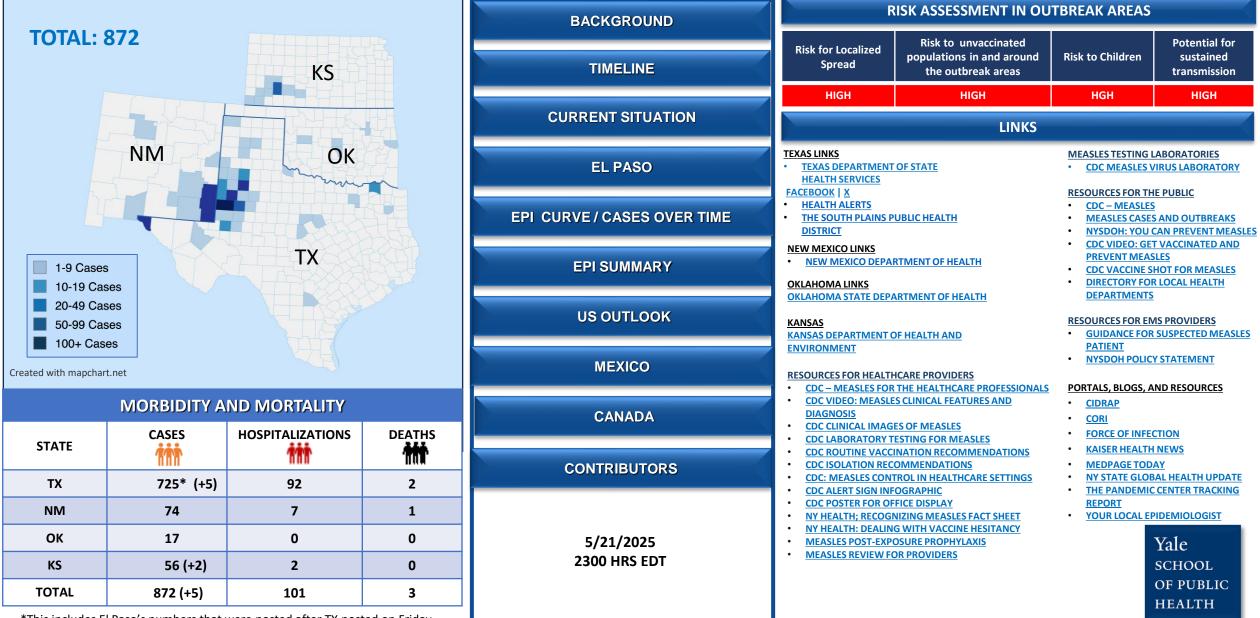
YALE SCHOOL OF PUBLIC HEALTH - ESF-8 VIRTUAL MEDICAL OPERATION CENTER SPECIAL REPORT

MEASLES OUTBREAK - SOUTHWEST U.S. - 2025



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

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 **101 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:

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.

VACCINATION & GLOBAL TRENDS

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>). Over the past 20 years, vaccination rates have been declining globally, leading to a rise in certain regions, including the <u>United States</u>, <u>Canada</u>, <u>Mexico</u>, <u>South America</u>, and <u>parts of Europe</u>. In 2025, North and South America reported 11 times more cases than during the same period in 2024. In Europe, measles rates are at their highest point in 25 years.

If current vaccination trends persist, the risk of measles becoming endemic once more, with recurrent outbreaks, is inevitable.

CONCERNS: With spring and summer travel kicking off—peaking between Memorial Day and Labor Day we can expect both domestic and international movement to fuel additional measles importations and spread in the United States. Measles is not inherently seasonal, but transmission often surges during periods of high travel, such as summer vacations, when unvaccinated or under-immunized individuals mix in crowded settings

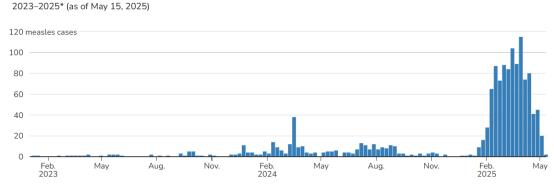
MEASLES CASES IN 2025 - CDC

5-19 years: 9% (33 of 388)

20+ years: 8% (25 of 325)

Age unknown: 13% (1 of 8)

