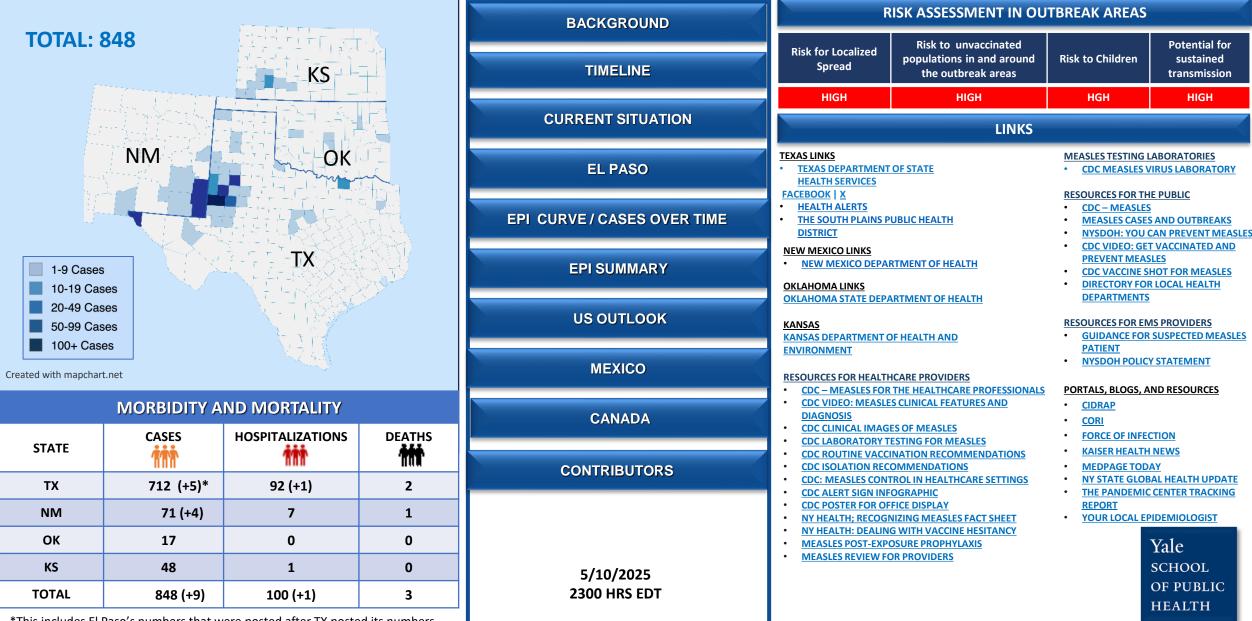
YALE SCHOOL OF PUBLIC HEALTH - ESF-8 VIRTUAL MEDICAL OPERATION CENTER SPECIAL REPORT

MEASLES OUTBREAK - SOUTHWEST U.S. - 2025



*This includes El Paso's numbers that were posted after TX posted its numbers

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 100 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 suggest that this outbreak has also contributed to the current outbreak in Chihuahua, Mexico, indicating clear cross-border transmission.

THE VIRUS:

<u>Measles</u> 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 <u>MMR</u> (measles, mumps, and rubella) vaccine, outbreaks continue to occur in under-vaccinated communities, leading to severe health outcomes and increased transmission risk (<u>CDC</u>).

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:

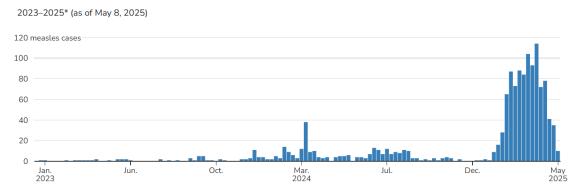
- Emergency vaccination campaigns and targeted outreach efforts
- Focused messaging to combat misinformation and rebuild community trust
- Multi-sector coordination involving schools, healthcare providers, and local organizations

MEASLES CASES IN 2025 - CDC

5-19 years: 9% (32 of 376)

20+ years: 7% (23 of 311) Age unknown: 13% (2 of 15)

1001 (+51) CONFIRMED MEASLES CASES (AS OF 5/9/25)

