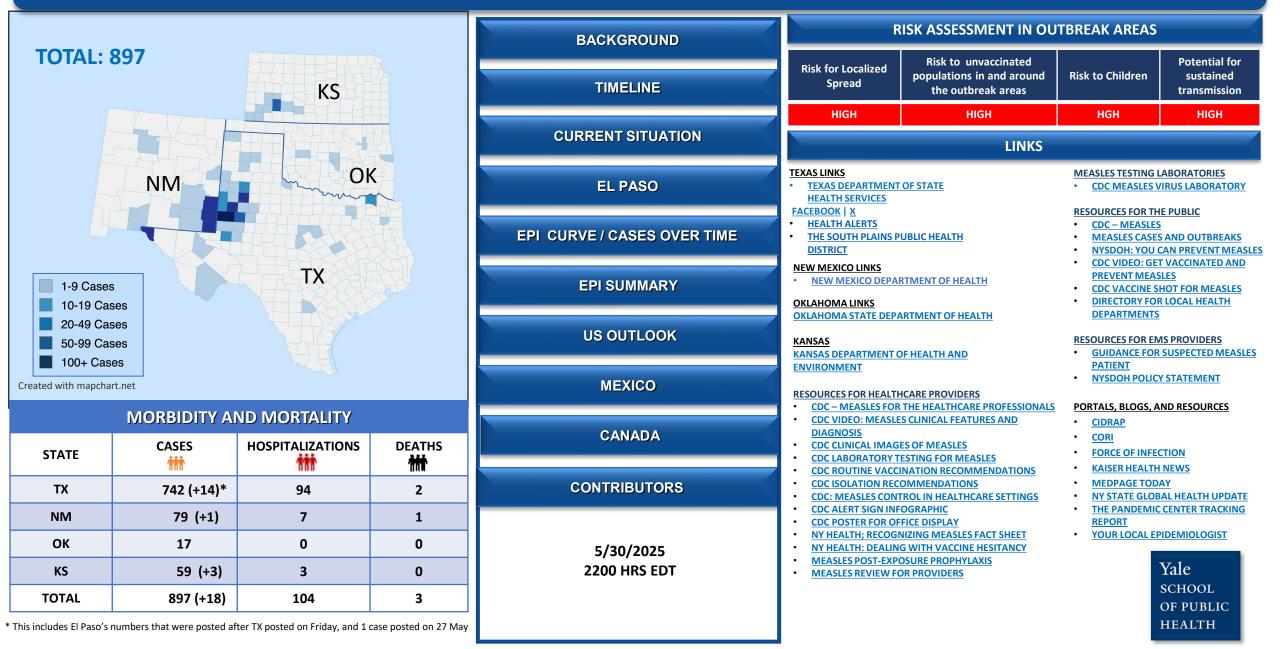
YALE SCHOOL OF PUBLIC HEALTH - ESF-8 VIRTUAL MEDICAL OPERATION CENTER SPECIAL REPORT

MEASLES OUTBREAK - SOUTHWEST U.S. - 2025



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 **104** 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

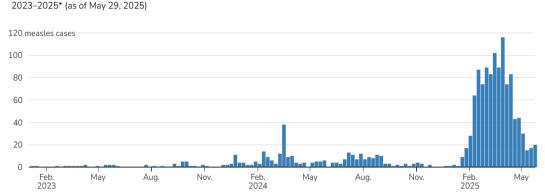
Despite being preventable through the MMR (measles, mumps, and rubella) vaccine, outbreaks continue to occur in under-vaccinated communities, leading to severe health outcomes and increased transmission risk (CDC). Over the past 20 years, vaccination rates have been declining globally, leading to a rise in certain regions, including the United States, Canada, Mexico, South America, and parts of Europe. 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 the summer travel kicking off—peaking between now and Labor Day—we can expect 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

1088(+42) CONFIRMED MEASLES CASES (AS OF 5/29/25)



As of May 29, 2025, a total of 1,088 confirmed* measles cases were reported by 33 jurisdictions: Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York City, New York State, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, Virginia, and Washington.

