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 **106 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.

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, Canada, Mexico, 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 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

1197 (+29) <u>CONFIRMED</u> MEASLES CASES (AS OF 6/13/25)



As of June 13, 2025, a total of 1197 confirmed* measles cases were reported by 35 jurisdictions: jurisdictions: Alaska, Arkansas, Arizona, 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, South Dakota, Tennessee, Texas, Vermont, Virginia, and Washington.

Age Under 5 years: 347 (29%) 5-19 years: 446 (37%) 20+ years: 393 (33%) Age unknown: 11 (1%)

Percent Hospitalized: 12% Percent of Age Group Hospitalized: Under 5 years: 21% (72 of 347) 5-19 years: 8% (35 of 446) 20+ years: 9% (36 of 393) Age unknown: 9% (1 of 11)

Vaccination Status

Unvaccinated or Unknown: 95% One MMR dose: 2% Two MMR doses: 3%

Deaths: 3

There have been 3 confirmed deaths from measles.

TIMELINE (JANUARY – JUNE 2025)



As of June 14, 2025, the Southwestern outbreak has 919 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.

CURRENT CASE COUNT: 919

- Texas: 744 (+2) (55% of cases are in Gaines County).
- New Mexico: 81 (83% of cases are from Lea County).
- Oklahoma: 20 (+2)
- Kansas: 74 (+5) (38.89% of the cases are from Gray County).

HOSPITALIZATIONS: 104

- Texas: 96 (+2) 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 the state of Kansas.

DEATHS: 3

- Texas: 2 This is 0.27% of all cases in Texas.
- New Mexico: 1 This is 1.23% of all cases in New Mexico.

US NATIONAL CASE COUNT: 1,197

INTERNATIONAL SPREAD

- Mexico: 2337 (+257), 5 fatalities
 - Chihuahua, Mexico: 2,179 (+239) cases, 4 fatalities, 7 currently hospitalized.
- Canada: 3,207 (+208), 1 fatality
 - Ontario Outbreak, Canada: 2,115 (+74) cases, 158 hospitalizations, 1 fatality.
 - Alberta, Canada: 879(+118) cases, 5 currently hospitalized.

TEXAS: The 2025 measles outbreak in Texas exhibited a steep and sustained rise in cases beginning in late January, peaking the week of March 22 with 78 new infections. The curve reflects rapid early transmission, likely fueled by significant immunity gaps within communities. Even after the peak, the state experienced a prolonged plateau with 60–70 weekly cases through early April, suggesting continued spread across multiple population clusters. A gradual decline followed, with weekly cases dropping to the single digits by mid-May, marking a slow path to containment. However, sporadic cases persisted through the end of the month, indicating lingering transmission. The shape of the epidemic curve suggests that while public health interventions eventually curbed the outbreak, earlier action and targeted vaccination efforts might have shortened its duration and reduced its magnitude.

NEW MEXICO: The 2025 measles outbreak in New Mexico began with a sharp rise in early February, recording 14 cases in the first week. Weekly case counts remained elevated through March, peaking at 10 cases during the week of March 22. The outbreak showed a slow decline, with intermittent spikes in April, suggesting continued transmission in vulnerable communities. By mid-May, cases had fallen to two or fewer per week. The prolonged plateau highlights challenges in early containment and the need for targeted vaccination and outreach in under-immunized areas.

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: The 2025 measles outbreak in Kansas began with isolated cases in mid-February and rapidly escalated by early March, peaking with nine confirmed cases during the week of March 8. The epidemic curve suggests a pattern of sustained community transmission, with a first wave from late February to late March followed by a secondary rise in April and early May. This bimodal curve points to at least two clusters of transmission, potentially fueled by delays in diagnosis, gaps in vaccination coverage, or spread into new susceptible populations.