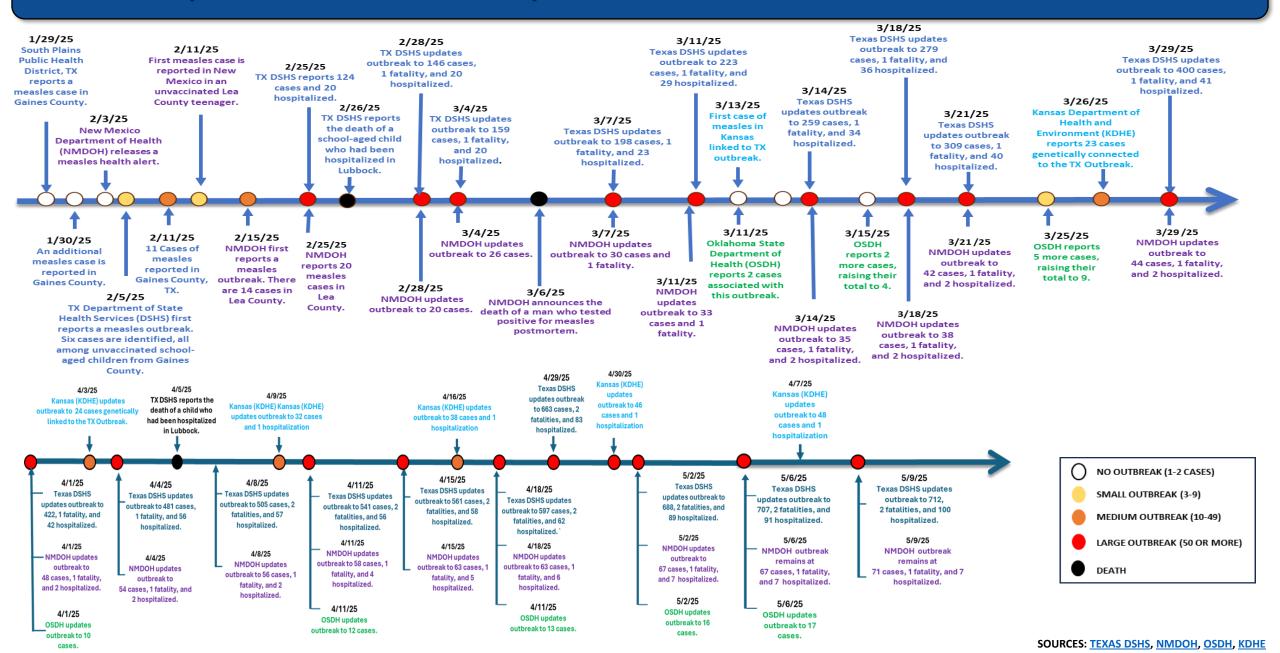


As of May 9, 2025, a total of 1,001 confirmed* measles cases have been reported by 31 jurisdictions: Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, New Jersey, New Mexico, New York City, New York State, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, Virginia, and Washington.

Age Under 5 years: 299 (30%) 5-19 years: 376 (38%) 20+ years: 311 (31%) Age unknown: 15 (1%)	Vaccination Status Unvaccinated or Unknown: 96% One MMR dose: 2% Two MMR doses: 2%
Percent Hospitalized: 13% Percent by Age Group: Under 5 years: 23% (69 of 299)	Deaths: 3 There have been 3 confirmed deaths

There have been 3 confirmed deaths from measles.

TIMELINE (JANUARY – MAY 2025)



CURRENT SITUATION

As of 5/9/25, the Southwestern outbreak has 848 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.

CURRENT CASE COUNT: 848 (As of 5/9/2025)

- Texas: 712 (+5) (62% of cases are in Gaines County)
- New Mexico: 71 (+4) (92.4% of cases are from Lea County)
- Oklahoma: 17 (+1)
- Kansas: 48 (32% of the cases are from Gray County)

HOSPITALIZATIONS: 100 (+1)

- Texas: 92 (+1) This accounts for 14.04% of all cases in Texas.
- New Mexico: 7 This accounts for 10.45% of all cases in New Mexico.
- Kansas: 1 This accounts for 2.08% of all cases in the state of Kansas.

DEATHS: 3

- Texas: 2 This is 0.28% of all cases
- New Mexico: 1 This is 1.41% of all cases

US NATIONAL CASE COUNT: 1,014 (Confirmed and suspected)

INTERNATIONAL SPREAD (As of 5/9/2025)

- Mexico: 1,065 (+83)
 - Chihuahua, Mexico: 1,041 (+87) cases, 2 hospitalizations, 1 fatality
- **Canada: 1,867** (Includes Ontario's outbreak, which began 11/2024)
 - Ontario, Canada 1,440 (+197) cases, 101 hospitalizations.