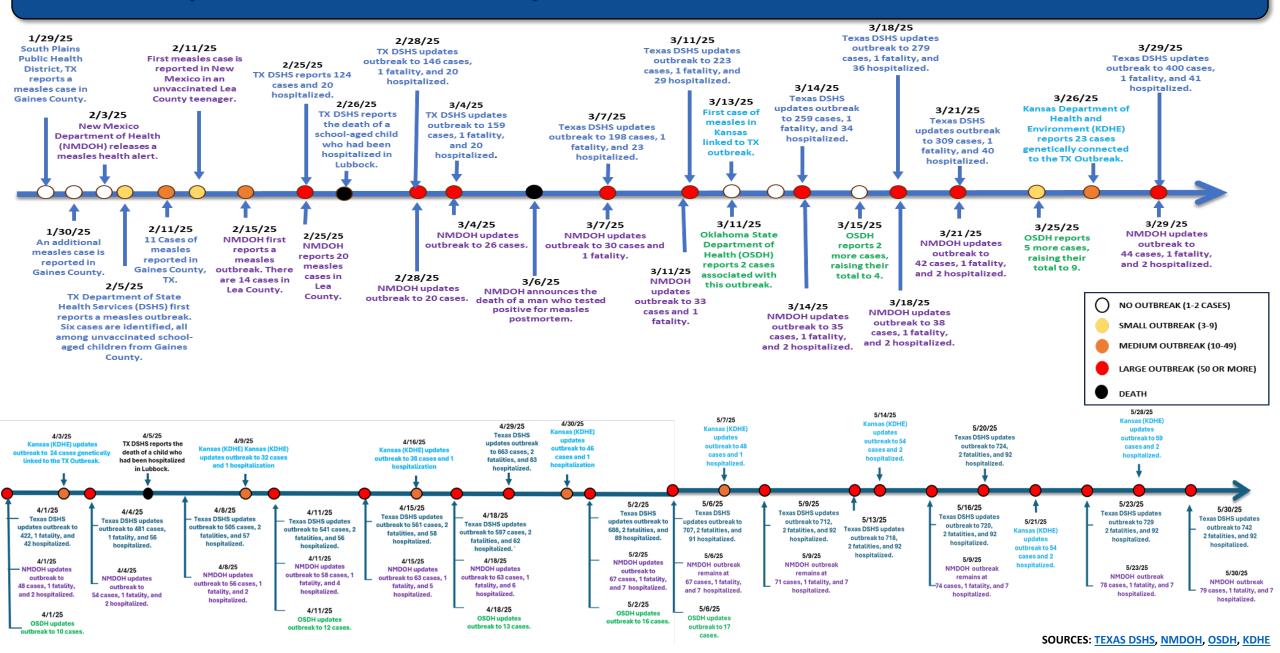
Age Under 5 years: 322 (30%) 5-19 years: 407 (37%)	Vaccination Status Unvaccinated or Unknown: 96% One MMR dose: 2%
20+ years: 349 (32%) Age unknown: 10 (1%)	Two MMR doses: 3%
Developt Heaviteltand, 400/	

Percent Hospitalized: 12% Percent of Age Group Hospitalized Under 5 years: 22% (71 of 322) 5-19 years: 8% (33 of 407) 20+ years: 8% (28 of 349) Age unknown: 10% (1 of 10)

Deaths: 3

There have been 3 confirmed deaths from measles.

TIMELINE (JANUARY – MAY 2025)



CURRENT SITUATION

As of May 30, 2025, the Southwestern outbreak has 897 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: 897

- Texas: 742 (+14) (55% of cases are in Gaines County)
- New Mexico: 79 (+1) (83% of cases are from Lea County)
- Oklahoma: 17
- Kansas: 59 (+3) (38.89% of the cases are from Gray County)

HOSPITALIZATIONS: 103

- Texas: 94 This accounts for 13% of all cases in Texas.
- New Mexico: 7 This accounts for 9.47% of all cases in New Mexico.
- Kansas: 3 This accounts for 5.08% of all cases in Kansas.

DEATHS: 3

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

US NATIONAL CASE COUNT: 1,132 (confirmed and suspected)

INTERNATIONAL SPREAD

- Mexico: 1,856(+103), 4 fatalities
 - **Chihuahua, Mexico: 1,740 (+83)** cases, **3** fatalities, **4** currently hospitalized.
- Canada: 2,791 (+273)
 - Ontario, Canada: 1,938 (+143) cases. 158 (+29) hospitalizations
 - Alberta, Canada: 679 (+119) cases. 4 currently hospitalized

TEXAS:

The outbreak appears to be slowing in most areas. As of May 30, 2025, DSHS estimates that fewer than ten confirmed cases—approximately 1 percent—remain actively infectious, based on rash-onset dates within the past week; however, reporting delays may result in this being an underestimate.

- Trajectory: The epidemic curve exhibits a classic propagated pattern: an early, sharp rise reflecting a large susceptible population in Gaines County and intense transmission in urban centers such as El Paso and Lubbock. Transmission peaked the week of March 22; shortly thereafter, intensified public health measures (mobile vaccination clinics, quarantine of contacts) produced a consistent week-to-week decline. Even after the primary downward trend, small case counts (e.g., 10 cases the week of May 24) persisted into late May, indicating the presence of lingering susceptible clusters.
- El Paso: Since April 4, 2025, El Paso has reported 61 confirmed cases and five hospitalizations. Two-thirds of cases occur among adults (over the age of 18), posing a challenge because many providers who primarily serve adults do not routinely stock the measles–mumps–rubella (MMR) vaccine, unlike pediatric clinics.