1024 (+23) <u>CONFIRMED MEASLES CASES (AS OF 5/16/25)</u>

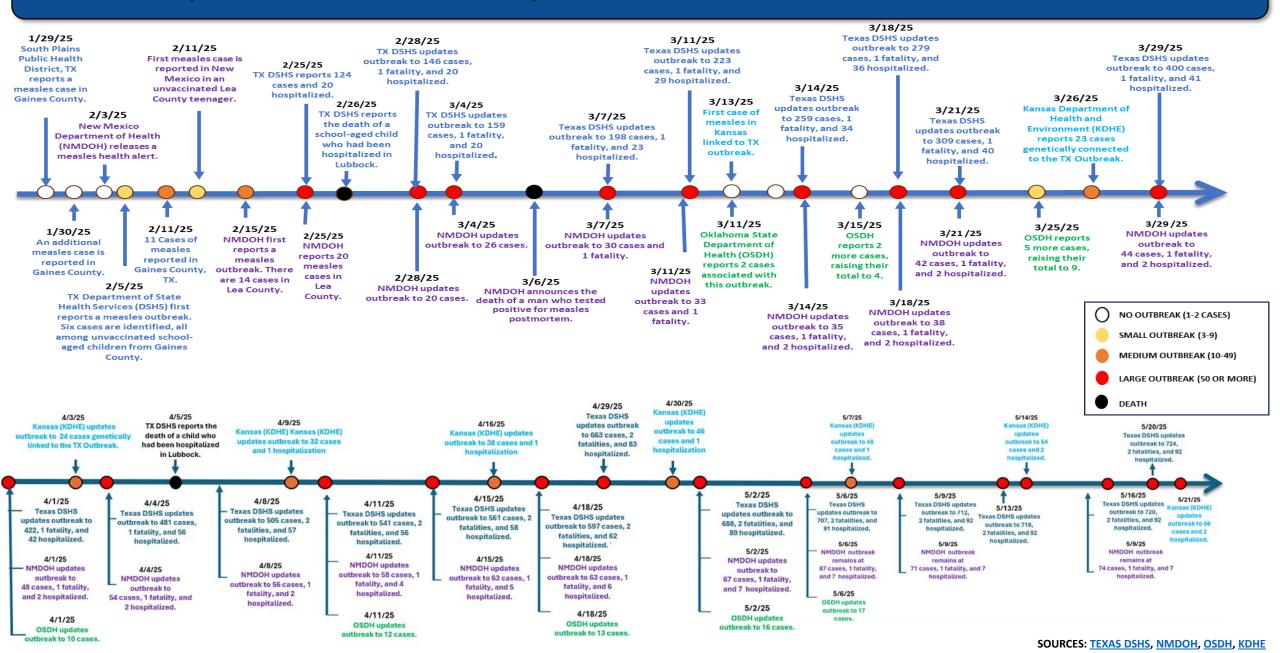


As of May 16, 2025, a total of 1,024 confirmed* measles cases were reported by 31 jurisdictions: Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, New Jersey, New Mexico, New York City, New York State, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, Virginia, and Washington.

Age Under 5 years: 303 (30%) 5-19 years: 388 (38%) 20+ years: 325 (32%) Age unknown: 8 (1%)	Vaccination Status Unvaccinated or Unknown: 96% One MMR dose: 1% Two MMR doses: 2%
Percent Hospitalized: 13% Percent by Age Group: Under 5 years: 23% (69 of 303)	Deaths: 3 There have been 3 confirmed deaths

There have been 3 confirmed deaths from measles.

TIMELINE (JANUARY – MAY 2025)



CURRENT SITUATION

As of May 21, 2025, the Southwestern outbreak has 872 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, though we are starting to see a significant reduction in new cases in Texas. Experts project the outbreak could last up to a year.

CURRENT CASE COUNT: 872 (As of 5/21/2025)

- Texas: 725 (+5) (62% of cases are in Gaines County)
- New Mexico: 74 (92.4% of cases are from Lea County)
- Oklahoma: 17
- Kansas: 56 (+2) (38.89% of the cases are from Gray County)

HOSPITALIZATIONS: 101

- Texas: 92 This accounts for 13% of all cases in the State.
- New Mexico: 7 This accounts for 9.47% of all cases in New Mexico.
- Kansas: 2 This accounts for 3.7% of all cases in Kansas.