TEXAS:

- The outbreak continues, though it appears to be slowing in most areas. As of 5/9/2025, DSHA estimates that fewer than 10 confirmed cases—approximately 1.0%—remain actively infectious, based on rash onset dates within the past week. However, this figure may underestimate the true number due to reporting delays.
- **Trajectory: A classic epidemic curve with an early,** sharp rise, suggesting a large susceptible pool and intense transmission in urban centers.
- El Paso County is experiencing a significant uptick in measles. Since 4/4/2025, the county has reported 53 confirmed cases with five hospitalizations. The majority of these involve unvaccinated individuals or those with unknown vaccination status.
- The outbreak has been exacerbated by declining vaccination rates, particularly in communities with high nonmedical exemption rates. Gaines County, for instance, has one of the highest exemption rates in the state, with nearly 1 in 5 incoming kindergartners in the 2023–2024 class not receiving the MMR vaccine.
- DSHS has identified "designated outbreak counties" with ongoing measles transmission: Cochran, Dallam, Dawson, Gaines, Garza, Lynn, Lamar, Lubbock, Terry, and Yoakum.

NEW MEXICO: After an initial spike, New Mexico maintained moderate transmission for six weeks before interventions, or the natural depletion of susceptible contacts, drove case counts steadily downward. The small late March bump underscores the importance of sustained control measures until transmission is fully interrupted.

OKLAHOMA: Oklahoma experienced a brief, small-scale outbreak, peaking in late March, followed by a rapid decline to sporadic, isolated cases by early May. This pattern suggests limited transmission chains that were contained mainly after the initial cluster. Continued vigilance—particularly through contact tracing and targeted vaccination—would be key to preventing further flare-ups.

KANSAS:

- Since the solitary index case was detected in Stevens County on March 14, 2025, the outbreak in southwestern Kansas has maintained a steady upward climb. By April 23, KDHE had logged 37 cases; over the next two weeks, that tally rose by 11 more (a 24% increase) to 48 confirmed cases as of May 7. This translates to an average of roughly 0.8 new cases per day over the most recent fortnight, with no apparent plateau emerging.
- Transmission remains firmly entrenched across the eight affected counties—Finney, Ford, Grant, Gray, Haskell, Kiowa, Morton, and Stevens—and continues to affect those under 18 years of age disproportionately.

CURRENT SITUATION

AGES OF CASES:

WEST TEXAS OUTBREAK						
0-4 Years	5-17 Years	18+ Years	Pending	Total		
210 (29.5%)	257 (+2) (36.1%)	227 (+3) (31.9%)	19 (2.7%)	712		
NEW MEXICO OUTBREAK						
0-4 Years	5-17 Years	18+ Years	Pending	Total		
19 (+1) (26.8%)	20 (+1) (28.2%)	32 (+2) (45.1%)	0	71		
KANSAS OUTBREAK						
0-4 Years	5-17 Years	18+ Years	Pending	Total		
15 (31.3%)	24 (50%)	9 (18.8%)	0	48		
OKLAHOMA OUTBR	OKLAHOMA OUTBREAK					
0-4 Years	5-17 Years	18+ Years	Pending	Total		
14 Cases C	confirmed, 3 Probable – no	ages provided	3	17		

Genotype D8 Lineage: MVs/Ontario.CAN/47.24 — Cross-Border Circulation Summary (2024–2025)

The detection of measles virus lineage MVs/Ontario.CAN/47.24 across Canada, the United States, and Mexico supports the hypothesis of a travel-associated importation event—likely originating in Canada or involving individuals with recent international travel—in late 2024 or early 2025.

Initially identified in Ontario, this lineage has since been documented in multiple provinces on Canada, US states, including Texas, New Mexico, Oklahoma, Kansas, and northern Mexico, particularly Chihuahua and Durango.

Its wide geographic spread and consistent genetic profile highlight the persistence of cross-border transmission, especially in regions with low vaccination coverage. Many of the reported cases

have occurred in communities with high rates of nonmedical exemptions or limited access to immunization, where population immunity is insufficient to prevent sustained outbreaks.

The emergence of MVs/Ontario.CAN/47.24 in both rural and urban settings underscores gaps in regional surveillance systems and the urgent need for improved coordination across borders in outbreak investigation, case detection, and immunization efforts. Its continued spread serves as a critical reminder of measles' high transmissibility and the threat posed by even a single imported case in under-immunized populations.