NEW MEXICO: After an initial spike, New Mexico sustained moderate transmission for six weeks before interventions, or the natural depletion of susceptible contacts, drove case counts steadily downward. Small bumps in late March and mid-May underscore the importance of maintaining control measures until all chains of transmission are fully interrupted. Measles is now present in six counties; this week, Sandoval County has seen a notable rise in cases.

OKLAHOMA: Oklahoma experienced a brief, small-scale outbreak that peaked in late March. By early May, case counts had declined rapidly to sporadic, isolated instances, indicating that transmission was effectively contained.

KANSAS: In early 2025, Kansas experienced a measles resurgence localized to the southwest, driven by declining vaccination rates and increased travel-related exposures. Initially marked by isolated importations, the outbreak transitioned to sustained person-to-person transmission by mid-March, peaked in late March, and then gradually subsided as public health interventions were implemented. However, pockets of low immunity have allowed low-level transmission to persist as of this update.

CURRENT SITUATION

AGES OF CASES:

WEST TEXAS OUTBREAK						
0-4 Years	5-17 Years	Pending	Total			
217 (+3) (29%)	280 (+7) (38%)	241 (+3) (32%)	4 (0.5%)	742 (+14)		
NEW MEXICO OUTB	NEW MEXICO OUTBREAK					
0-4 Years	5-17 Years	18+ Years	Pending	Total		
23 (+1) (29%)	20 (25%)	36 (+3) (46%)	0	79		
KANSAS OUTBREAK						
0-4 Years	5-17 Years	18+ Years	Pending	Total		
18 (32%)	26 (+1) (46%)	12 (+1) (21%)	0	56		
OKLAHOMA OUTBREAK						
0-4 Years	5-17 Years	Pending	Total			
14 Cases C	confirmed, 3 Probable – no	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)

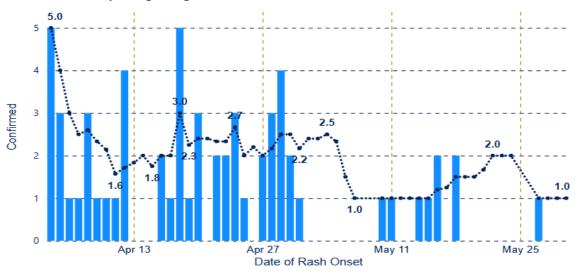
UNITED STATES: Although specific lineages are not always reported, genotype D8 has been the predominant strain in recent outbreaks across **Texas, New Mexico**, Oklahoma, and Kansas. Genetic sequencing has linked the virus circulating in the U.S. to the same D8 lineage found in Canada and Mexico, suggesting **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

	CONFIR	MED CASES BY AGE	VACCINATIC	ON STATUS	
AGE	CASES	HOSPITALIZATIONS	HOSPITALIZATIONS DEATHS		NUMBER
0-4	17 (+2)	2	0	UNVACCINATED	22
0-4	17 (+2)	2	U	UNKNOWN	24 (+2)
5-17	4	0	0	1 DOSE	7 (+1)
18+	40 (+2)	3	0	2 DOSES	8 (+1)
TOTAL	61	5	0	TOTAL	61 (+4)

CASES BY GENDER		
GENDER	CASES	
MALE	28	
FEMALE	33	
TOTAL	61	
Confirmed 7 Day Rolling Average		



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 30, 2025, the City of El Paso Department of Public Health had reported 61 confirmed cases in the region: 40 among adults (≥ 18 years) and 17 among young children (< 4 years).
- Initial Importations and Spread: The outbreak's early cases were linked to importations from Gaines County, Texas, and to cross-border travel to Chihuahua, Mexico. El Paso's position as a border city, with heavy binational traffic, facilitated multiple introductions of the measles virus into urban public spaces (e.g., malls, restaurants, schools). Genetic sequencing confirmed the D8 genotype circulating among cases on both sides of the border.
- **Adult-Predominant Pattern**: Unlike most U.S. outbreaks, where young children typically comprise the majority of cases, El Paso saw a disproportionate burden among adults. Two factors likely contributed:
 - 1. High Pediatric Coverage: Kindergarten- and seventh-grade vaccination rates in El Paso County exceeded 96%, helping to shield children and delay widespread pediatric transmission.
 - 2. Uncertainty Among Adults: Many adults either never received two documented MMR doses or lacked any vaccination record, leading to clusters of susceptible adults in workplaces and community venues.

Risk Factors and Challenges

- Urban Density and Public Venues: High-traffic locations served as focal points for exposure events, underscoring how urban environments accelerate transmission if pockets of susceptibility exist.
- Misinformation and Access Barriers: Language barriers, concerns among undocumented residents about seeking care, and lingering vaccine hesitancy— sometimes fueled by unproven alternative "remedies"— hampered early containment efforts. Public health messaging now stresses that the MMR vaccine is free, safe, and available regardless.