CURRENT SITUATION

AGES OF CASES:

WEST TEXAS OUTBRE	AK						
0-4 Years	5-17 Years	18+ Years	Pending	Total			
218 (29%)	281 (38%)	241 (32%)	4 (0.5%)	744			
NEW MEXICO OUTBREAK							
0-4 Years	5-17 Years	18+ Years	Pending	Total			
24 (30%)	20 (25%)	37 (46%)	0	81			
KANSAS OUTBREAK	KANSAS OUTBREAK						
0-4 Years	5-17 Years	18+ Years	Pending	Total			
28 (38%)	33 (44.5%)	13(17.5%)	0	74			
OKLAHOMA OUTBREAK							
0-4 Years	5-17 Years	18+ Years	Pending	Total			
17 Cases C	Confirmed, 3 Probable – no	3	20				

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			VACCINATION STATUS		
AGE	CASES	HOSPITALIZATIONS	DEATHS	STATUS	NUMBER
0.4	15	2	0	UNVACCINATED	22
0-4	15	2	U	UNKNOWN	25
5-17	4	0	0	1 DOSE	6
18+	41	3	0	2 DOSES	7
TOTAL	60	5	0	TOTAL	60

CASES BY GENDER

GENDER	CASES
MALE	29
FEMALE	31
TOTAL	60





- With a population of approximately 679,000, El Paso recorded its first five confirmed measles cases on April 4, 2025. By June 5, 2025, the City of El Paso Department of Public Health had reported 62 confirmed cases in the region: 40 among adults (≥ 18 years) and 22 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	23	20	701*	744*

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	13	52	16	81

STATE	VACCINATED WITH	VACCINATED WITH	UNVACCINATED/	TOTAL
	ONE DOSE	TWO DOSES	UNKNOWN	CASES
ОК	0	1	19	20

STATE	AGE APPROPRIATELY VACCINATED	NOT AGE APPROPRIATELY VACCINED	NOT VACCINATED	PENDING VERIFICATION/ UNABLE TO VERIFY	TOTAL CASES
KS	5	1	64	4	74

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



CUMULATIVE CASES OVER TIME (WEEK ENDING 6/14/2025)



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 744 cases across 35 counties.
- NM: A total of 81 cases across 6 counties.
- **OK:** A total of 20 cases have been reported.
- KS: A total of 74 cases across 9 counties.

EPI SUMMARY - TEXAS (n= 745) AS OF 6/6/2025

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	Hale	5	0.84%	98.30%	2
Atascosa	1	0.14	98.51	0	Harderman	1	0.14%	94.40%	3
Bailey	2	0.28%	98.94%	0	Hockley	6	0.84%	94.40%	3
Borden	1	0.14%	94.44%	1	Lamar	21 (+1)	2.67%	96.84%	0
Brewster	1	0.14	94.74%	1	Lamb	1	0.14%	97.37%	1
Brown	1	0.14%	93.64%	5	Lubbock	53	7.16%	92.25%	8
Carson	1	0.14%	91.67%	3	Lynn	2	0.28%	92.16%	2
Cochran	1/	1 07%	05.20%	1	Martin	3	0.42%	96.59%	1
Collins	14	1.57/0	95.20%	1	McLennan	8		96.53	6
	1	0.14%	93.31%	10	Midland	6 (+1)	0.42%	94.77%	4
Dallam	/	0.98%	95.30%	2	Parmer	5	0.70%	95.04%	1
Dawson	27	3.65%	88.10%	4	Potter	1	0.28%	96.32%	3
Eastland	2	0.28%	95.63	2	Randall	1	0.14%	93.95%	1
Ector	11	1.48%	91.30%	5	Reeves	1	0.14%	94.92%	1
El Paso	58	8.05%	96.37%	8	Rockwell	1	0.14%	91.47	2
Erath	1	0.14%	93.94%	5	Terry	60	8.43%	95.52%	2
Gaines	411	56.49%	82.00%	3	Upshur	5	0.70%	93.3	2
Garza	2	0.28%	97.10%	0	Yoakum	20	2.81%	92.50%	1



SOURCES:

Measles Outbreak – 13 June 2025 | Texas DSHS •

Measles Outbreak El Paso 6 June 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=69) AS OF 6/13/2025			
Finney	Between 1- 5		98%
Ford	Between 1- 5		87%
Grant	Between 1-5		99%
Gray	26 (+1)	4068%	66%
Haskell	15(+4)	16.95%	58%
Kiowa	6	10.17%	92%
Morton	Between 1- 5		82%
Pawnee	7	1.01%	
Stevens	7	11.86%	83%
	Kansas has reported 2 add	itional cases NOT associated with the outbreak in Reno and Sedgwick Counties	

ansas has reported 2 additional cases NOT associated with the outbreak itello alla Se

NEW MEXICO (n=81) AS OF 6/13/2025					
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		

Note: Those 18 years or younger have a 95% vaccination rate. According to local health officials, 63% of adults have received one shot of MMR, and only 55% have received both shots. However, they noted that there may be vaccinated adults whose records have not been added to the system. Adults make up more than half of the reported cases in New Mexico.

OKLAHOMA (n=18) AS OF 6/132025			
Tulsa and Cherokee Nation	18	Insufficient Information	89.5%

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)**



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 **	778	OUTBREAKS		
NEW MEXICO	81			
KANSAS	76			
OHIO	35			
NORTH DAKOTA	34	An outbreak of meas		
MONTANA	20	temporally related a		
	20			
	15	As of 1800 hours o		
	15	cases (including co		
	15	This year, there ha		
	12	1. Texas, involvi		
	13	2. New Mexico,		
MICHIGAN	12	3. Oklahoma, al		
ILLINOIS	10	4. <u>8 counties</u> in i		
<u>ARKANSAS</u>	8	6 Erie County		
INDIANA	8	7. Allen County,		
<u>TENNESSEE</u>	6	8. Bergen Count		
WASHINGTON	6	9. metro Atlanto		
<u>GEORGIA</u>	5	10. Gallatin Coun		
MINNESOTA	5	11. Montcalm Co		
ARIZONA	4	12. Upper Cumbe		
FLORIDA	3	13. Williams Coul		
IOWA	3	14. Faulkner Coul		
MARYLAND	3			
NEW JERSEY	3	 1 case – Brazoria C 		
VIRGINIA	3	2 cases- Collin Cou		
ΔΙΔSΚΔ	2	 2 case – Denton Coll 		
	2	• 2 cases – El Paso C		
	2	 1 case – Adult, For 3 cases – Harris Co 		
	2	• 2 case – Harrison C		
LUUISIANA		 1 case – Hays Court 2 case – Bandall Co 		
	2	 1 case - Reeves Co 		
SUUTH SAKUTA		 1 case – Adults, Ro 1 Case – Source Course 		
NEBRASKA		 1 case – Scurry Col 1 case – Shackelfor 		
RHODE ISLAND	1	• 4 cases – Tarrant		
VERMONT	1	 2 case – Travis Co 6 cases - Williamso 		
TOTAL	1196	TEXAS CASES ASSOCIAT		

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

sles is defined as three or more laboratory-confirmed cases that are and epidemiologically or virologically linked.