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

UNITED STATES: Although specific lineages are not always reported, genotype D8 has been the predominant strain in recent outbreaks across Texas, New Mexico, Oklahoma, and Kansas. Genetic sequencing has linked the virus circulating in the U.S. to the same D8 lineage found in Canada and Mexico, suggesting cross-border transmission. However, the precise source of initial introduction remains undetermined. (Source: WHO)

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

CURRENT SITUATION: EL PASO

VACCINATION STATUS

NUMBER

22

19

6

6

53

STATUS

UNVACCIANTED

UNKNOWN

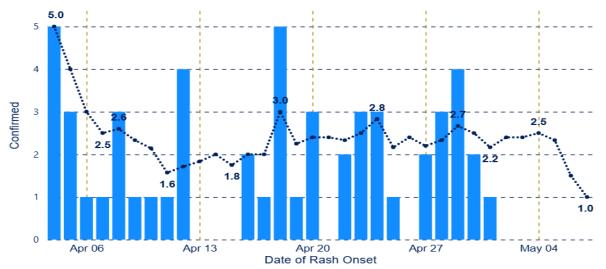
1 DOSE

2 DOSES

TOTAL

CONFIRMED CASES BY AGE				
AGE	CASES	HOSPITALIZATIONS DEATHS		
0-4	14	2	0	
5-17	4	0	0	
18+	35	3	0	
TOTAL	53	5	0	

HOSPITALIZATIONS	CASES BY GENDER		
HOSPITALIZATION STATUS	NUMBER	GENDER	CASE
CURRENT	1	MALE	24
PREVIOUSLY	4	FEMALE	29
TOTAL	5	TOTAL	53



Confirmed ●7 Day Rolling Average

- With a population of approximately 679,000, El Paso recorded its first five confirmed measles cases on April 4, 2025. By May 9, 2025, the City of El Paso Department of Public Health had reported 53 confirmed cases in the region: 35 among adults (≥ 18 years) and 14 among young children (< 4 years).
- As of May 2025, El Paso County's two-dose measles vaccination coverage stands at 96%. However, this figure masks under-immunized pockets—roughly 4 percent of the population, or about 27,000 individuals, remain unvaccinated and at risk.
- High-volume daily travel across the Paso del Norte border with Ciudad Juárez and along Interstates 10 and 20—which link El Paso and Gaines County to major urban centers like San Antonio, Houston, and Dallas—has facilitated transmission, with contact tracing and genomic sequencing linking the Chihuahua outbreak (first detected late February 2025) to Gaines County and confirming genotype D8 on both sides of the U.S.–Mexico border.
- Public health outreach efforts are hampered by language barriers, pervasive misinformation, and fears of deportation among undocumented residents, while early transmission events traced to malls, retail stores, and restaurants underscore the vulnerability of crowded urban venues

KEY CONCERNS

- 1. POCKETS OF SUSCEPTIBILITY IN SCHOOLS AND DAYCARES: Even with high overall coverage, small clusters of unvaccinated or under-vaccinated children, particularly in certain schools and childcare settings, can sustain transmission.
- 2. PUBLIC HEALTH RESOURCE STRAIN: To keep pace with demand, the El Paso Department of Public Health has expanded clinic hours—including Saturday pop-ups—and is maintaining an online dashboard of exposure sites, rather than issuing frequent news releases. Continued vaccination drives and contact-tracing efforts are taxing staffing and logistics.
- **3. BINATIONAL COORDINATION CHALLENGES:** High daily movement across the U.S.–Mexico border complicates contact tracing and synchronized vaccination campaigns. Aligning outreach, language-appropriate messaging, and immunization activities on both sides remains critical to preventing further spread

SOURCES: DSHS, KVIA, KTSM, KFOX, KISS.FM, YISD, PBS, EL PASO MEASLES OUTBREAK DASHBOARD, KTSM

CURRENT SITUATION: VACCINATION STATUS

STATE	VACCINATED	VACCINATED	UNVACCINATED/	TOTAL
	WITH 1 DOSE	WITH 2 DOSES	UNKNOWN	CASES
тх	13	20	679*	712*

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

Numbers adjusted based on additional information from El Paso after TX DSHS update.

STATE	VACCINATED WITH AT LEAST ONE DOSE	NOT VACCINATED	UNKNOWN	TOTAL CASES	
NM	9	48	14	71	

STATE	VACCINATED WITH	VACCINATED WITH	UNVACCINATED/	TOTAL
	ONE DOSE	TWO DOSES	UNKNOWN	CASES
ОК	0	1	16	17

STATE	AGE APPROPRIATELY VACCINATED	NOT AGE APPROPRIATELY VACCINED	NOT VACCINATED	PENDING VERIFICATION/ UNABLE TO VERIFY	TOTAL CASES
KS	4	1	40	3	48



MMR Vaccination Rate

Among the affected counties in TX, 15 out of 29 are below a 95% vaccination rate, the recommended rate for herd immunity (SOURCE: <u>Annual Report on Immunization Status</u> and <u>CORI</u>).