CURRENT SITUATION: VACCINATION STATUS

STATE	VACCINATED	VACCINATED	UNVACCINATED/	TOTAL
	WITH 1 DOSE	WITH 2 DOSES	UNKNOWN	CASES
тх	19	20	703*	742*

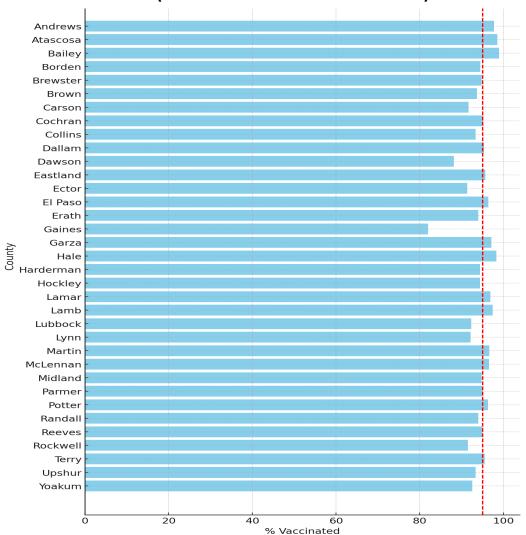
NOTE: The TX unvaccinated/unknown category includes individuals with no documented doses of measles vaccine administered more than 14 days prior to symptom onset. Numbers adjusted based on additional information from El Paso after TX DSHS update.

STATE	VACCINATED WITH AT LEAST ONE DOSE	NOT VACCINATED	UNKNOWN	TOTAL CASES
NM	12	52	15	79

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	50	3	59

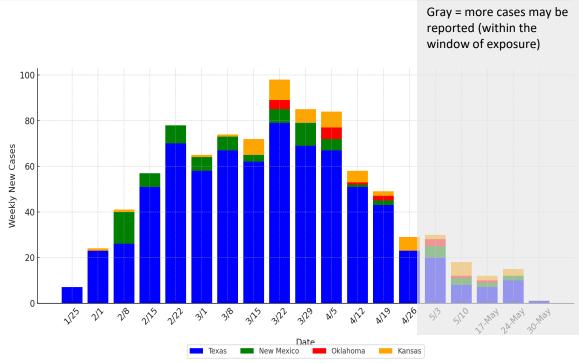
MMR Vaccination Coverage by County (Dotted Red Line at 95% Threshold)



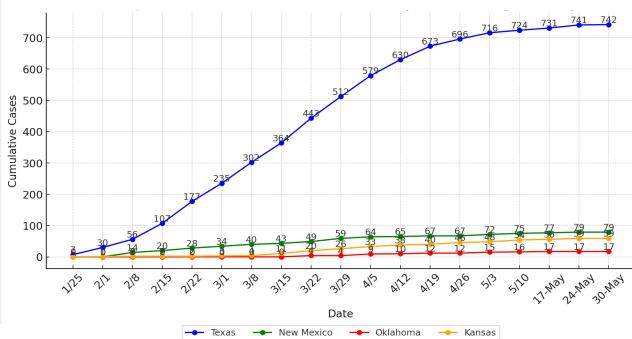
Among the affected counties in Texas, 19 out of 35 have a vaccination rate below 95%, the recommended rate for herd immunity (SOURCE: <u>Annual Report on Immunization Status</u>).

EPI CURVE AND CASES OVER TIME

SOUTHWEST MEASLES OUTBREAK - EPI CURVE (WEEK ENDING 05/30/2025)



CUMULATIVE CASES OVER TIME (WEEK ENDING 5/30/2025)



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.

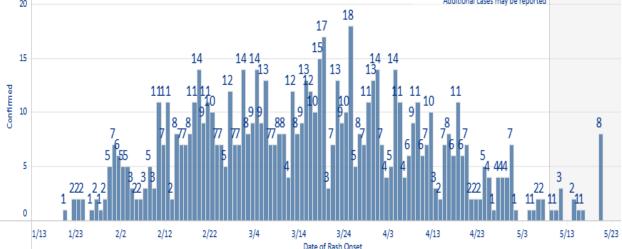
- **TX:** Reported first case the week of 1/25/25.
- NM: Reported first cases the week of 2/8/25.
- **OK:** Reported first cases the week of 3/15/25.
- KS: Reported first cases the week of 3/15/25.

Cases are stable or slowly rising.

- TX: A total of 742 cases across 34 counties.
- NM: A total of 79 cases across 6 counties.
- **OK:** A total of 17 cases have been reported.
- KS: A total of 59 cases across 8 counties.

