmed deaths** — including **two previously healthy children** in Texas and **one adult** in New Mexico. These are the **first U.S. measles deaths since 2015**, and the **first pediatric deaths since 2003**. Genetic and epidemiological evidence suggests this outbreak has also seeded the current outbreak in Chihuahua, Mexico, indicating clear cross-border transmission.

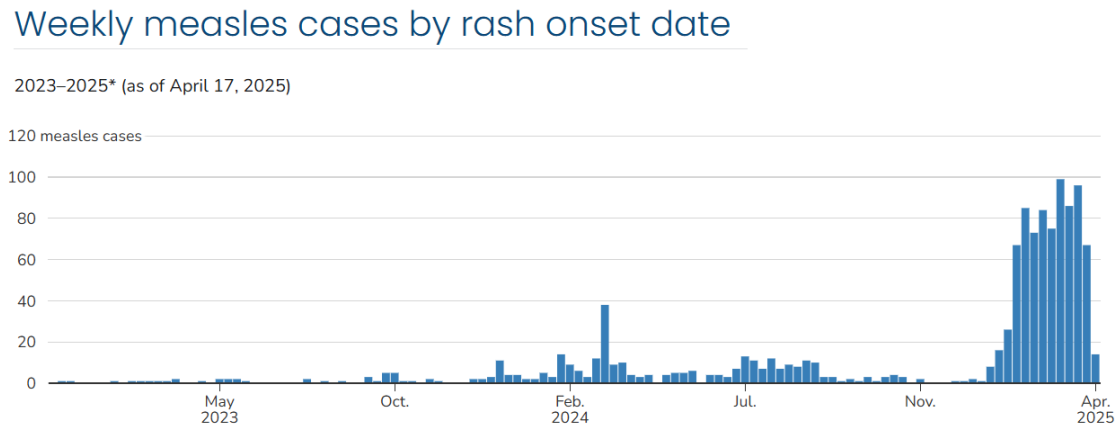
THE VIRUS:
Measles is a highly contagious viral disease transmitted primarily through **respiratory droplets** from coughing or sneezing. Symptoms include **high fever, cough, runny nose, conjunctivitis**, and a distinctive **red, blotchy rash**. The virus can remain **airborne or infectious on surfaces for up to two hours**, contributing to its rapid spread.

Despite being preventable through the MMR (measles, mumps, and rubella) vaccine, outbreaks continue to occur in under-vaccinated communities, leading to severe health outcomes and increased transmission risk (CDC).

FACTORS DRIVING THIS OUTBREAK:
- Low vaccination rates
- High levels of vaccine hesitancy and misinformation
- Community mistrust in public health authorities, heightened by post-pandemic attitudes

PUBLIC HEALTH RESPONSE:
- Emergency vaccination campaigns and targeted outreach.
- Focused messaging to combat misinformation and rebuild community trust.
- Multi-sector coordination involving schools, healthcare providers, and local organizations.

MEASLES CASES IN 2025 - CDC



Confirmed cases: 800 (As of 4/18/2025)

Age
Under 5 years: **249 (31%)**
5-19 years: **304 (38%)**
20+ years: **231 (29%)**
Age unknown: **16 (2%)**

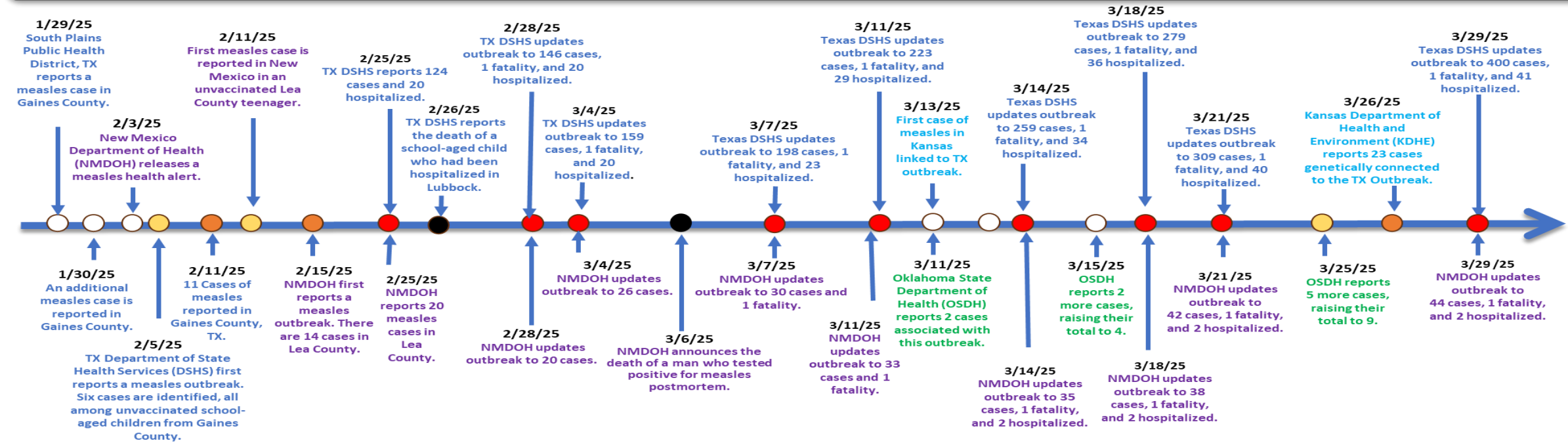
Vaccination Status
Unvaccinated or Unknown: **96%**
One MMR dose: **1%**
Two MMR doses: **2%**

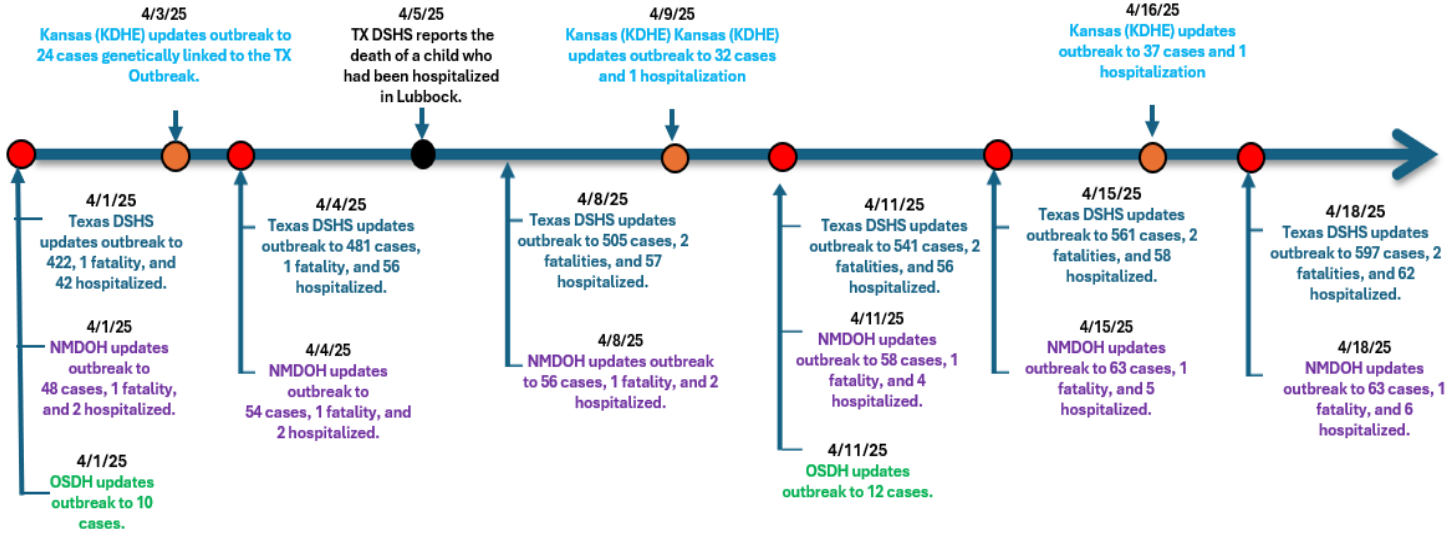
Percent of Age Group Hospitalized
Under 5 years: **19% (47 of 249)**
5-19 years: **7% (21 of 304)**
20+ years: **6% (15 of 231)**
Age unknown: **13% (2 of 16)**

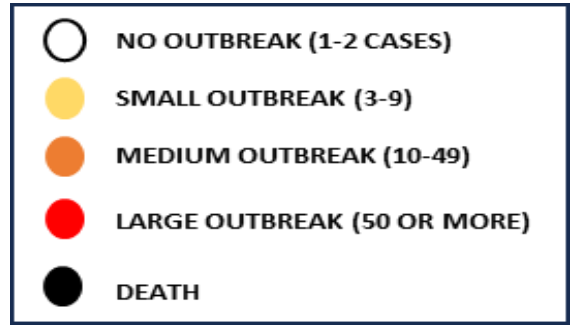
Deaths: 3
here have been 2 confirmed deaths from measles, and 1 death under investigation

SOURCES: CENTER FOR OUTBREAK RESPONSE (CORI), CDC, TX MEASLES OUTBREAK, NM MEASLES OUTBREAK, OSDH, KDHE

TIMELINE (JANUARY – APRIL 2025)







SOURCES: TEXAS DSHS, NMDOH, OSDH, KDHE

CURRENT SITUATION

As of 4/18/25, the Southwestern outbreak has **709 cases,** including confirmed and pending cases across **Texas, New Mexico, Oklahoma**, and **Kansas**. Experts warn this is **likely a severe undercount**. The situation remains fluid, with case numbers expected to rise. Experts project the outbreak could last **up to a year**.