EPI CURVE AND CASES OVER TIME

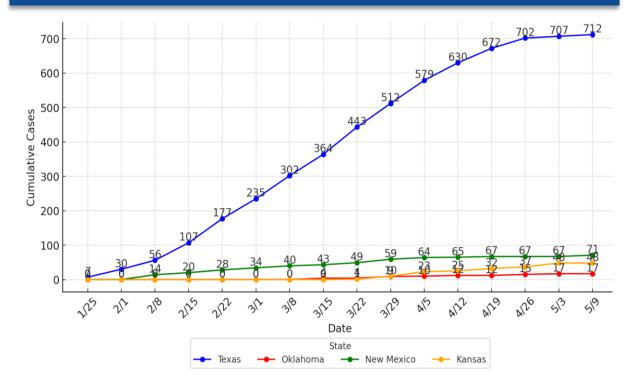
Grey = more cases can be reported (within the window of 80 exposure) Cases Incident Weekly 4 20 215 2122 3/15 3122 3129 4122 A126 125 218 A129 53 2ir 312 36 als 5/70 Date State New Mexico Oklahoma Kansa

SOUTHWEST MEASLES OUTBREAK – EPI CURVE (AS OF 5/9/2025)

The number of new cases per week remains high.

- **TX:** Reported first case the week of 1/25/25.
- NM: Reported first cases the week of 2/8/25.
- OK: Reported first cases the week of 3/15/25.
- KS: Reported first cases the week of 3/15/25.

SOUTHWEST MEASLES OUTBREAK – CUMULATIVE CASES OVER TIME (AS OF 5/9/2025)



Cases are rising, but at a slower pace in some areas.

- TX: A total of 712* cases across 29 counties.
- NM: A total of 71 cases across 5 counties.
- OK: A total of 17 cases have been.
- KS: A total of 48 cases across 8 counties.

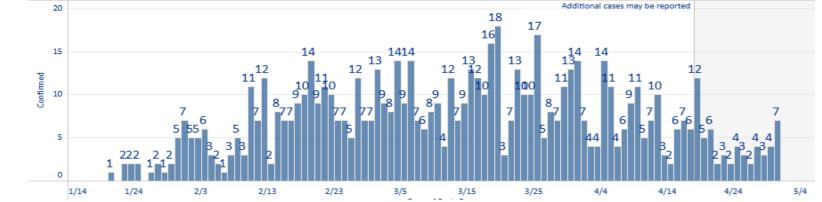
This includes an additional 5 cases from El Paso that were reported after Texas had published its numbers on Tuesday, May 6, 2025.

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

EPI SUMMARY - TEXAS (n=712) AS OF 5/9)

COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)	# OF SCHOOL DISTRICTS IN EACH COUNTY WITH MMR BELOW 95%	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%
					Hockley	6	0.84%	94.40%	3
Andrews	3	0.42%	97.70%	0	Lamar	19 (+1)	2.67%	96.84%	0
Bailey	2	0.28%	98.94%	0			0.14%		1
Borden	1	0.14%	94.44%	1	Lamb	1		97.37%	
Brown	1	0.14%	93.64%	5	Lubbock	51	7.16%	92.25%	8
Cochran	14	1.97%	95.20%	1	Lynn	2	0.28%	92.16%	2
Dallam	7	0.98%	95.30%	2	Martin	3	0.42%	96.59%	1
Dawson	26	3.65%	88.10%	4	Midland	3	0.42%	94.77%	4
Eastland	2	0.28%	95.63	2	Parmer	5	0.70%	95.04%	1
Ector	11	1.54%	91.30%	5	Potter	2	0.28%	96.32%	3
El Paso	53 (+4)	7.44%	96.37%	8	Randall	1	0.14%	93.95%	1
Erath	1	0.14%	93.94%	5					-
Gaines	403	56.60%	82.00%	3	Reeves	1	0.14%	94.92%	1
Garza	2	0.28%	97.10%	0	Terry	60	8.43%	95.52%	2
Hale	6	0.84%	98.30%	2	Upshur	5	0.70%	93.3	2
Harderman	1	0.14%	94.40%	3	Yoakum	20	2.81%	92.50%	1