EPI SUMMARY - TEXAS (n= 742) AS OF 5/30/2025

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	0.14	98.51	0	Lamar	20	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	Lubbock	53	7.16%	92.25%	8
Brewster	1	0.14	94.74%	1	Lynn	2	0.28%	92.16%	2
Brown	1	0.14%	93.64%	5	Martin	3	0.42%	96.59%	1
Carson	1	0.14%	91.67%	3	McLennan	8 (NEW)		96.53	6
Cochran	14	1.97%	95.20%	1	Midland	5	0.42%	94.77%	4
Collins	1	0.14%	93.31%	16	Parmer	5	0.70%	95.04%	1
Dallam	7	0.98%	95.30%	2	Potter	1	0.28%	96.32%	3
Dawson	26	3.65%	88.10%	4	Randall	1	0.14%	93.95%	1
Eastland	2	0.28%	95.63	2	Reeves	1	0.14%	94.92%	1
Ector	11	1.54%	91.30%	5	Rockwell	1	0.14%	91.47	2
El Paso	61 (+4)	7.44%	96.37%	8	Terry	60	8.43%	95.52%	2
Erath	1	0.14%	93.94%	5	Upshur	5	0.70%	93.3	2
Gaines	409 (+2)	56.49%	82.00%	3	Yoakum	20	2.81%	92.50%	1
Garza	2	0.28%	97.10%	0	20				Additional cases may be reported
Hale	5	0.84%	98.30%	2	20			17 18	
Harderman	1	0.14%	94.40%	3				17	



SOURCES:

Measles Outbreak – May 30, 2025 | Texas DSHS •

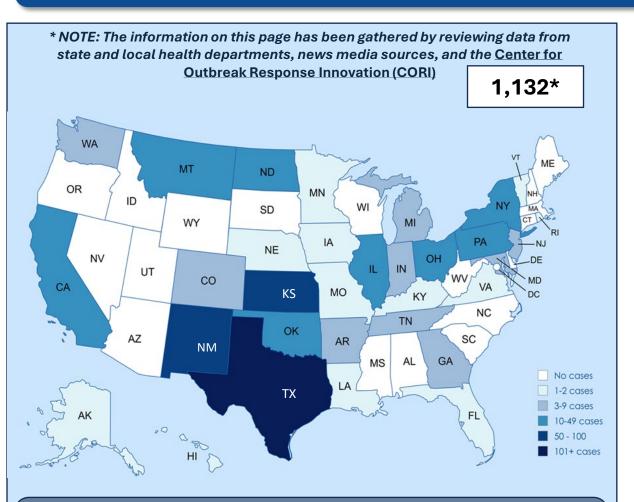
Measles Outbreak El Paso 30 May 2025 •

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=59) AS OF 5/30/2025			
Finney	Between 1-5		98%
Ford	Between 1-5		87%
Grant	Between 1-5		99%
Gray	24 (+3)	4068%	66%
Haskell	10 (+2)	16.95%	58%
Kiowa	6	10.17%	92%
Morton	Between 1-5		82%
<u>Stevens</u>	7	11.86%	83%
	Kansas has reported 2 addition	onal cases NOT associated with the outbreak, in Reno and Sedgwick C	Counties.
NEW MEXICO (n=79) AS OF 5/30/2025			
Chaves	1	1.27%	98%
Curry	1	1.27%	95%
Doña Ana	2	2.53%	95%
Eddy	3	3.8%	93%
Lea	66	83.54%	94%
Sandoval	6	7.59	94
		e shot of MMR, and only 55% have received both shots, according to ded to the system. Adults make up more than half of reported cases i	
OKLAHOMA (n=17) AS OF 5/30/2025			
Tulsa and Cherokee Nation	17	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	OUTBREAKS
TEXAS **	774	OUTBILEAKS
NEW MEXICO	79	
KANSAS	64	
OHIO	34	
NORTH DAKOTA	29	An outbreak of m
OKLAHOMA	17	temporally related
PENNSYLVANIA	15	
MONTANA	13	As of 1600 hour
NEW YORK	12	cases (including
CALIFORNIA	12	This year, there
ILLINOIS	10	1. Texas, invo
MICHIGAN	9	2. New Mexic 3. Oklahoma
INDIANA	8	4. 8 counties
ARKANSAW	7	5. Ashtabula
COLORADO	7	6. Erie County
TENNESSEE	6	7. Allen Coun
WASHINGTON	6	8. Bergen Cou 9. metro Atla
GEORGIA	4	10. Gallatin Co
MARYLAND	3	11. Montcalm
NEW JERSEY	3	12. Upper Cum
ALASKA	2	13. Williams C
FLORIDA	2	14. Faulkner C
HAWAII	2	** TEXAS CASES
LOUISIANA	2	 1 case – Brazo 2 case – Collir
MINNESOTA	2	2 case - Dent
MISSOURI	2	 1 case – Adult 4 cases – Harr
VIRGINIA	2	 4 cases – Harri 1 case - Harri
IOWA	1	• 1 case - Hays
KENTUCKY	1	 1 case - McLe 2 case - Rand
NEBRASKA	1	 1 case – Adult
RHODE ISLAND	1	• 1 Case – Scurr
VERMONT	1	 1 case – Shack 2 cases - Tarr
TOTAL	1132	 2 cases - Trav 2 case - Trav
		TEXAS CASES ASS