Texas: The Texas DSHS has identified "designated outbreak counties" with ongoing measles transmission: Cochran, Dallam, Dawson, Gaines, Garza, Lynn, Lamar, Lubbock, Terry, and Yoakum.

CURRENT CASE COUNT: 673 (As of 04/18/2025)

- **Texas: 597** (+36)
- **New Mexico: 63**
- **Oklahoma: 12**
- **Kansas**: **37**

HOSPITALIZATIONS: 69 (+5)

- **Texas: 62** (+4) - This is 10.4% of all TX cases.
- **New Mexico: 6** (+1) - This is 9.5% of all NM cases.
- **Kansas**: 1 - This is 2.7% of all KS cases.

DEATHS: 3

- **Texas: 2** – This is 0.34% of all cases
- **New Mexico:** 1 – This is 1.59% of all cases

US NATIONAL CASE COUNT (CONFIRMED AND SUSPECTED): 841

INTERNATIONAL SPREAD (AS OF 4/18/2025)

- **Mexico - 451**
  - **Chihuahua, Mexico: 433** (+86) cases, 5 hospitalizations, 1 fatality
- **Canada: 1079** (This reflects Ontario's Outbreak which began 11/24)
  - **Ontario, Canada – 925** (+109) cases, 69 hospitalizations.

AGES OF CASES:

WEST TEXAS OUTBREAK				
0-4 Years	**5-17 Years**	**18+ Years**	**Pending**	**Total**
182 **(+7)** (30%)	219 **(+13)** (37%)	172 **(+16)** (29%)	24 (4%)	597 **(+36)**
NEW MEXICO OUTBREAK				
0-4 Years	**5-17 Years**	**18+ Years**	**Pending**	**Total**
17 (25.9%)	19 (27.6%)	27 (46.5%)	0	63
KANSAS OUTBREAK				
0-4 Years	**5-17 Years**	**18+ Years**	**Pending**	**Total**
11 (29.7%)	19 (51.4%)	**7** (18.9%)	0	37
OKLAHOMA OUTBREAK				
0-4 Years	**5-17 Years**	**18+ Years**	**Pending**	**Total**
9 Cases Confirmed, 3 Probable – no ages provided			3	12

DNA SEQUENCING:

CANADA: The D8 genotype, specifically lineage MVs/Ontario.CAN/47.24, was first detected in Ontario in late 2024. By early 2025, it had been identified in 57 confirmed cases, primarily in Ontario, with additional cases in Quebec, Manitoba, and British Columbia. The majority of cases occurred among unvaccinated individuals. Source: PAHO)

MEXICO: In February 2025, a measles case in Chihuahua was confirmed to be of the D8 genotype, lineage MVs/Ontario.CAN/47.24. Contact tracing and active surveillance identified 17 additional related cases, confirming local transmission of this lineage. (Source: El Diario de Chihuahua, PAHO)

UNITED STATES: While specific lineages are not always reported, genotype D8 has been predominant in recent outbreaks in Texas, New Mexico, Oklahoma, and Kansas. Genetic sequencing has linked the virus in the U.S. to the same D8 genotype circulating in Canada and Mexico, indicating a clear cross-border transmission pattern. However, the initial introduction of measles associated with these outbreaks remains unknown. (Source: WHO)

SOURCES: TX MEASLES OUTBREAK, NM MEASLES OUTBREAK, OSDH, WHO

CURRENT SITUATION: - MEASLES IN AN URBAN SETTING

LUBBOCK, TX:

- Located about 80 miles from the outbreak's epicenter, **Lubbock**—a city of 257,000—has become a regional hotspot. As a medical hub, the city has facilitated viral spread, with rural residents traveling in for care and inadvertently introducing and amplifying transmission chains.
- As of April 18, 2025, **Lubbock County has reported 42 confirmed measles cases**, with a significant concentration within city limits. Due to increasing local transmission, the Texas Department of State Health Services has officially designated Lubbock as an outbreak area.
- The city's public health response has been constrained by stagnant immunization funding—just **$254,000 annually**, unchanged for over 15 years. These limitations have hindered outreach, education, and vaccination efforts, especially in close-knit, vaccine-hesitant communities.
- Clusters of vaccine hesitancy, particularly among **faith-based and libertarian-leaning groups**, continue to depress community immunity.
- As of April 2025, the measles, mumps, and rubella (MMR) vaccination rate among kindergartners in Lubbock County, Texas, stands at approximately **92%.** This rate falls below what is needed to achieve herd immunity. While the overall county rate is relatively high, certain private schools and daycare centers in Lubbock report MMR coverage rates significantly below this threshold, contributing to the risk of localized outbreaks.

EL PASO, TX

- With a population of 679,000, El Paso's **first 2 confirmed cases** were reported on 4/8/2025. As of April 18, 2025, **El Paso has reported 18 confirmed measles cases 4/18/2025.**
- As of April 2025, the vaccination rate in El Paso County stands at 96%. However, there is reason for concern about unvaccinated pockets within the community. Based on population, this would put 27,000 individuals at risk.
- In El Paso, cross-border dynamics with Juárez, Mexico, add unique challenges. High levels of daily binational travel have contributed to the spread of measles. Through contact tracing and sequencing data, a large outbreak in the Mexican state of Chihuahua has been directly linked to the ongoing outbreak in Gaines, Texas. The genotype D8 is now confirmed on both sides of the U.S.–Mexico border.
- Public health outreach faces obstacles such as language barriers, pervasive misinformation, and concerns among undocumented populations who may avoid seeking care for fear of deportation.
- Earlier cases in El Paso involved exposures at **high-traffic locations** such as malls, retail stores, and restaurants, underscoring the risk of transmission in urban public spaces.
- Measles cases have been reported in three Ysleta Independent School District (YISD) high schools (Eastwood, Bel Air, and Hanks), triggering schoolwide alerts and reinforcing the need for improved vaccination record reviews and contact tracing in school settings.

THE BOTTOM LINE:

Due to their unique community vulnerabilities, the rates of measles transmission have been steadily increasing in urban areas such as Lubbock, TX, and El Paso, TX. Cases linked to public venues like schools, retail settings, and other public spaces reveal how urban density accelerates the risk of measles exposure. Trusted community messengers who can spread awareness about the safety and necessity of the MMR vaccine are critical at this time.

SOURCES: DSHS, THE TEXAS TRIBUNE, NY1, ST. ALBERT GAZETTE, KFOX, KVIA, KTSM, KFOX, BBC, AP NEWS, VAX BEFORE TRAVEL, CHILDREN'S DEFENSE, KISS.FM, YISD, PBS

MEASLES IN AN URBAN SETTING

In an urban setting, even when the population is well vaccinated, measles can spread "rapidly". Here's why:

- **Rapid Transmission in Crowded Spaces -** Urban areas have dense populations and high foot traffic in schools, public transit, malls, and workplaces, creating ideal conditions for the spread of airborne diseases like measles.