SOURCES: Measles Outbreak – May 9, 2025 | Texas DSHS

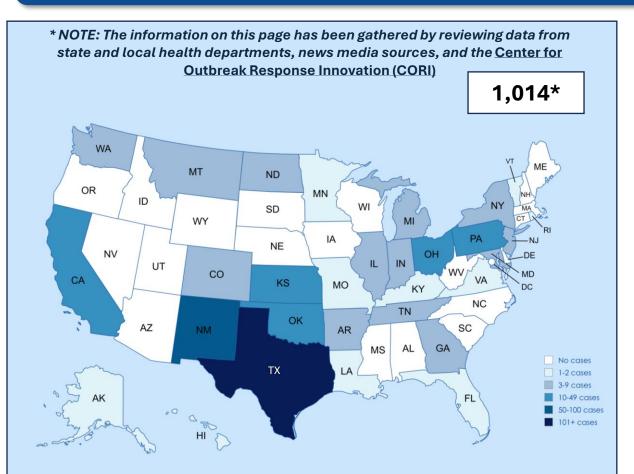
EPI SUMMARY (KS, NM, OK)

COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)
KANSAS (n=48) AS OF 5/9/2025			
<u>Finney</u>	Between 1- 5		98%
Ford	Between 1- 5		87%
Grant	Between 1- 5		99%
Gray	15	32.61%	66%
<u>Haskell</u>	8	21.6%	58%
<u>Kiowa</u>	6	16.2%	92%
Morton	Between 1- 5		82%
<u>Stevens</u>	7	18.9%	83%
NEW MEXICO (n=71) AS OF 5/9/2025			
Chaves	1	1.41%	98%
Curry	1 (NEW)	1.41%	95%
Doña Ana	1	1.5%	95%
Eddy	3	3.%	93%
Lea	64 (+3)	94%	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=17) AS OF 5/9/2025			
Tulsa and Cherokee Nation	16	Insufficient Information	89.5%

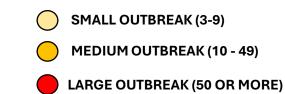
US OUTLOOK



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 **	728
NEW MEXICO	71
<u>KANSAS</u>	48
<u>OHIO</u>	34
<u>OKLAHOMA</u>	17
<u>PENNSYLVANIA</u>	13
CALIFORNIA	10
MICHIGAN	9
NORTH DAKOTA	9
ILLINOIS	8
INDIANA	8
MONTANA	7
NEW YORK	7
<u>TENNESSEE</u>	6
<u>COLORADO</u>	5
WASHINGTON	5
ARKANSAS	4
<u>GEORGIA</u>	3
MARYLAND	3
NEW JERSEY	3
<u>ALASKA</u>	2
<u>FLORIDA</u>	2
HAWAII	2
<u>LOUISIANA</u>	2
<u>MINNESOTA</u>	2
MISSOURI	2
<u>KENTUCKY</u>	1
RHODE ISLAND	1
VERMONT	1
VIRGINIA	1
TOTAL	1014

OUTBREAKS



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

As of 1600 hours on May 9, 2025, EDT, there are approximately 1,005 measles cases (including confirmed and suspected cases) across 30 states.

This year, there have been **11 measles outbreaks**:

- 1. West Texas, involving <u>29 counties</u> in **Texas**, <u>4 counties</u> in **New Mexico**, <u>2 counties</u> in **Oklahoma**, and the <u>Cherokee Nation</u> in Oklahoma
- 2. <u>8 counties</u> in Kansas
- 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
- 9. Montcalm County, Michigan (linked to Ontario Outbreak)
- 10. Upper Cumberland region Tennessee
- 11. Williams County North Dakota

** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 16

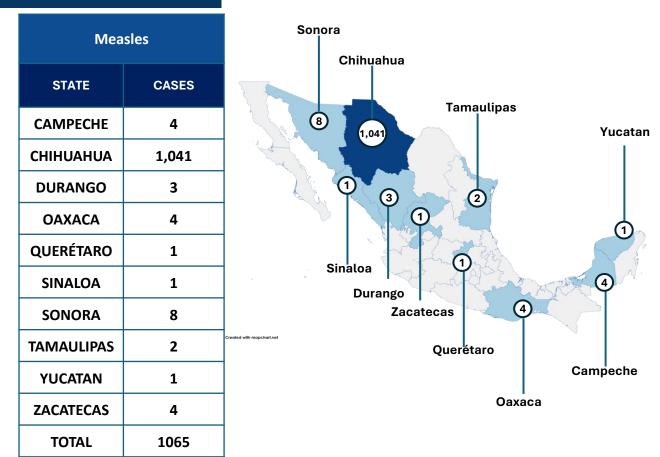
- 1 case Atascosa County
- 1 case Brazoria County
- 1 case Collin County
- 1 case Adult, Fort Bend (travel-related)
- 4 cases Harris County
- 2 cases Adults, Rockwall County (travel-related)
- 1 case Shackelford
- 2 case Travis County
- 18 cases Upshur County
- TEXAS CASES ASSOCIATED WITH THE OUTBREAK: 712