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

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

'ANIA	15	
NA	13	As of 1600 hours on May 31, 2025, EDT, there are approximately 1,131 measles
)RK	12	cases (including confirmed and suspected cases) across 32 states.
NIA	12	This year, there have been 13 measles outbreaks :
IS	10	1. Texas, involving <u>35 counties</u>
AN	9	2. New Mexico, <u>6 counties</u>
		3. Oklahoma, and the <u>Cherokee Nation</u> in Oklahoma
<u>AI</u>	8	4. <u>8 counties</u> in Kansas
AW	7	5. Ashtabula and Knox Counties, Ohio 6. Erie County, Pennsylvania
<u>DO</u>	7	7. Allen County, Indiana
SEE	6	8. Bergen County, New Jersey
ITON	6	9. metro Atlanta, Georgia
IA	4	10. Gallatin County, Montana
ND	3	11. Montcalm County, Michigan (linked to Ontario Outbreak)
SEY	3	12. Upper Cumberland region, Tennessee
	2	13. Williams County, North Dakota
<u>A</u>	2	14. Faulkner County, Arkansas
<u>A</u>		** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 32
<u>. </u>	2	1 case – Brazoria County
NA	2	2 case – Collin County
<u>ATC</u>	2	 2 case - Denton 1 case - Adult, Fort Bend (travel-related)
JRI	2	 4 cases – Harris County
IA	2	1 case - Harrison County.
	1	1 case - Hays County
СКҮ	1	 1 case - McLennan County 2 case - Randall County
KA	1	 1 case – Adults, Rockwall County (travel-related)
AND	1	1 Case – Scurry County
	1	1 case – Shackelford
<u>NT</u>		 2 cases - Tarrant 2 case - Travis County
L	1132	
		TEXAS CASES <u>ASSOCIATED</u> WITH THE OUTBREAK: 742

US OUTLOOK

THINGS TO KEEP AN EYE ON:

The CDC updated its warning about the risk of contracting measles while traveling, after tallying dozens of cases so far this year in travelers who were infectious while flying on airplanes within the U.S. "Travelers can catch measles in many travel settings, including travel hubs like airports and train stations, on public transportation like airplanes and trains, at tourist attractions, and at large, crowded events," the agency now says, in an update <u>published</u> Wednesday, 5/28/2025.

<u>ARKANSAS</u>: The Arkansas Department of Health is reporting a seventh case of measles in the state. The Wednesday report indicates that the new case <u>is in</u> <u>Faulkner County</u>, marking the sixth case for that county. A single case was reported in Saline County as well.

<u>CALIFORNIA</u>: A new case has been identified in a <u>Santa Clara County</u> <u>resident</u> who reported recent travel.

COLORADO: Colorado has confirmed its first measles outbreak of the year after a vaccinated Arapahoe County adult on the same flight (Turkish Airlines Flight 201) as two other confirmed cases in the state tested positive for the virus, state health officials said Thursday (5/29/2025).

IDAHO: An international traveler with measles visited multiple locations in Idaho during the infectious period. During their infectious period, the out-ofstate visitor spent time at three Burley, Idaho, establishments: Edgewater Dining and Spirits on Monday evening, an urgent care clinic on Tuesday morning, and Intermountain Health Cassia Regional Hospital on Tuesday morning and afternoon. **IOWA** - The Iowa Department of Health and Human Services (HHS) is reporting a confirmed case of measles in central Iowa in an unvaccinated adult. The case tested positive through the State Hygienic Laboratory and is the first confirmed case of measles in Iowa this year, marking the first case in the state since 2019 (5/23/2025).

MICHIGAN: Marquette County Health Department (MCHD) has confirmed a measles case in a Marquette County resident. MCHD is working closely with the Michigan Department of Health and Human Services (MDHHS) to investigate the situation to prevent additional cases. This is the first case for this county and the 9th case this year for Michigan.

MONTANA: There are 13 cases of measles among Montana residents. Newly identified cases are isolating. Cases have been reported from three counties in Montana: <u>Flathead</u> (2), <u>Hill</u> (1), and <u>Gallatin</u> (5/29/2025).

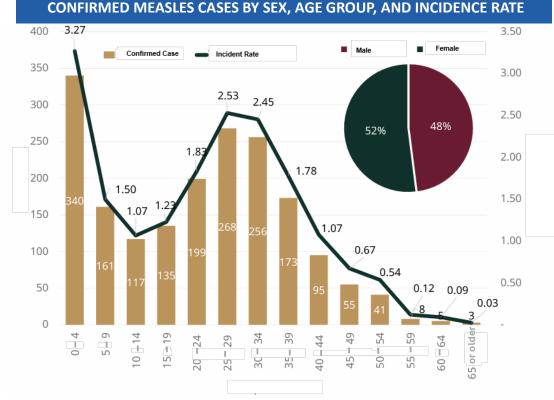
NEBRASKA: A vaccinated child in Sheridan County has tested positive for measles, according to the Nebraska Department of Health and Human Services (DHHS) on Tuesday, May 27, 2025. This is the first confirmed case of measles in Nebraska from the recent outbreak in the U.S.