- **Pockets of Low Vaccination -** While city-wide vaccination rates may appear adequate (greater than 95%), localized clusters of unvaccinated individuals can lead to dangerous outbreak hotspots. These clusters often occur in:
  - Specific neighborhoods
  - Certain school districts or private/religious schools
  - Cultural, religious, or ideological communities

- **Vaccine Hesitancy -** Even when vaccines are available, some parents delay or refuse immunization due to:
  - **Distrust of medical institutions** (historical or systemic reasons)
  - **Fears** about side effects, autism, or "too many vaccines"
  - Belief in **"natural immunity"** or reliance on alternative medicine

- **Vulnerable Populations in Congregate Settings –** Measles can spread rapidly in congregate settings among the unvaccinated, often due to inadequate infection control measures. Such settings include:
  - Schools and daycare
  - Religious gatherings
  - Camps
  - Homeless shelters
  - Detention centers and correction facilities.

- **Delayed Recognition/Diagnosis** - The early symptoms of measles, which include fever, cough, and runny nose, can mimic other viral illnesses, making early detection difficult. In busy or overwhelmed emergency departments and clinics, measles may go undiagnosed during its most infectious period, thus delaying containment efforts and increasing its spread.

- **High Mobility & Importation Risk**
  - Urban centers are major travel hubs—airports, bus terminals, train stations, and seaports.
  - Tourism increases the likelihood of imported cases sparking local outbreaks.
  - Cities also experience constant population turnover—including new arrivals, short-term renters, and international visitors—which:
    - Complicates tracking of immunization status
    - Increases the risk of undetected spread in under-vaccinated micro-populations

- **Strain on Health Infrastructure**
  - During measles outbreaks, public health agencies must rapidly expand to:
    - Conduct health surveillance and contact tracing
    - Enact isolation protocols
    - Operate emergency vaccination efforts
  - The surge in demands can overwhelm urban healthcare systems and public health systems, particularly in under-resourced areas. The estimated cost of managing each measles case is $47,479.(TPR).

SOURCES: PUBLIC HEALTH RESPONSES DURING MEASLES OUTBREAKS IN ELIMINATION SETTINGS: STRATEGIES AND CHALLENGE, MEASLES CONTROL IN THE URBANIZING ENVIRONMENT, CONSEQUENCES OF UNDERVACCINATION — MEASLES OUTBREAK, NEW YORK CITY, 2018–2019; BROOKLYN HASIDIC COMMUNITY IS IN THE MIDST OF A DIRE MEASLES OUTBREAK

CURRENT SITUATION: TEXAS DAYCARE EXPOSURES

DAYCARE EXPOSURES

TEXAS:

- As of April 12, 2025, the measles outbreak at Tiny Tots U Learning Academy in Lubbock, Texas, has resulted in at least seven confirmed cases among children, with two hospitalizations.
- The Tiny Tots U Learning Academy is a center with approximately 230 infants, toddlers and preschool-age children. The children who have tested positive at the day care so far are between the ages of 5 months and 3 years old.
- The outbreak began when an infectious child transmitted the virus to two others, leading to further spread within the daycare.
- The daycare has implemented measures such as isolating unvaccinated children and those too young to be vaccinated. Unvaccinated attendees are required to stay home for 21 days following their last exposure.
- In response, **Lubbock Public Health has updated vaccination guidelines, recommending that infants receive their first MMR vaccine dose at 6 months old instead of the standard 12 months. Children who have received only one dose are advised to get their second dose earlier than the usual schedule.**

NEW MEXICO: The New Mexico Department of Health notified the public about a potential measles exposure from an unvaccinated child with measles at multiple locations in Hobbs, including a daycare center– Friday, April 4 and Tuesday, April 8, from 10:30 a.m. - 6:45 p.m. at the Kidz City Daycare.

UPDATED SET OF VACCINE RECOMMENDATION FOR TEXAS

This week, the Texas Department of State Health Services released an updated set of vaccine recommendations for 10 West Texas counties at the center of an ongoing measles outbreak. Those counties include: Cochran, Dallam, Dawson, Gaines, Garza, Lamar, Lynn, Lubbock, Terry and Yoakum.

The recommendations for those living or traveling to the outbreak counties covers Texans of all ages, not just young children. The agency stressed that vaccination is the best defense against measles and that two doses of the measles-mumps-rubella (MMR) vaccine prevents more than 97% of measles infections.

DSHS's recommendations for outbreak areas include:

- Children 6 to 11 months receive an "outbreak" dose of the MMR vaccine if they live or are traveling to an outbreak county.
- Children over 12 months old who have not been vaccinated with the MMR vaccine receive one dose and follow up with a second at least 28 days later.
- Teens and adults should also be up-to-date on their MMR vaccination.
- Adults born between 1957 and 1968 who only received one MMR vaccine from that time period should consider getting one dose of the current vaccine.
- Adults born before 1957, pregnant women, and people with severe immunodeficiency are not recommended to receive any dose of MMR vaccine.

SOURCES: THE COLUMBUS DISPATCH, TEXAS TRIBUNE, NBC NEWS, NMDOH

CURRENT SITUATION: TEXAS DAYCARE EXPOSURE PROCEDURES

TEXAS: Provide Staff with the following resources.

- **Post informational flyers** in English and Spanish in high-traffic areas for staff and guardians to view.
  - Messages including: measles is preventable through vaccination, when to go to the ER for measles, and measles is spreading
- **Collect and Verify Immunization Records.**
  - Ensure all staff and eligible children have up-to-date MMR (measles, mumps, rubella) vaccination. See Vaccine Schedule and Requirements by Age Level.
  - Sort out any unvaccinated children or staff without documented immunity (medical records or lab-confirmed immunity) into separate classrooms. Encourage mask wearing for those who can comfortably wear a mask.
  - Promote and encourage MMR vaccination. See vaccination site maps with low-cost options and measles vaccine FAQs.
- **Recognize Symptoms:** Train staff to recognize early signs of measles: fever, cough, runny nose, rash, and red, watery eyes. See CDC symptoms and measles rash photos.
- **Isolate Exposed Unvaccinated Individuals and Suspected Cases.**
  - If exposure has occurred, exclude unvaccinated children and staff for 21 days from the date of last exposure.
  - If a child develops symptoms, immediately isolate them from others. Notify parents of the exposure and/or symptoms and how to re-enter safely.
- **Communicate with Health Officials:** Immediately report suspected cases to local public health authorities. Inform families and staff of a confirmed or suspected case while maintaining confidentiality. See TX disease reporting contact by county.
- **Sanitation** - General Guidance for Workers and Employers
  - Wash hands regularly and wear gloves when coming into contact with bodily fluids.
  - Disinfect high-touch surfaces, including toys, books, and school supplies, regularly.
  - Improve ventilation in indoor areas, especially where children congregate (HEPA filters, open windows, replace/upgrade HVAC filters).
- **Collaborate with Public Health Authorities**
  - Cooperate with contact tracing efforts.
  - Follow health department guidance on closures, exclusions, and immunization catch-up clinics. See Texas DSHS measles outbreak page.
- **Plan for Temporary Closure**
  - Be prepared for short-term closure if public health officials advise, especially in cases of multiple exposures or uncontrolled spread.
  - Provide parents with resources such as the Measles Communication Kit, Interim Guidance for Measles in Schools, Measles FAQs, and CDC Health Alert Network guidance (listed below).

1. **Measles Communications Toolkit provided by Texas DSHS**
   - Informational flyers
   - Exposure notification scripts and letters (English and Spanish),
   - Measles overview for school nurses and school staff
   - Additional measles resources (about measles, symptoms, how it spreads, etc.)
2. **Interim Guidance for Measles in Schools, March 2025 by Texas DSHS**
   - This document provides information for schools on preventative measures to enact and steps to follow when a case of measles is identified within a school and childcare setting.
3. **Measles FAQs by Texas DHS**
4. **CDC Health Alert Network**
   - Expanding measles outbreak in the United States and guidance for upcoming travel season