DEATHS: 3

- Texas: 2 This is 0.28% of all cases
- New Mexico: 1 This is 1.35% of all cases

US NATIONAL CASE COUNT: 1,050 (confirmed and suspected)

INTERNATIONAL SPREAD (As of 5/20/2025)

- Mexico: 1,649 4 fatalities (1 fatality in Sonora)
 - Chihuahua, Mexico: 1,537 cases, 3 fatalities, 5 hospitalizations
- **Canada: 2,272 (+330)** (Includes Ontario's outbreak, which began November 2024)
 - Ontario, Canada 1,622 (+182), 101 (+18) hospitalizations
 - Alberta, Canada 505(+97)

TEXAS:

- The outbreak appears to be slowing down in most areas. As of 5/20/2025, 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 actual number due to delays in reporting.
- **Trajectory**: A classic epidemic curve with an early, sharp rise, indicating a large susceptible population (Gaines County) and intense transmission in urban areas, such as Lubbock and El Paso.
- 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.
- Since April 4, 2025, El Paso has reported 57 confirmed cases, with five hospitalizations. 2/3 of the cases are among people over the age of 18. This has become a challenge since many healthcare providers who serve adults do not have the measles-mumps-rubella vaccine on hand, unlike pediatricians.
- DSHS has identified "designated outbreak counties" with ongoing measles transmission: Cochran, Dawson, Gaines, 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 and mid-May bumps underscore the importance of sustained control measures until transmission is fully interrupted. Measles is now present in six counties in New Mexico.

OKLAHOMA: Oklahoma experienced a brief, small-scale outbreak, peaking in late March, followed by a rapid decline to sporadic, isolated cases by early May.

KANSAS:

- Since the solitary index case was detected in Stevens County, 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 5/14/2025 and is now up to 56. 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	
214 (+2) (29.5%)	272 (37.57%)	235 (+4) (32.46%)	4 (0.55%)	725	
NEW MEXICO OUTB	REAK				
0-4 Years	5-17 Years	18+ Years	Pending	Total	
21 (26.8%)	20 (28.2%)	33 (45.1%)	0	74	
KANSAS OUTBREAK					
0-4 Years	5-17 Years	18+ Years	Pending	Total	
18 (33.3%)	26 (+1) (46.3%)	12 (+1) (2.14%)	0	56	
OKLAHOMA OUTBREAK					
0-4 Years	5-17 Years	18+ Years	Pending	Total	
14 Cases 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, and 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

CONFIRMED CASES BY AGE						
AGE	CASES	HOSPITALIZATIONS	DEATHS			
0-4	16	2	0			
5-17	4	0	0			
18+	37	3	0			
TOTAL	57	5	0			

HOSPITALIZATIONS	CASES BY GENDER		
HOSPITALIZATION STATUS	NUMBER	GENDER	CASES
CURRENT	0	MALE	28
PREVIOUSLY	5	FEMALE	29
TOTAL	5	TOTAL	57

VACCINATION STATUS

NUMBER

22

21

7

7

57

STATUS

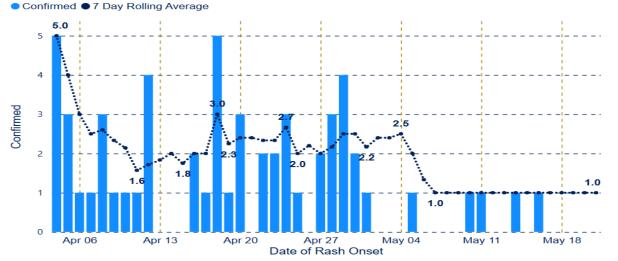
UNVACCIANTED

UNKNOWN

1 DOSE

2 DOSES

TOTAL



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

- With a population of approximately 679,000, El Paso recorded its first five confirmed measles cases on April 4, 2025. By May 21, 2025, the City of El Paso Department of Public Health had reported 57 confirmed cases in the region: 37 among adults (≥ 18 years) and 16 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% 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.
- Language barriers, pervasive misinformation, and fears of deportation among undocumented residents hamper public health outreach efforts. At the same time, 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 <u>online dashboard</u> 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, culturally-appropriate messaging, and immunization activities on both sides remains critical to preventing further spread