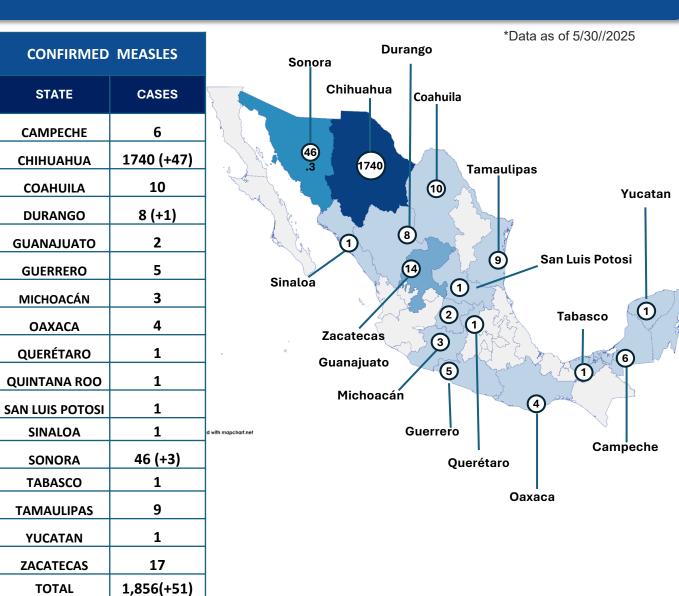
NORTH DAKOTA: The North Dakota Department of Health and Human Services (HHS) has identified another case of measles in Grand Forks County, bringing the state's total to 29. So far, there have been 13 cases in Williams, 8 in Grand Forks, 7 in Cass, and 1 in Burke County. This week's total is 8 new cases.

MEXICO OUTLOOK

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. To date, there have been four deaths associated with this outbreak– 1 case in Sonora and 3 cases in Chihuahua. Mexico's health authorities estimate that the probable number of cases is greater than 4,000.





SOURCE: MEDICHIHUAHUA, DAILY INFORMATION - MEASLES 29 MAY 2025

MEXICO OUTLOOK: CHIHUAHUA

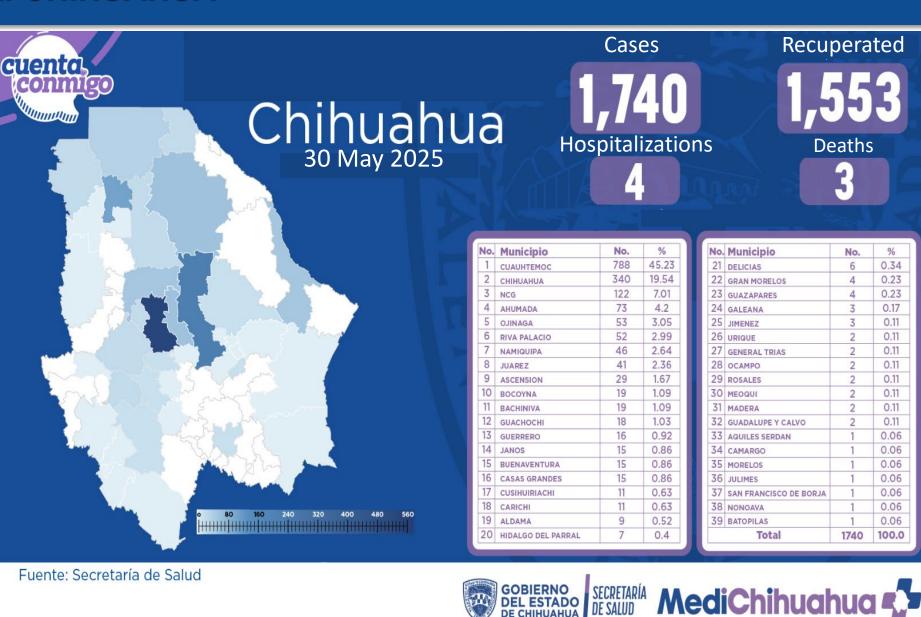
Health officials in Chihuahua have confirmed that two children—an 11month-old infant and a seven-yearold—from a vaccine-hesitant Christian community died this month from measles complications.

The infant had leukemia, and the older child suffered from a kidney condition. Neither had been vaccinated.

In April, a 31-year-old unvaccinated man in Chihuahua also died from measles.

In neighboring Sonora, a one-yearold unvaccinated girl with severe malnutrition died from the disease.

.Authorities warn that medically vulnerable individuals are at heightened risk in communities with low vaccination coverage and continue to urge the public to get immunized.