SOURCES: Texas DSHS 1, 2, 3, 4, 5, 6; CDC 1, 2, 3; OSHA

CURRENT SITUATION: VACCINATION STATUS

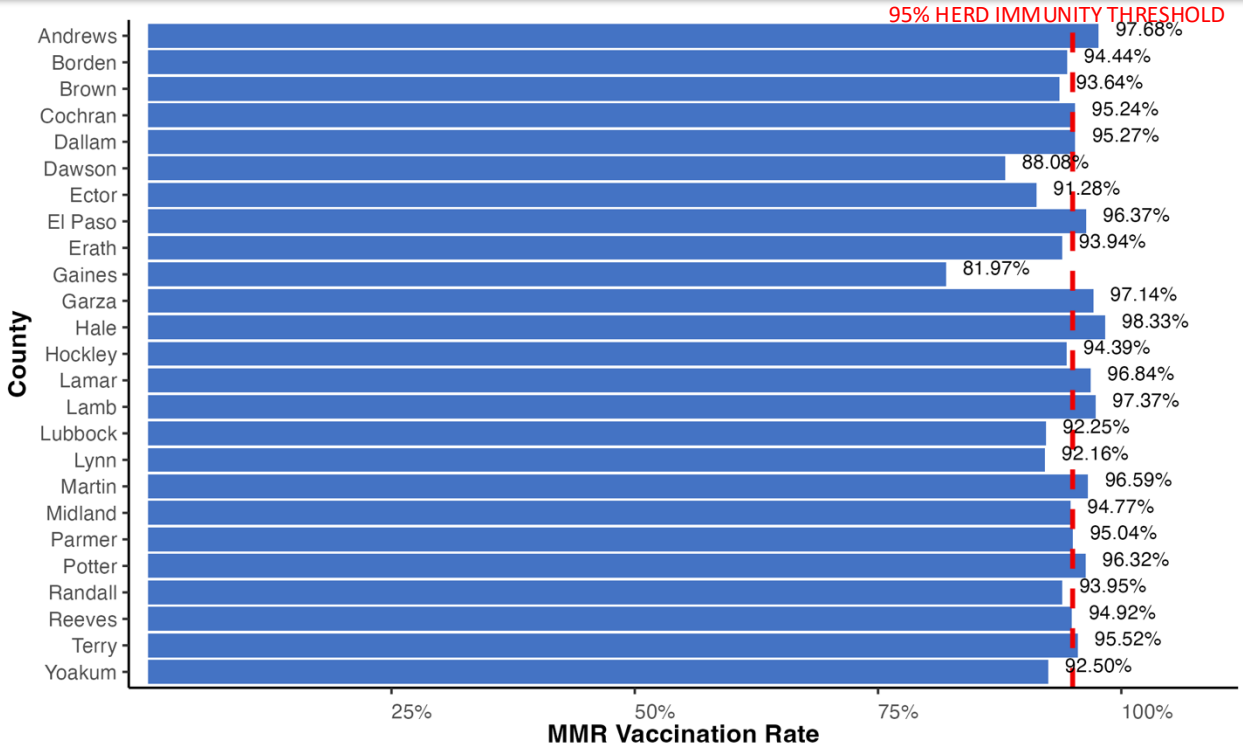
STATE	VACCINATED WITH 1 DOSE	VACCINATED WITH 2 DOSES	UNVACCINATED/ UNKNOWN	TOTAL CASES
TX	10	12	575*	597

NOTE: The TX unvaccinated/unknown category includes people with no documented doses of measles vaccine more than 14 days before symptom onset.

STATE	VACCINATED WITH AT LEAST ONE DOSE	NOT VACCINATED	UNKNOWN	TOTAL CASES
NM	6	46	11	63

STATE	VACCINATED WITH AT LEAST ONE DOSE	UNVACCINATED / UNKNOWN	TOTAL CASES
OK	0	12	12

STATE	AGE APPROPRIATELY VACCINATED	NOT AGE APPROPRIATELY VACCINED	NOT VACCINATED	Pending Verification/ Unable to Verify	TOTAL CASES
KS	4	1	30	2	37



Among the affected counties in TX, 13 out of 25 are below a 95% vaccination rate, the recommended rate for herd immunity (SOURCE: Annual Report on Immunization Status and CORI).

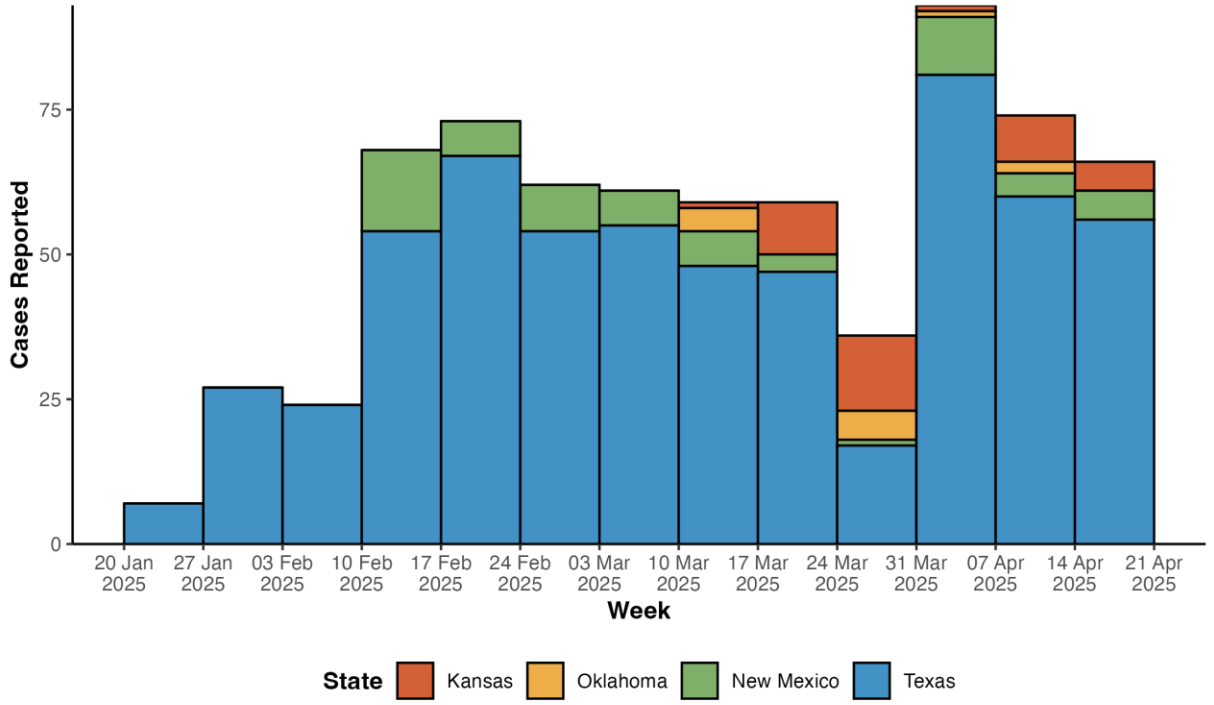
BECAUSE MEASLES IS HIGHLY CONTAGIOUS, 95% OF THE POPULATION MUST BE VACCINATED TO ACHIEVE HERD IMMUNITY AND PREVENT ONGOING TRANSMISSION OF THE VIRUS.

- **TX:** Vaccination rates are low in most affected areas. In Gaines County, TX, vaccination rates are significantly below the threshold required for herd immunity, contributing to the virus's rapid spread.
- **NM:** NM reports that 94% of individuals aged 18 and under in Lea County have received at least one dose of the MMR vaccine. This is slightly below the state's overall rate of 95% for the same age group.
- **OK:** For the 2023–24 school year, CDC reported Oklahoma kindergartners' vaccine exemption rate rose to 5.7%. 88.3% of kindergarteners received the MMR vaccine.
- **KS:** Vaccination rates are low in the most affected counties in KS. The statewide vaccination rate is 90%. In the counties reporting cases, vaccination rates are far below herd immunity, except for Finney and Grant Counties (98% and 99%, respectively).