CURRENT SITUATION: VACCINATION STATUS

STATE	VACCINATED	VACCINATED	UNVACCINATED/	TOTAL
	WITH 1 DOSE	WITH 2 DOSES	UNKNOWN	CASES
тх	16	19	690*	725*

NOTE: The TX unvaccinated/unknown category includes individuals with no documented doses of measles vaccine administered more than 14 days prior to 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	50	15	74

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

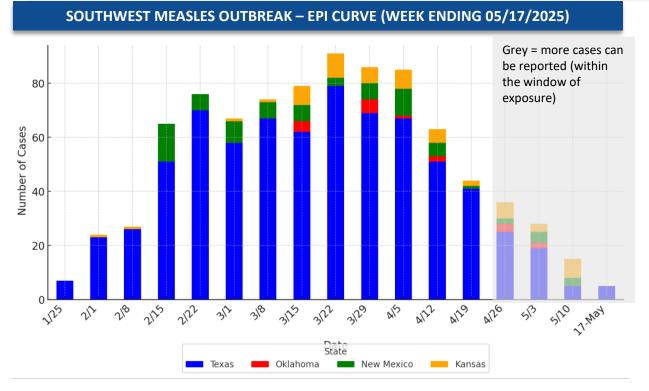
STATE	AGE APPROPRIATELY VACCINATED	NOT AGE APPROPRIATELY VACCINED	NOT VACCINATED	PENDING VERIFICATION/ UNABLE TO VERIFY	TOTAL CASES
KS	5	1	47	3	56

MMR Vaccination Coverage by County

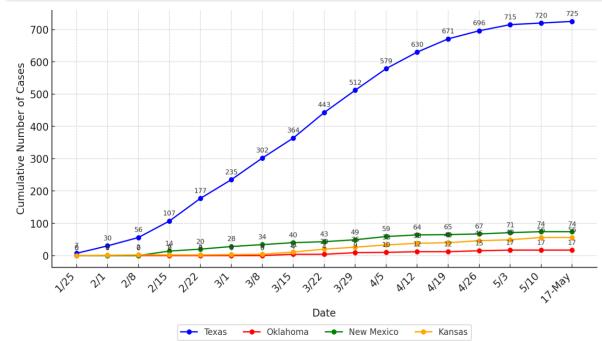
(Dotted Red Line at 95% Threshold) Atascosa Gaines Ector Rockwel Carson Lynn Lubbock Yoakum Brown Erath Randall Hockley **Harderman** Borden Midland Reeves Parme Cochran Dallam Terry Potter El Paso Martir Lamar Garza Lamb Andrews Bailev 0.00% 20.00% 40.00% 60.00% 80.00% 100.00%

Among the affected counties in Texas, 18 out of 33 have a vaccination rate below 95%, the recommended rate for herd immunity (SOURCE: <u>Annual Report on Immunization Status</u> and <u>CORI</u>).

EPI CURVE AND CASES OVER TIME



CUMULATIVE CASES OVER TIME - WEEK ENDING - 5/17/2025)



The number of new cases per week is declining in Texas and Oklahoma, while cases in New Mexico remain sporadic, and Kansas is experiencing a rise.

- **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.

Cases are stable or slowly rising.

- **TX:** A total of 725 cases across 33 counties.
- NM: A total of 74 cases across 6 counties.
- **OK:** A total of 17 cases have been reported.
- KS: A total of 56 cases across 8 counties.