MEXICO OUTLOOK

THE MEASLES OUTBREAK IN MEXICO: OVERVIEW

- Measles Outbreak in Mexico: 1,065 Cases First Death Reported: Mexico is grappling with a measles outbreak. The state of Chihuahua has been hit hardest, reporting 1,041 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 can be traced back to Texas, where rising anti-vaccine sentiment has contributed to an increase in 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. In terms of vaccination history, 92.4% had no vaccination history, while 3.8% had received one dose of the MMR vaccine, and another 3.8% had received two doses.
- The Most Affected Age Group: 25- to 44-year-olds are the most affected age group, with 34.4% of cases, followed by 5- to 9-year-olds, with 13.5% of cases.
- On 4/25/2025, the Mexican Ministry of Health (Secretaría de Salud) issued a medium-level travel alert for the United States and Canada due to a significant increase in measles cases in both countries.

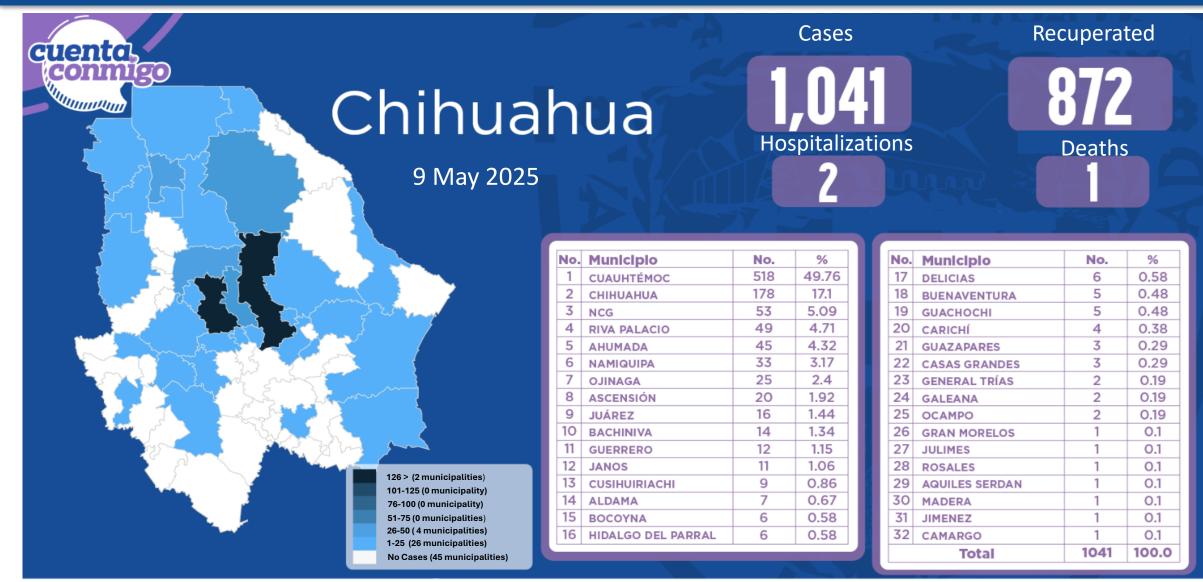
VACCINES ADMINISTERED (JAN-MAR 2025)		
TYPE OF VACCINES VACCINATION GIVEN		
Measles, Mumps and Rubella (MMR)	669,209	
Measles and Rubella	46,068	
Total	715,277	



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

*Data as of 5/9/2025

MEXICO OUTLOOK: CHIHUAHUA



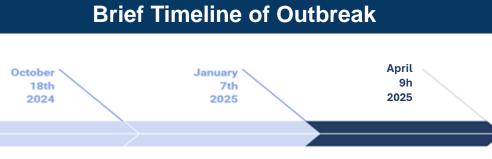
Fuente: Secretaría de Salud

SOURCE OF GRAPHIC: MediChihuahua



MediChihuahua 📣

CANADA OUTLOOK



Measles cases in Ontario are linked to exposure to a travel-related case in New Brunswick. New Brunswick declares its measles outbreak over.