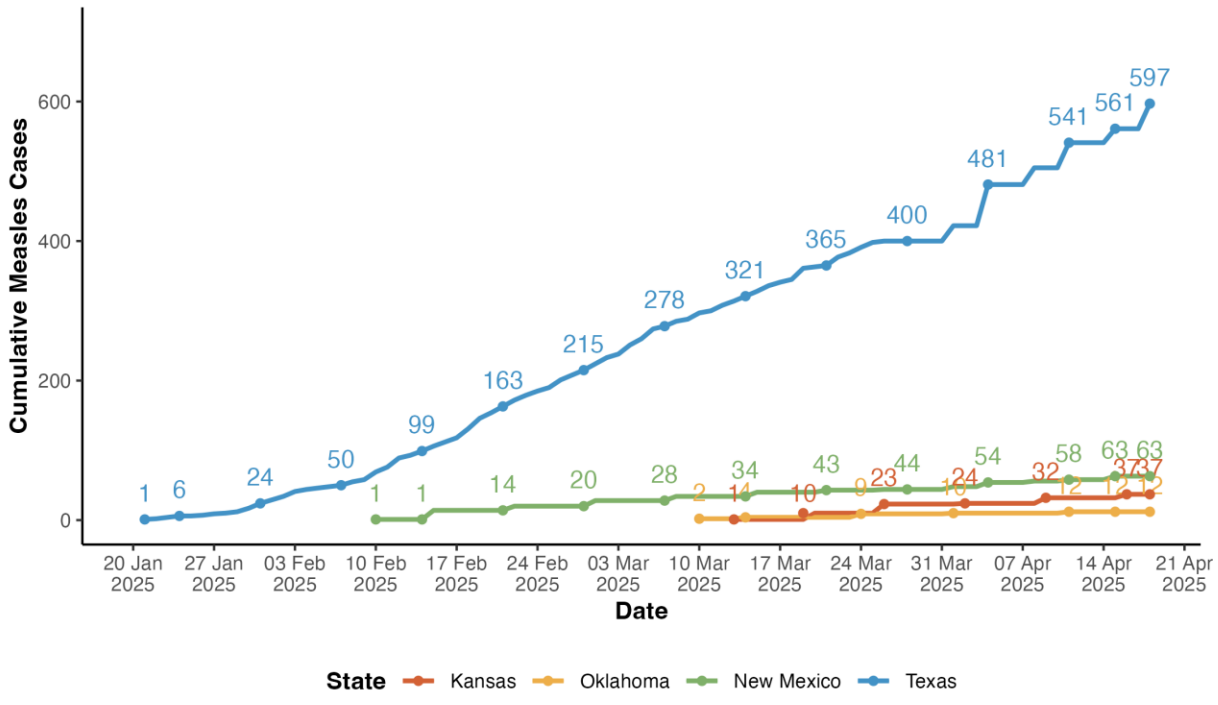
SOURCES: TX MEASLES OUTBREAK, NM MEASLES OUTBREAK, OSDH, AP -3/21/2025, NYT

EPI CURVE AND CASES OVER TIME

SOUTHWEST MEASLES OUTBREAK – EPI CURVE



SOUTHWEST MEASLES OUTBREAK – CUMULATIVE CASES OVER TIME



The number of new cases per week remains high.

- **TX:** Reported first case the week of 1/25/25. Most cases in the current outbreak are in Gaines County.
- **NM:** Reported first cases the week of 2/10/25. First case in Doña Ana County reported 4/16/25.
- **OK:** Reported first cases the week of 3/10/25.
- **KS:** Reported first case on 3/13/25. First hospitalization reported 4/9/25. No new counties in the last week.

Cases are rising, and the outbreak is not slowing down.

- **TX:** The number of cases has increased consistently over time, to a total of 597 cases across 25 counties.
- **NM:** A total of 63 cases have been reported in 4 counties.
- **OK:** A total of 12 cases have been reported by the OSDH. No new cases reported since 4/11/25.
- **KS**: A total of 37 cases across 8 counties have been reported by the KDHE. Cases increased by 50% from 4/2/25 to 4/9/25.

SOURCES: TX DSHS, NMDOH, OSDH, KDHE, CENTER FOR OUTBREAK RESPONSE (CORI)

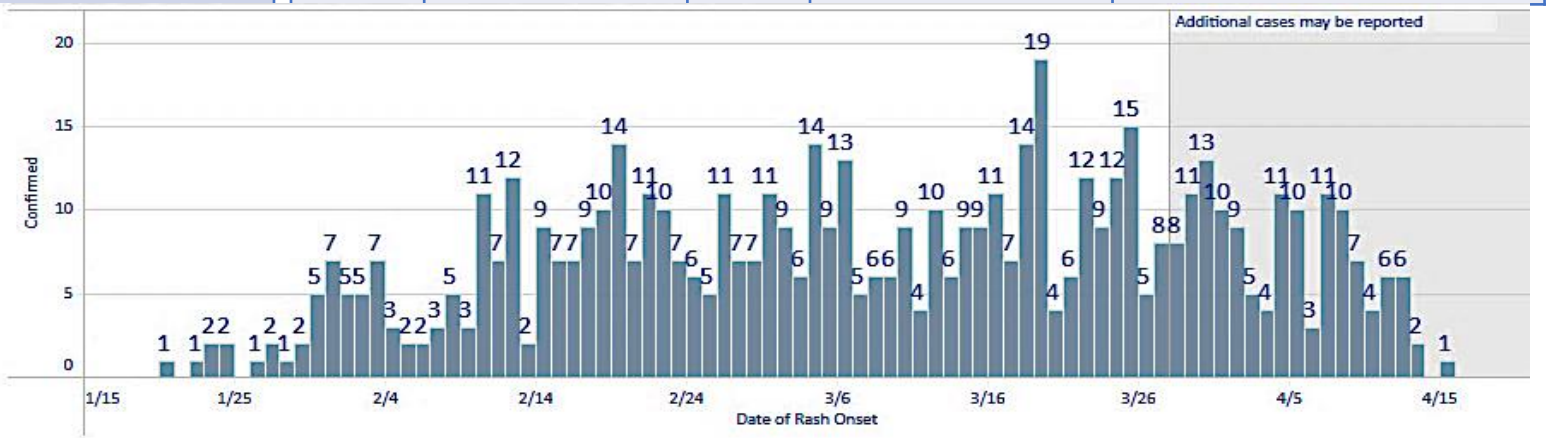
EPI SUMMARY - TEXAS

(n=597) AS OF 4/18

COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)	# OF SCHOOL DISTRICTS IN EACH COUNTY WITH MMR BELOW 95%
Andrews	2	0.34. %	97.70%	0
Borden	1	0.2%	94.44%	1
Brown	1	0.2%	93.64%	5
Cochran	12	2.0%	95.20%	1
Dallam	7	1.3%	95.30%	2
Dawson	24 (+3)	3.9%	88.10%	4
Ector	9 (+1)	1.42%	91.30%	5
El Paso	18 **(+11)**	1.3%	96.37%	8
Erath	1	0.2%	93.94%	5
Gaines	371 **(+11)**	65%	82.00%	3
Garza	2	0.4%	97.10%	0
Hale	5	0.9%	98.30%	2
Hockley	5(+2)	0.5%	94.40%	3

COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)	# OF SCHOOL DISTRICTS IN EACH COUNTY WITH MMR RATES BELOW 95%
Lamar	11	2.0%	96.84%	0
Lamb	1	0.2%	97.37%	1
Lubbock	42 **(+2)**	7.0%	92.25%	8
Lynn	2	0.4%	92.16%	2
Martin	3	0.5%	96.59%	1
Midland	2	0.4%	94.77%	4
Parmer	4 (NEW)	0.7%	95.04%	1
Potter	1 (NEW)	0.2%	96.32%	3
Randall	1	0.2%	93.95%	1
Reeves	1	0.2%	94.92%	1
Terry	52 (+5)	8.4%	95.52%	2
Yoakum	18	3.2%	92.50%	1

OUTBREAK CASES BY DATE OF RASH ONSET



SOURCES: [MEASLES OUTBREAK – APRIL 18, 2025 | TEXAS DSHS]

EPI SUMMARY (KS, NM, OK)