DE CHIHUAHUA

SOURCE OF GRAPHIC: MediChihuahua

CANADA OUTLOOK

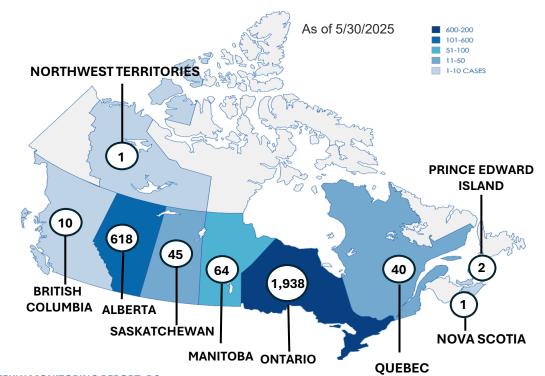
Brief Timeline of Outbreak



MEASLES 2025					
PROVINCE	CASES				
ONTARIO	1,938 (+143)				
ALBERTA	679 (+119)				
ΜΑΝΙΤΟΒΑ	72 (+8)				
BRITISH COLUMBIA	12 (+2)				
SASKATCHEWAN	46 (+1)				
QUEBEC	40				
PRINCE EDWARD ISLAND	2				
NOVA SCOTIA	1				
NORTHWEST TERRITORIES	1				
TOTAL	2,791 (+215)				

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.
- Quebec declared its outbreak on 4/22/2025 after no new cases in 32 days.

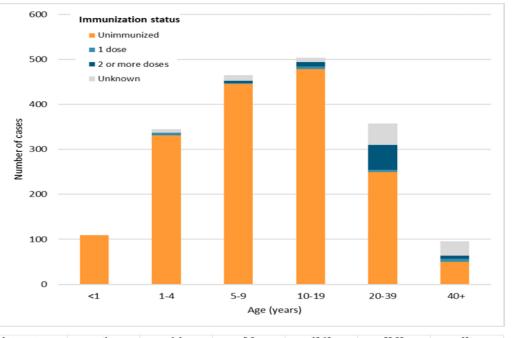


CANADA OUTLOOK: ONTARIO

MORBIDITY AND MORTALITY					
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS		
ONTARIO*	1,938 (+143)	158 (+12)	0		

Since January 1, 2025, 1,938 measles cases have been reported in the province of Ontario. All but 87 cases are linked with the multi-jurisdictional outbreak described on this page.

IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 – MAY 27, 2025

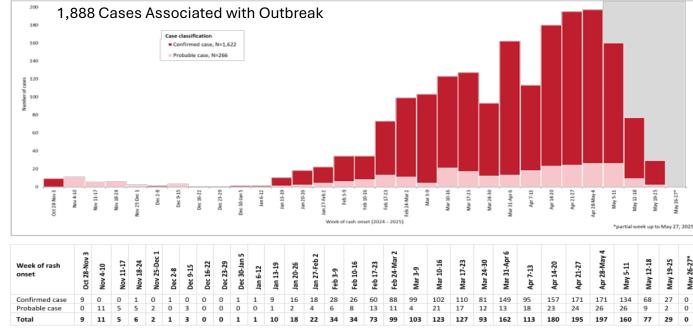


Age group	<1	1-4	5-9	10-19	20-39	40+
Unimmunized	100.0%	95.9%	95.9%	95.0%	70.0%	52.1%
1 dose	0.0%	1.7%	0.4%	1.0%	1.4%	7.3%
2 or more doses	0.0%	0.0%	0.9%	2.0%	15.4%	7.3%
Unknown	0.0%	2.3%	2.8%	2.0%	13.2%	33.3%

Multi-Jurisdictional Outbreak

- Among all outbreak cases, the majority were in infants, children, and adolescents (75.4%, n=1,423), while 24.0% (n=453) were in adults, and 0.6% (n=12) had unknown age.
- 2.0% (n=38) of outbreak cases were pregnant.
- 98.3% (n=1,856) of outbreak cases were born in or after 1970.
- Among infant, child, and adolescent outbreak cases, 95.9% (n=1,365) were unimmunized, while among adults, 66.2% (n=300) were unimmunized.
- Overall, 7.5% (n=141) of outbreak cases have required hospitalization, and 0.5% (n=10) were admitted to the ICU. Of those hospitalized, 94.3% (n = 133) were unimmunized, including 101 infants, children, and adolescents.

NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 10/28/2024 - 05/27/25



The grey shaded area in the figure represents a case reporting lag; case counts during these weeks should be considered tentative.

- Rash onset date was not yet available for 31 cases at the time of analysis; as a result, episode date was used as a proxy instead.
- The incubation period for measles (i.e., period from exposure to prodromal symptoms) averages 10 to 12 days; the time from exposure to rash onset ranges from 7 to 21 days (average 14 days). Cases are considered to be infectious from four days before rash onset to four days after rash onset.

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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