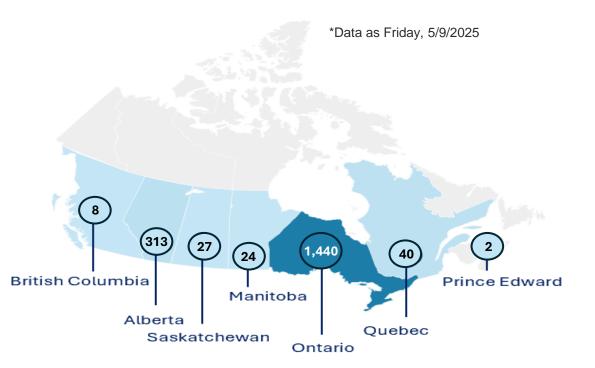
Ontario reports a total of 1,440 measles cases associated with this outbreak, occurring in 17 public heath units since October 18, 2024.

MEASLES 2025		
PROVINCE	CASES	
ONTARIO	1,440 (+197)	
ALBERTA	326 (+116)	
ΜΑΝΙΤΟΒΑ	24 (+10)	
BRITISH COLUMBIA	8 (+1)	
SASKATCHEWAN	27 (+15)	
QUEBEC	40	
PRINCE EDWARD ISLAND	2	
TOTAL	1,867 (+336)	

* From October 18, 2024 to April 23, 2025, Ontario has reported a total of 1,020 measles cases (884 confirmed, 136 probable) associated with this outbreak occurring in 15 public health units

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. The Ontario outbreak continues to escalate.
- Alberta has seen a very large number of cases since Easter.
- Manitoba has also reported measles cases related to this outbreak.
- Quebec declared its outbreak on 4/22/2025 after no new cases in 32 days.



SOURCES: MANITOBA HEALTH, ALBERTA DASHBOARD, QUEBEC, PUBLIC HEALTH ONTARIO SASKATCHEWAN, CBC CA MEASLES AND RUBELLA WEEKLY MONITORING REPORT, BC

CANADA OUTLOOK: ONTARIO

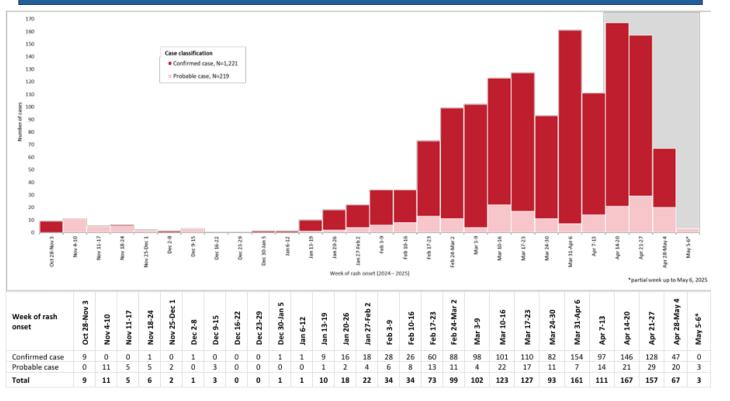
MORBIDITY AND MORTALITY				
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS	
ONTARIO	1,440 (+197)	101 (+17)	0	

IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 – MAY 6, 2025

400 Immunization status Unimmunized 350 1 dose 2 or more doses 300 Unknown 250 Number of cases 200 150 100 50 0 1-4 5-9 10-19 20-39 40+ <1 Age (years) Age group <1 1-4 5-9 10-19 20-39 40+ Unimmunized 98.7% 95.3% 95.0% 94.2% 64.0% 51.2% 0.0% 1.8% 0.6% 0.8% 1.6% 1 dose 4.9% 2 or more doses 0.0% 0.0% 0.8% 1.6% 19.2% 8.5% 2.9% 3.6% 3.4% 15.2% 35.4% Unknown 1.3%

ONTARIO:

- 76.4% (n=1,100) were in infants, children and adolescents, while 23.1% (n=332) were in adults, and 0.6% (n=8) had unknown age.
- 2.2% (n=31) of outbreak cases were pregnant.
- (n=1,222) of outbreak cases were born in or after 1970.
- Among infants, children and adolescents, 95.1% (n=1,046) were unimmunized, while among adults, 60.8% (n=202) were unimmunized.
- Overall, 7.0% (n=101) of outbreak cases have required hospitalization, and 0.6% (n=8) were admitted to the ICU. Of those hospitalized, 94.1% (n=95) were unimmunized, including 75 children.



NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 10/28/2024 - 05/6/25

SOURCES: PUBLIC HEALTH ONTARIO

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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This is an educational product.