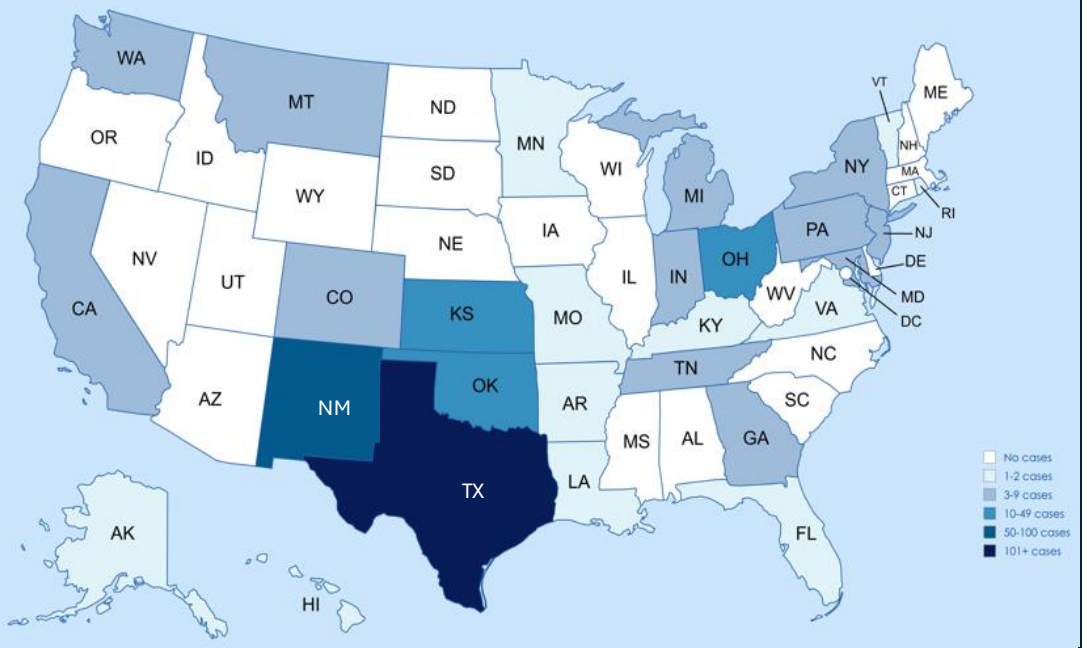
COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)
KANSAS (n=37) AS OF 4/16/2025			
Finney	Between 1- 5		98%
Ford	Between 1- 5		87%
Grant	Between 1- 5		99%
Gray	Between 1- 5		66%
Haskell	8	21.6%	58%
Kiowa	6	16.2%	92%
Morton	Between 1- 5		82%
Stevens	7	18.9%	83%
NEW MEXICO (n=63) AS OF 4/15/2025			
Chaves	1	1.6%	98%
Doña Ana	1	1.6%	
Eddy	2	3.2%	93%
Lea	59 (+4)	93.6%	94%
Note: Those 18 years or younger have a 95% vaccination rate. 63% of adults have received one shot of MMR, and only 55% have received both shots, according to local health officials, though they noted that there may be vaccinated adults whose records have not been added to the system. Adults make up more than half of reported cases in New Mexico.			
OKLAHOMA (n=12) AS OF 4/15/2025			
Tulsa and Cherokee Nation	12	Insufficient Information	89.5%

SOURCES: NM MEASLES OUTBREAK, OKLAHOMA HEALTH ALERT NETWORK (OK-HAN) NOTIFICATION, OSDH, WHO, NYT

US OUTLOOK

** NOTE: The information on this page has been gathered by reviewing data from state and local health departments, news media sources, and the Center for Outbreak Response Innovation (CORI)*

841*



The increase in measles cases can be attributed to falling vaccination rates and increased importation of travel-related cases, which occur when unvaccinated people acquire measles abroad and bring it back to the U.S.

STATE	CASES
TEXAS **	622
NEW MEXICO	63
KANSAS	37
OHIO	30
OKLAHOMA	12
CALIFORNIA	9
PENNSYLVANIA	9
MICHIGAN	7
INDIANA	6
TENNESSEE	6
MONTANA	5
NEW YORK	4
WASHINGTON	4
COLORADO	3
GEORGIA	3
MARYLAND	3
NEW JERSEY	3
ALASKA	2
ARKANSAS	2
HAWAII	2
MINNESOTA	2
FLORIDA	1
LOUISIANA	1
KENTUCKY	1
MISSOURI	1
RHODE ISLAND	1
VIRGINIA	1
VERMONT	1
TOTAL	841

OUTBREAKS

- **SMALL OUTBREAK (3-9)**
- **MEDIUM OUTBREAK (10 - 49)**
- **LARGE OUTBREAK (50 OR MORE)**

An outbreak of measles is defined as three or more laboratory-confirmed cases that are temporally related and epidemiologically or virologically linked.

*As of 4/19/2025, 2300 hrs. EDT, there are approximately **844** measles cases (including confirmed and suspected cases) across 21 states.*

*Currently, there are six or **seven measles outbreaks**:*

1. *West Texas, involving 23 counties in **Texas**, 4 counties in **New Mexico**, 2 counties in **Oklahoma**, and the Cherokee Nation in Oklahoma*
2. *8 counties in **Kansas** are connected to West, TX.*
3. *Ashtabula and Knox Counties, **Ohio***
4. *Erie County, **Pennsylvania***
5. *Allen County, **Indiana***
6. *Bergen County, **New Jersey***
7. *metro Atlanta, **Georgia***
8. *Gallatin County, **Montana***

**** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 25**

- 2 cases – Adults, Harris County (travel-related)
- 1 case – Infant, Harris County – required hospitalization (travel-related)
- 1 case – Harris County
- 1 case – Infant, Travis County (travel-related)
- 2 case – Adult, Rockwall County (travel-related)
- 2 case – Adult, Fort Bend (travel-related)
- 1 Case Brazoria
- 15 Cases - Upshur

TEXAS CASES ASSOCIATED WITH THE OUTBREAK: 597

MEXICO OUTLOOK

THE MEASLES OUTBREAK IN MEXICO: OVERVIEW

*Data as of Friday, April 18th, 2025

- **Measles Outbreak in Mexico: 451 Cases - First Death Reported:** Mexico is currently grappling with a measles outbreak, with 451 confirmed cases nationwide. The state of Chihuahua has been hit hardest, reporting 433 cases and the country's first measles-related death — a 31-year-old unvaccinated man with diabetes and kidney complications.
- **Low Immunization & Cross-Border Spread:** The outbreak traces back to Texas, where rising anti-vaccine sentiment has contributed to increased infections. In Mexico, declining childhood vaccination rates — particularly in Chihuahua, where coverage in some age groups is as low as 21.2% — have heightened vulnerability.
- **Holiday Travel Increases Risk:** With Semana Santa and vacation travel approaching, health officials warn of a higher risk of transmission, especially among travelers to the U.S., where measles cases are surging. A nationwide vaccination push is scheduled for April 26 to May 3 to strengthen community immunity ahead of the holidays.
- **The Most Affected Age Group:** 25 to 44 years old, with 34.4 percent of cases, followed by 5 to 9 years old, with 13.5 percent

MORBIDITY	
STATE	**CASES**
CAMPECHE	4
CHIHUAHUA	433
OAXACA	4
QUERÉTARO	1
SINALOA	1
SONORA	5
TAMAULIPAS	2
QUERÉTARO	1
ZACATECAS	1
TOTAL	451

VACCINES ADMINISTERED (JAN-MAR 2025)	
TYPE OF VACCINES	**VACCINATIONS GIVEN**
Measles, Mumps and Rubella (MMR)	669,209
Measles and Rubella	46,068
Total	715,277