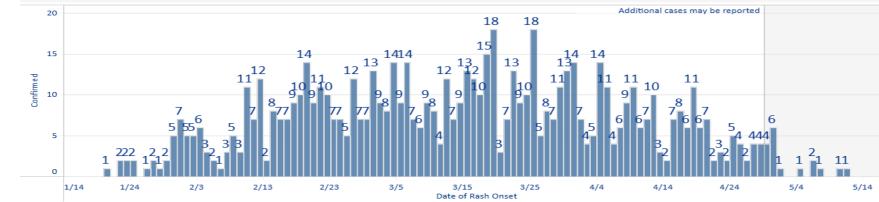
EPI SUMMARY - TEXAS

(n= 725) AS OF 5/21

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%
Andrews	3	0.42%	97.70%	0	Hockley	6	0.84%	94.40%	3
Atascosa	1 (New)	0.14	98.51	0	Lamar	19	2.67%	96.84%	0
Bailey	2	0.28%	98.94%	0	Lamb	1	0.14%	97.37%	1
Borden	1	0.14%	94.44%	1		/			-
Brown	1	0.14%	93.64%	5	Lubbock	53 (+1)	7.16%	92.25%	8
Carson	1	0.14%	91.67%	3	Lynn	2	0.28%	92.16%	2
Cochran	14	1.97%	95.20%	1	Martin	3	0.42%	96.59%	1
Collins	1	0.14%	93.31%	16	Midland	3	0.42%	94.77%	4
Dallam	7	0.98%	95.30%	2		5	0.70%		1
Dawson	26	3.65%	88.10%	4	Parmer	-		95.04%	1
Eastland	2	0.28%	95.63	2	Potter	2	0.28%	96.32%	3
Ector	11	1.54%	91.30%	5	Randall	1	0.14%	93.95%	1
El Paso	57 (+3)	7.44%	96.37%	8	Reeves	1	0.14%	94.92%	1
Erath	1	0.14%	93.94%	5	Rockwell	1	0.14%	91.47	2
Gaines	406	56.49%	82.00%	3	Terry	60	8.43%	95.52%	2
Garza	2	0.28%	97.10%	0					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

Outbreak Cases by Date of Rash Onset

If date of rash not available, the following hierarchy is used for date: symptom onset date, specimen collection date, hospital admission date, or date reported to the region. People with measles are contagious from four days before rash onset to four days after.



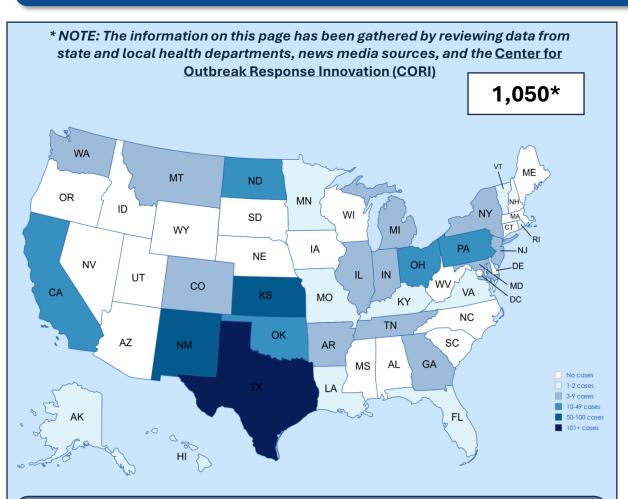
SOURCES: <u>Measles Outbreak – May 20, 2025 | Texas DSHS</u> 2023-2024 School Vaccination Coverage Levels by District/Private School and County - Kindergarten (XLS)

EPI SUMMARY (KS, NM, OK)

COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)						
KANSAS (n=56) AS OF 5/21/2025	KANSAS (n=56) AS OF 5/21/2025								
Finney	Between 1-5		98%						
Ford	Between 1-5		87%						
Grant	Between 1-5		99%						
Gray	21	38.89%	66%						
<u>Haskell</u>	10 (+2)	14.81%	58%						
<u>Kiowa</u>	6	11.11%	92%						
Morton	Between 1-5		82%						
Stevens	7	12.96%	83%						
	Kansas has reported 2 additi	onal cases NOT associated with the outbreak, in Reno and Sedgwick C	Counties.						
NEW MEXICO (n=74) AS OF 5/21/2025									
Chaves	1	1.35%	98%						
Curry	1	1.35%	95%						
Doña Ana	2	2.7%	95%						
Eddy	3	4.05%	93%						
Lea	65	88%	94%						
Sandoval	2	2.7%	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 5/21/2025									
Tulsa and Cherokee Nation	17	Insufficient Information	89.5%						

SOURCES: NM MEASLES OUTBREAK,, OSDH, KDHE

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 **	740
NEW MEXICO	74
<u>KANSAS</u>	58
<u>OHIO</u>	34
<u>OKLAHOMA</u>	17
<u>PENNSYLVANIA</u>	13
NORTH DAKOTA	13
<u>CALIFORNIA</u>	11
MICHIGAN	9
<u>MONTANA</u>	9
<u>ILLINOIS</u>	8
INDIANA	8
NEW YORK	7
<u>ARKANSAS</u>	6
<u>TENNESSEE</u>	6
WASHINGTON	6
COLORADO	5
<u>GEORGIA</u>	4
MARYLAND	3
NEW JERSEY	3
<u>ALASKA</u>	2
<u>FLORIDA</u>	2
HAWAII	2
LOUISIANA	2
<u>MINNESOTA</u>	2
<u>MISSOURI</u>	2
<u>KENTUCKY</u>	1
RHODE ISLAND	1
VERMONT	1
<u>VIRGINIA</u>	1
TOTAL	1,050