20	As a factor have been an a 2025 FDT there are an installed a 202 method
15	As of 1800 hours on June 14, 2025, EDT, there are approximately 1,196 measies cases (including confirmed and suspected cases) across 34 states
15	This was there have been at least 14 meaning out the states.
15	Inis year, there have been at least 14 measies outbreaks:
13	1. Texas, involving <u>55 counties</u>
12	3 Oklahoma and the Cherokee Nation in Oklahoma
10	4 8 counties in Kansas
0	5. Ashtabula and Knox Counties. Ohio
<u> </u>	6. Erie County. Pennsylvania
8	7. Allen County, Indiana
6	8. Bergen County, New Jersey
6	9. metro Atlanta, Georgia
5	10. Gallatin County, Montana
5	11. Montcalm County, Michigan (linked to Ontario Outbreak)
4	12. Upper Cumberland region, Tennessee
2	13. Williams County, Grand Rapids, North Dakota
3	14. Faulkner County, Arkansas
3	
3	** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 34
3	1 case – Brazoria County
3	2 cases – Collin County 1 case – Dallas County
2	 2 case – Denton County
2	2 cases – El Paso County
2	1 case – Adult, Fort Bend (travel-related) 3 cases – Harris County
2	 2 case – Harrison County.
2	1 case – Hays County
2	2 case – Randall County 1 case – Reeves County
2	 1 case – Adults, Rockwall County (travel-related)
1	1 Case – Scurry County
1	1 case – Shackelford
<u> </u>	
1	2 case - Travis County
1	 2 case – Travis County 6 cases - Williamson

SUMMER CAMP GUIDANCE: The U.S. Centers for Disease Control and Prevention is now urging summer camp operators to verify documentation of immunity from measles through vaccination or prior infection for all children, staff, and volunteers, amid a deadly year of outbreaks that is now approaching record levels. "Measles can spread quickly in summer camps because campers and staff spend a lot of time together in close contact with each other. Measles is more than just a rash — it can cause serious complications or even death," the CDC warned <u>in a "checklist"</u> for operators of summer camps published this week.

BE READY FOR MEASLES TOOLKIT: The Centers for Disease Control and Prevention has added new resources for healthcare providers to its "*Be Ready for Measles*." They include a decision tree to help providers determine when to administer measles, mumps, and rubella vaccinations to adults; checklists for summer camps; and templates for immunity records.

ARIZONA: Has four cases in <u>Navajo County</u>. They are linked to a single source, the county health department said Monday. All four were unvaccinated and had a history of recent international travel.

CALIFORNIA: Yolo County Health and Human Services Agency's Public Health Branch has confirmed that a resident of West Sacramento has been diagnosed with measles. Additionally, the Long Beach Health Department confirmed an infant who had recently traveled overseas has measles. These two cases represent the 14th and 15th cases of measles in California this year. **COLORADO:** The <u>Colorado</u> Health Department reported seven measles cases linked to <u>Turkish Airlines Flight 201</u>, which arrived at Denver International Airport on May 13. On 6/13/2025, the Colorado Department of Public Health and Environment confirmed a new case separate from the outbreak. A fully vaccinated Boulder County resident recently traveled to Europe, where a large number of cases have been confirmed as positive. This individual traveled between Boulder and Denver while potentially infectious.

IOWA: An unvaccinated child <u>from</u> Eastern Iowa is now the third reported measles case in that state. The child had recently traveled internationally. The case isn't linked to the earlier two cases.

MONTANA: This outbreak has been growing since April 17, 2025. Twenty cases and two hospitalizations have been reported. All 20 cases of measles are Montana residents. Newly identified cases are isolating. The 20 cases have been reported from the following jurisdictions: Flathead (2), Yellowstone (2), Hill (4), and Gallatin (12).

NEW MEXICO: The New Mexico Department of Health reports finding a positive measles sample via wastewater testing in Roswell. The sample, taken on June 3, is part of a wastewater testing initiative the New Mexico Department of Health (NMDOH) is conducting in 11 treatment facilities around the state since mid-March.

TEXAS: First measles case confirmed in Dallas County, officials say. The patient, a woman in her mid-20s, was contagious from May 30 through June 7 and visited two public locations in Plano during that time.