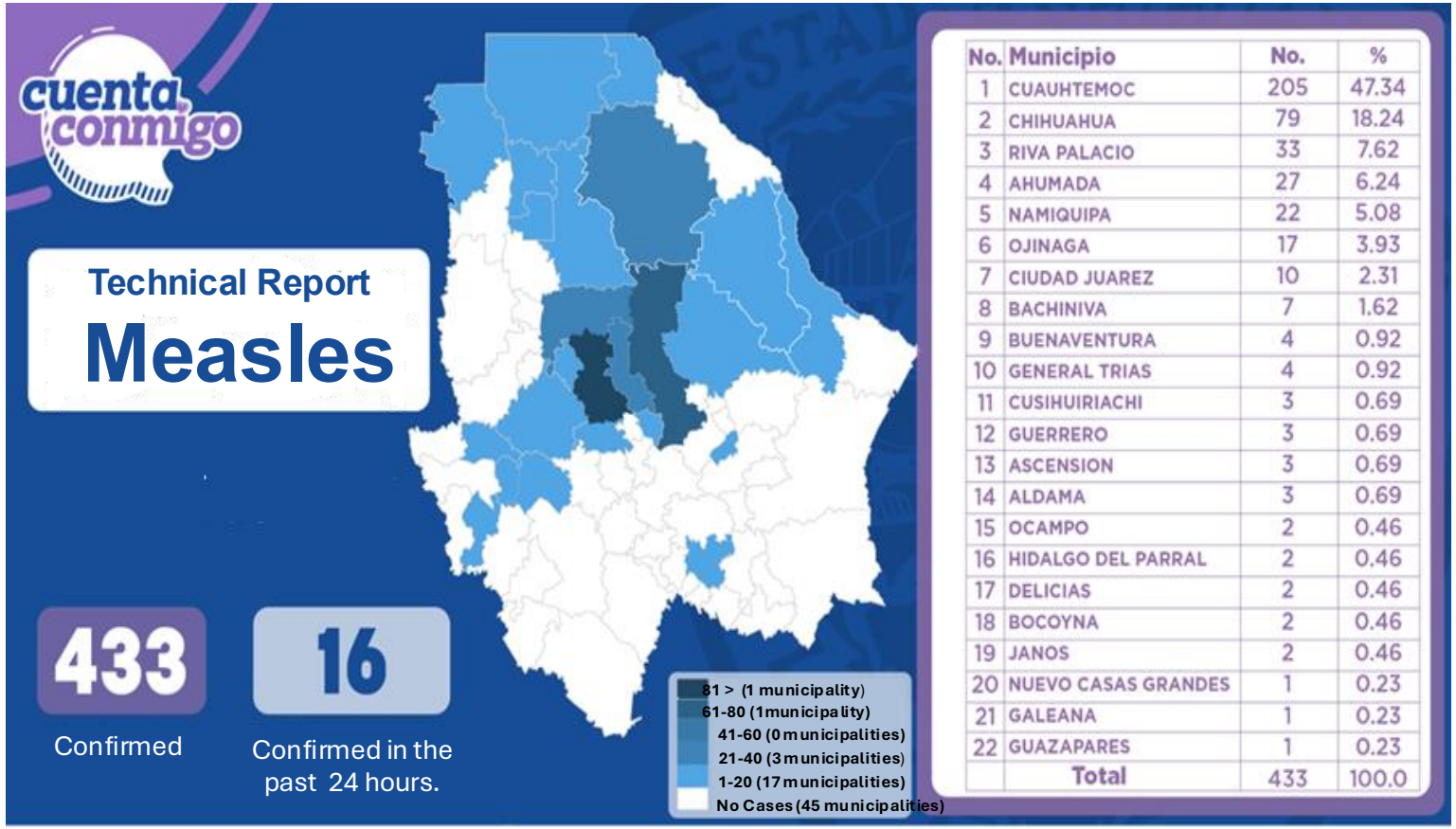
Vaccination Campaign Underway: Between January and March, over 715,000 people were vaccinated as part of the national response. Authorities have implemented "vaccine cordons," targeting healthcare workers and close contacts of confirmed cases to curb the spread. **On April 15, the Secretary of** Health urged the need for measles vaccination, and the triple viral vaccine against measles, rubella, and mumps will be administered during the **First National Vaccination Week of 2025 that starts on April 26th 2025 and ends on May 3rd 2025.**

SOURCE: MEDICHIHUAHUA, EPI REPORT GOV MEXICO, ELFINANCIERO, EL PAIS, EL DIARIO

MEXICO OUTLOOK: CHIHUAHUA

Link Between Chihuahua and Texas

- **Frequent Crossings**: Thousands cross daily between El Paso and Juárez for work, school, and family, increasing the risk of disease transmission.
- **Low Vaccination Rates**: The outbreak is mostly affecting unvaccinated minors and adults in both Chihuahua and West Texas.
- **High Exposure Risk**: A confirmed case in Juárez had contact with 250–300 people at a daycare and hospital, raising fears of wider spread.
- **Mennonite populations** – both have large Mennonite communities that public health officials have linked to outbreaks. The virus was first brought into a Mennonite community in Chihuahua by a 9-year-old boy who visited Texas with his family.
- **Coordinated Response**: Health officials in both cities are working together, emphasizing the need for vaccination in this shared border region.



No.	Municipio	No.	%
1	CUAUHTEMOC	205	47.34
2	CHIHUAHUA	79	18.24
3	RIVA PALACIO	33	7.62
4	AHUMADA	27	6.24
5	NAMIQUIPA	22	5.08
6	OJINAGA	17	3.93
7	CIUDAD JUAREZ	10	2.31
8	BACHINIVA	7	1.62
9	BUENAVENTURA	4	0.92
10	GENERAL TRIAS	4	0.92
11	CUSIHUIRIACHI	3	0.69
12	GUERRERO	3	0.69
13	ASCENSION	3	0.69
14	ALDAMA	3	0.69
15	OCAMPO	2	0.46
16	HIDALGO DEL PARRAL	2	0.46
17	DELICIAS	2	0.46
18	BOCOYNA	2	0.46
19	JANOS	2	0.46
20	NUEVO CASAS GRANDES	1	0.23
21	GALEANA	1	0.23
22	GUAZAPARES	1	0.23
	Total	433	100.0

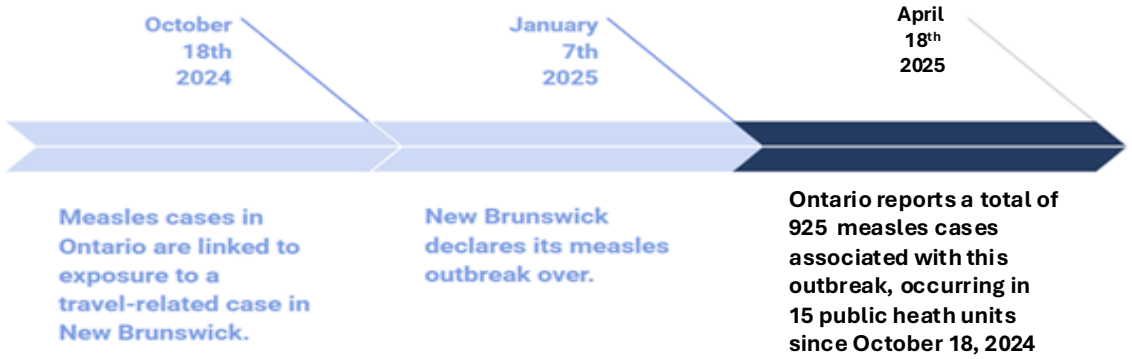
SOURCE OF GRAPHIC: MediChihuahua

GOBIERNO DEL ESTADO DE CHIHUAHUA | SECRETARÍA DE SALUD MediChihuahua

SOURCE: MEDICHIHUAHUA, KXAN, EPI REPORT GOV MEXICO, ELFINANCIERO, EL PAIS, NYT

THE AMERICAS: CANADA

Brief Timeline of Outbreak

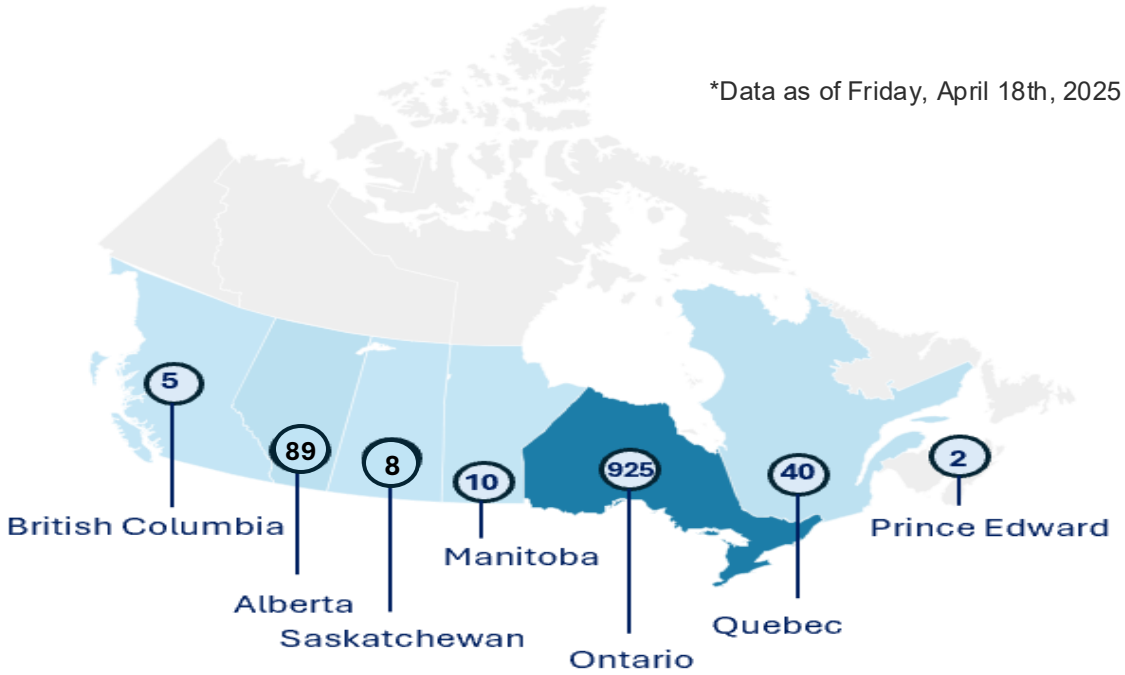


CANADA OUTBREAK:

- An ongoing outbreak of measles in Ontario has been traced back to a large gathering in New Brunswick last fall that was attended by guests from Mennonite communities. On October 18, 2024, exposure to a travel-related case in New Brunswick led to measles cases in Ontario.
- New Brunswick declared their outbreak over on January 7, 2025, Ontario and Manitoba has reported measles cases related to this outbreak.
- Ontario schools are starting to issue suspensions to some of the thousands of students who aren't fully vaccinated.