OUTBREAKS

SMALL OUTBREAK (3-9)

MEDIUM OUTBREAK (10 - 49)

LARGE OUTBREAK (50 OR MORE)

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 20, 2025, EDT, there are approximately 1,038 measles cases (including confirmed and suspected cases) across 30 states.

This year, there have been 13 measles outbreaks:

- 1. Texas, involving <u>33 counties</u>
- 2. New Mexico, <u>6 counties</u>
- 3. Oklahoma, and the Cherokee Nation in Oklahoma
- 4. <u>8 counties</u> in Kansas
- 5. Ashtabula and Knox Counties, Ohio
- 6. Erie County, Pennsylvania
- 7. Allen County, Indiana
- 8. Bergen County, New Jersey
- 9. metro Atlanta, Georgia
- 10. Gallatin County, Montana
- 11. Montcalm County, Michigan (linked to Ontario Outbreak)
- 12. Upper Cumberland region Tennessee
- 13. Williams County North Dakota

- 1 case Atascosa County
- 1 case Brazoria County
- 1 case Collin County
- 1 case Denton
- 1 case Adult, Fort Bend (travel-related)
- 4 cases Harris County
- 1 case Adults, Rockwall County (travel-related)
- 1 case Shackelford
- 2 cases Tarrant
- 2 case Travis County

TEXAS CASES ASSOCIATED WITH THE OUTBREAK: 725

US OUTLOOK

HOW MUCH WORSE COULD AMERICA'S MEASLES OUTBREAK GET? THE ECONOMIST:

America's measles outbreak is alarming for several reasons. What began as a handful of cases in Texas in January has now surpassed 800 across several states, with many more cases probably going unreported. It is the worst outbreak in 30 years and has already killed three people. Other smaller outbreaks bring the total number of cases recorded in 2025 so far to over 1,000. But above all, public-health experts worry that the situation now is a sign of worse to come. A study published in JAMA, the journal of the American Medical Association, in April estimated that, if current childhood vaccination rates remain unchanged, measles will likely become endemic in the United States again within two decades. Under these circumstances, there will be an estimated 850,000 measles cases in the next 25 years, and around 850 deaths. If, however, the MMR rate in each state falls by 10%, endemicity will arrive earlier, and there could be 11 million measles cases in the next 25 years. In that scenario, there would be around 11,000 deaths from the disease, each of which could have been avoided. (5/14/2025)

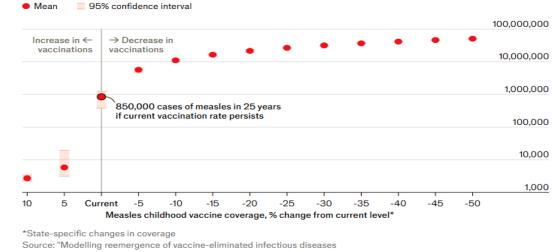
WASHINGTON - A new case of measles was identified in Washington on May 20, 2025. The King County adult was likely infected while traveling internationally and was in the airport from 4:30 to 8:45 p.m., according to Public Health Seattle-King County. The case isn't connected with previous local measles infections.

NORTH DAKOTA - A new case of measles was confirmed in Williams County on Friday, May 16. North Dakota's 2025 measles case count now stands at 13.

MONTANA: On May 21, 2025, one confirmed case of measles was reported in a Flathead County resident. This individual is an adult and is currently isolating at home. Confirmed cases of measles were reported in Gallatin County between April 17 and May 5, 2025. All cases were residents of Gallatin County and were members of two households with exposure to measles from out-of-state.