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 five deaths associated with this outbreak– 1 case in Sonora and 4 cases in Chihuahua. Mexico's health authorities estimate that the probable number of cases exceeds 5,000

CONFIRMED MEASLES CASES BY SEX, AGE GROUP, AND INCIDENCE RATE

4.17 500 4.50 MALE FEMALE . CONFIRMED INCIDENCE RATE 450 4.00 400 3.25 3.50 350 2.85 48% 3.00 52% 100,000 hab. 300 2.50 250 2.09 1.93 2.00 1.73 200 Ξ 1.50 .40 150 0.84 1.00 100 0.63 0.18 0.09 0.50 50 0.03 0 30 - 34 35 - 39 σ 19 54 49 59 20÷ 24 25 - 29 4 2 5 5 50 -40 0 15 1 45-2 55 o 60 50



19 (+2)

2337 (+257)

ZACATECAS

TOTAL

MEXICO OUTLOOK: CHIHUAHUA

Health officials in Chihuahua have confirmed the death of a 2-year-old girl from the measles. The child had not completed the full vaccination schedule. This marks the fourth measles-related death in Chihuahua.

Two other children, an 11-month-old infant and a seven-year-old—from a vaccine-hesitant Christian community died in May. 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-year-old 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.



Fuente: Secretaría de Salud



CANADA OUTLOOK



MEASLES 2025						
PROVINCE	CASES					
ONTARIO	2,115 (+74)					
ALBERTA	879(+118)					
ΜΑΝΙΤΟΒΑ	106 (+12)					
BRITISH COLUMBIA	12					
SASKATCHEWAN	51 (+4)					
QUEBEC	40 3203					
PRINCE EDWARD ISLAND	2					
ΝΟΥΑ SCOTIA	1					
NORTHWEST TERRITORIES	1					
TOTAL	3,207 (+208)					

CANADA OUTBREAK:

- An ongoing outbreak of measles in Ontario has been traced back to a large gathering in New Brunswick last fall that guests from Mennonite communities attended. On October 18, 2024, exposure to a travel-related case in New Brunswick led to measles cases in Ontario.
- Quebec declared its outbreak on 4/22/2025 after no new cases in 32 days.
- Currently, four provinces are experiencing active outbreaks: Ontario, Alberta, Manitoba, and Saskatchewan.
- An infant infected with measles has died in southwestern Ontario, Canada, the province's chief medical officer of health said in a statement on Thursday, 6/5/2025.



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

CANADA OUTLOOK: ONTARIO's OUTBREAK



IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 – JUNE 10, 2025



Age group	<1	1-4	5-9	10-19	20-39	40+
Unimmunized	100.0%	96.4%	97.4%	95.1%	71.5%	54.2%
1 dose	0.0%	1.6%	0.4%	1.1%	1.5%	7.5%
2 or more doses	0.0%	0.3%	0.8%	2.9%	15.6%	9.3%
Unknown	0.0%	1.8%	1.4%	0.9%	11.4%	29.0%

SOURCES: PUBLIC HEALTH ONTARIO

Multi-Jurisdictional Outbreak

- Among all outbreak cases, the majority (74.8%, n=1,559) were infants, children, and adolescents (19 years old or younger), while 24.5% (n=511) were adults, and 0.6% (n=13) had unknown age
- A total of 1.9% (n=40) of outbreak cases were pregnant at the time of their measles infection
- 98.3% (n=2,047) of outbreak cases were born in or after 1970
- Almost all infant, child, and adolescent outbreak cases (96.5%, n=1,505) were unimmunized, while 67.9% (n=347) of adults were unimmunized
- Overall, 6.9% (n=144) of outbreak cases were hospitalized and 0.4% (n=9) were admitted to the intensive care unit (ICU). 94.4% (n=136) of hospitalized cases were unimmunized, of whom 104 were infants, children, and adolescents.
- The median length of stay among discharged hospitalized cases was three days (range: 1–54 days), and the median length of stay among ICU admissions was two days (range: 1–54 days).
- There have been seven cases of congenital measles (i.e., measles diagnosed in the first 10 days of life)
- There was one death that occurred in a congenital case of measles, who was born pre-term and had other underlying medical conditions



NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 10/28/2024 - 06/10/20/25

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.

Yale MPH Student Contributors: Our semester has come to a close. Congratulations to all our graduates who worked tirelessly on this report throughout the semester. Over the summer months, volunteers will step in to continue the reports.

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