MORBIDITY IN 2025	
PROVINCE	**CASES**
ONTARIO	925 (THIS REFLECTS THE TOTAL OUTBREAK NUMBERS SINCE 11/24)
ALBERTA	89
MANITOBA	10
BRITISH COLUMBIA	5
SASKATCHEWAN	8
QUEBEC	40
PRINCE EDWARD ISLAND	2
TOTAL	1079

*Data as of Friday, April 18th, 2025

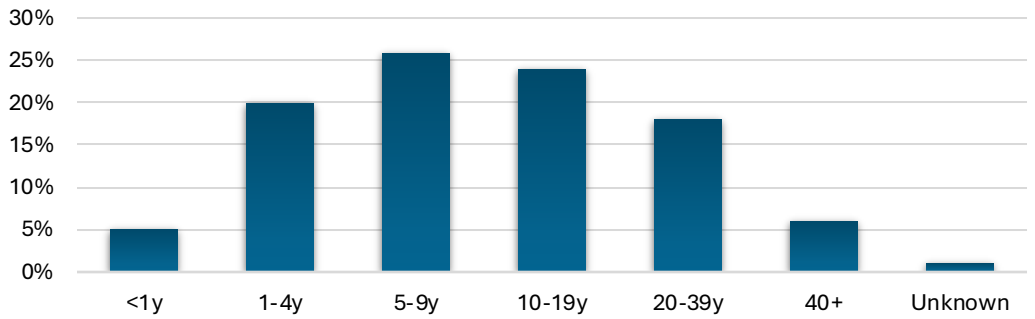


SOURCES: MANITOBA HEALTH , ALBERTA DASHBOARD, CBC, QUEBEC, PUBLIC HEALTH ONTARIO, CBC NEWS, THE GLOBE AND MAIL, SASKATCHEWAN

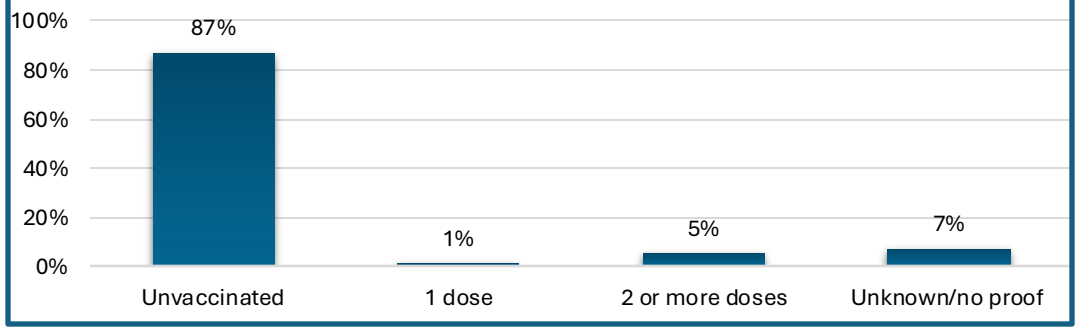
ONTARIO, CANADA OUTBREAK

MORBIDITY AND MORTALITY			
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS
ONTARIO	925 (+109)	69 (+8)	0

Measles Cases Age Distribution: Ontario



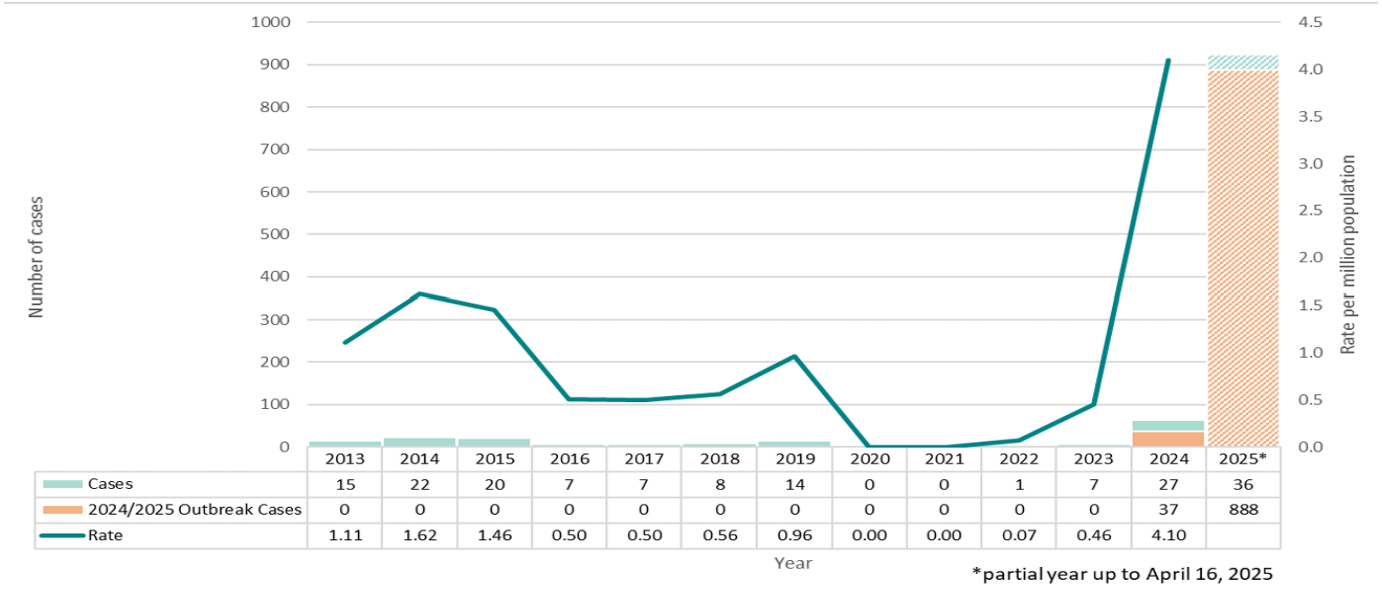
Measles Vaccination Status: Ontario



ONTARIO:

- Among all outbreak cases, 75.0% (n=694) were in infants, children and adolescents, while 24.4% (n=226) were in adults, and 0.5% (n=5) had unknown age.
  - 2.1% (n=19) of outbreak cases were pregnant.
  - 98.6% (n=912) of outbreak cases were born in or after 1970.
- Among infants, children and adolescents, 94.8% (n=658) were unimmunized, while among adults, 63.7% (n=144) were unimmunized.

NUMBER OF MEASLES CASES AND INCIDENT RATED PER MILLION POPULATION 1/1/2013 – 4/16/25



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Cases	15	22	20	7	7	8	14	0	0	1	7	27	36
2024/2025 Outbreak Cases	0	0	0	0	0	0	0	0	0	0	0	37	888
Rate	1.11	1.62	1.46	0.50	0.50	0.56	0.96	0.00	0.00	0.07	0.46	4.10	

SOURCES: PUBLIC HEALTH ONTARIO, CBC

CONTRIBUTORS

The Virtual Medical Operations Center Briefs (VMOC) were created as a service-learning project by the Yale School of Public Health faculty and graduate students in response to the 2010 Haiti Earthquake. Each year, students enrolled in Environmental Health Science Course 581—Public Health Emergencies: Disaster Planning and Response, produce the VMOC Briefs. These briefs compile diverse information sources—including status reports, maps, curated news articles, and web content— into a single, easily digestible document that can be widely shared and used interactively.

Key features of this report include:

- **Comprehensive Overview:** Provides situation updates, maps, relevant news, and web resources.
- **Accessibility:** Designed for easy reading, wide distribution, and interactive use.
- **Collaboration:** The “unlocked" format enables seamless sharing, copying, and adaptation by other responders.

The students learn by doing, quickly discovering how and where to find critical information and presenting it in an easily understood manner.

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