Spread ahead

United States, cumulative number of measles cases after 25 years, log scale



under declining vaccination in the US", by M.V. Kiang et al., JAMA, April 2025

GEORGIA - State officials report fourth measles case of 2025 in Georgia. The person contracted the disease while traveling internationally. The state health department did not disclose the identity or age of the person, who lives in the metro Atlanta area. State officials are working to identify anyone who may have been exposed to measles through contact with this person between May 10 and May 18.

NEW JERSEY - Officials warn of potential measles exposure at Shakira concert at MetLife Stadium. On Tuesday, May 20, 2025, the New Jersey Department of Health (NJDOH) announced that a non-New Jersey resident attended the concert while infected with the disease. The concert took place from Thursday, May 15, 2025, at 7:30 p.m. through Friday, May 16, 2025, at 1 a.m. at MetLife Stadium on 1 MetLife Stadium Drive in East Rutherford, New Jersey.

MEXICO OUTLOOK

THE MEASLES OUTBREAK IN MEXICO: OVERVIEW

Mexico is currently facing its largest measles outbreak in decades, centered in the Mennonite community of Cuauhtémoc, Chihuahua. Genetic and epidemiological investigations have linked the outbreak to an unvaccinated child who traveled from Seminole, Texas, to visit relatives in late January 2025, seeding sustained local transmission.

Drivers of the Outbreak

- Cross-border importation: Increased anti-vaccine sentiment in parts of Texas contributed to a rise in infections, one of which crossed into Mexico in January 2025.
- Low local immunization: Nationwide childhood vaccination coverage has declined, with some age cohorts in Chihuahua reporting rates as low as 21.2%.

Cases are now in 17 states and 55 municipalities.

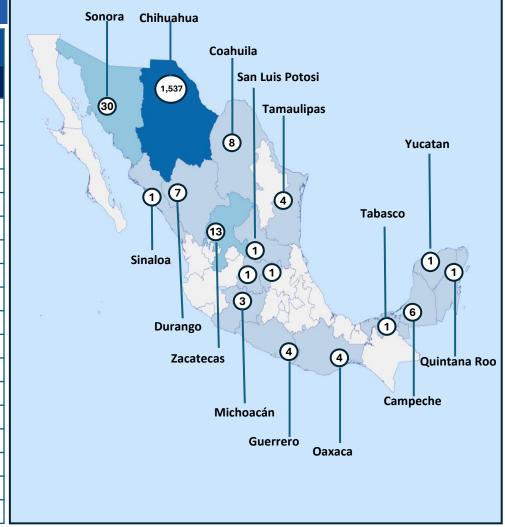
Vaccination status among cases

- 94.4% (947) had no documented MMR vaccination
- 3.8% (38) had received one dose
- 1.8% (18) had received two doses

Four deaths are reported:

- An unvaccinated 1-year-old girl has died of measles in the state of Sonora, which borders Arizona. The case was imported from Chihuahua.
- All other cases are in Chihuahua; more details to come.

CONFIRMED MEASLES		
STATE	CASES	
CAMPECHE	6	
CHIHUAHUA	UAHUA 1,537	
COAHUILA	UILA 8	
DURANGO	iO 7	
GUANAJUATO	2	
GUERRERO	4	
MICHOACÁN	3	
ΟΑΧΑϹΑ	4	
QUERÉTARO	1	
QUINTANA ROO	1	
SAN LUIS POTOSI	1	
SINALOA	1	
SONORA	30	
TABASCO	1	
TAMAULIPAS	9	
YUCATAN	1	
ZACATECAS	13	
TOTAL	1,629	

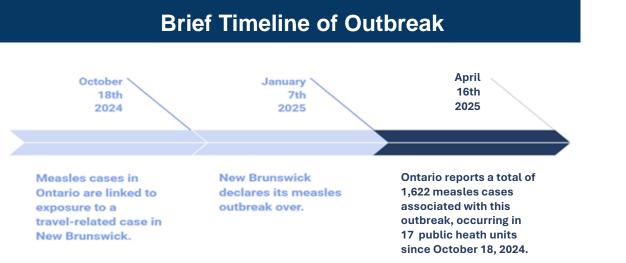


*Data as of 5/21//2025

SOURCE: INFOMRE DIARIO DEL BROT DE SARAMPIO EN MEXICO 5/21/2025

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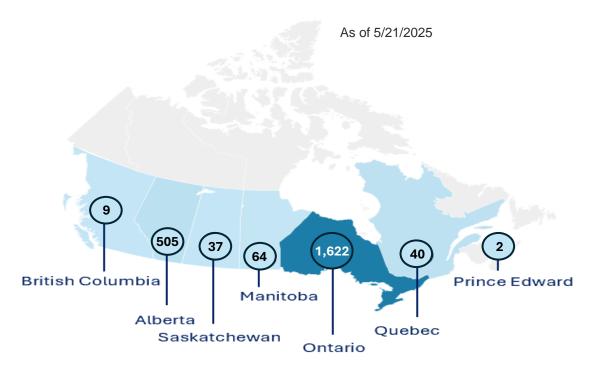
CANADA OUTLOOK



MEASLES 2025		
PROVINCE	CASES	
ONTARIO	1,622 (+182)	
ALBERTA	505 (+97)	
ΜΑΝΙΤΟΒΑ	64 (+40)	
BRITISH COLUMBIA	9 (+1)	
SASKATCHEWAN	37 (+10)	
QUEBEC	40	
PRINCE EDWARD ISLAND	2	
TOTAL	2,279 (+330)	

CANADA OUTBREAK:

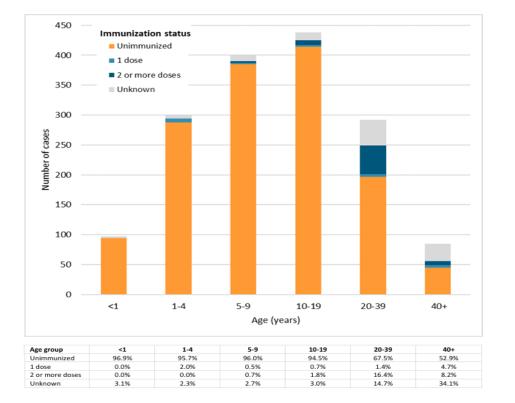
- An ongoing outbreak of measles in Ontario has been traced back to a large gathering in New Brunswick last fall that was attended by guests from Mennonite communities. On October 18, 2024, exposure to a travel-related case in New Brunswick led to measles cases in Ontario. The Ontario outbreak continues to escalate, with the highest reported numbers in North America.
- Alberta has seen a very large number of cases since Easter.
- Manitoba numbers have doubled in a week.
- We are starting to see numbers increase in Saskatchewan.
- Quebec declared its outbreak on 4/22/2025 after no new cases in 32 days.



CANADA OUTLOOK: ONTARIO

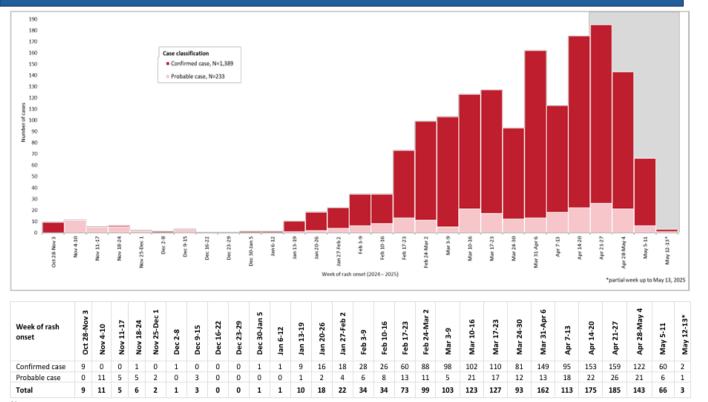
MORBIDITY AND MORTALITY			
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS
ONTARIO	1,622 (+182)	119 (+18)	0

IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 – MAY 13, 2025



ONTARIO:

- Among all outbreak cases, the majority were in infants, children, and adolescents (76.3%, n=1,237), while 23.2% (n=377) were in adults, and 0.5% (n=8) had unknown age.
- 2.1% (n=34) of outbreak cases were pregnant.
- 98.3% (n=1,594) of outbreak cases were born in or after 1970.
- Among infant, child and adolescent outbreak cases, 95.5% (n=1,181) were unimmunized, while among adults, 64.2% (n=242) were unimmunized
- Overall, 7.3% (n=119) of outbreak cases have required hospitalization, and 0.6% (n=9) were admitted to the ICU, Of those hospitalized, 95.0% (n=113) were unimmunized, including 89 children.



NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 10/28/2024 - 05/13/25

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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