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 **103 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 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: 8% (32 of 389)

20+ years: 7% (25 of 336)

Age unknown: 10% (1 of 10)

1046 (+22) <u>CONFIRMED MEASLES CASES (AS OF 5/22/25)</u>



As of May 22, 2025, a total of 1,046 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: 311 (30%) 5-19 years: 389 (37%) 20+ years: 336 (32%) Age unknown: 10 (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: 22% (69 of 311)	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 25, 2025, the Southwestern outbreak has 880 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: 880

- Texas: 729 (+5) (56% of cases are in Gaines County)
- New Mexico: 78 (+4) (83% of cases are from Lea County)
- Oklahoma: 17
- Kansas: 56 (38.89% of the cases are from Gray County)

HOSPITALIZATIONS: 103

- Texas: 94 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: 1,076 (confirmed and suspected)

INTERNATIONAL SPREAD

- Mexico: 1,753 (+198) 4 fatalities
 - Chihuahua, Mexico: 1,657 (+167) cases, 3 fatalities, 9 hospitalizations
- Canada: 2518 (+239) (Includes Ontario's outbreak, which began November 2024)
 - Ontario, Canada: 1,795 (+173) 129 (+10) hospitalizations
 - Alberta, Canada: 560 (+55)

TEXAS:

- The outbreak appears to be slowing down in most areas. As of 5/250/2025, 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. This week, we are seeing cases rise in Sandoval County.

OKLAHOMA: Oklahoma experienced a brief, small-scale outbreak, peaking in late March. It then rapidly declined 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 at 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 disproportionately affect those under 18 years of age.

CURRENT SITUATION

AGES OF CASES:

WEST TEXAS OUTBREAK					
0-4 Years	5-17 Years	18+ Years	Pending	Total	
214 (29.5%)	273 (+1) (37.57%)	238 (+3) (32.46%)	4 (0.55%)	729	
NEW MEXICO OUTB	REAK				
0-4 Years	5-17 Years	18+ Years	Pending	Total	
22 (+1) (26.8%)	20 (28.2%)	36 (+3) (45.1%)	0	78	
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 C	onfirmed, 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

CONFIRMED CASES BY AGE			VACCINATIC	ON STATUS	
AGE	CASES	HOSPITALIZATIONS	IOSPITALIZATIONS DEATHS		NUMBER
0-4	15	2	0	UNVACCIANTED	22
0-4	15	2	U	UNKNOWN	22
5-17	4	0	0	1 DOSE	6
18+	38	3	0	2 DOSES	7
TOTAL	57	5	0	TOTAL	57

CASES BY GENDER

GENDER	CASES
MALE	27
FEMALE	30
TOTAL	57



- With a population of approximately 679,000, El Paso recorded its first five confirmed measles cases on April 4, 2025. By May 25, 2025, the City of El Paso Department of Public Health had reported 57 confirmed cases in the region: 38 among adults (≥ 18 years) and 15 among young children (< 4 years).
- As of May 2025, El Paso County's two-dose measles vaccination coverage is 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. Contact tracing and genomic sequencing linked the Chihuahua outbreak (first detected late February 2025) to Gaines County and confirmed 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

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

CURRENT SITUATION: VACCINATION STATUS

STATE	VACCINATED	VACCINATED	UNVACCINATED/	TOTAL
	WITH 1 DOSE	WITH 2 DOSES	UNKNOWN	CASES
тх	18	19	692*	729*

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	51	15	78

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



Among the affected counties in Texas, 19 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 - 5/24/2025)



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 729 cases across 34 counties.
- NM: A total of 784 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= 729) AS OF 5/25/2025

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	· · ·	20 (+1)	2 679/		0
Bailey	2	0.28%	98.94%	0	Lamar	20 (+1)	2.67%	96.84%	0
Borden	1	0.14%	94.44%	1	Lamb	1	0.14%	97.37%	1
Brewster	1 (new)	0.14	94.74%	1	Lubbock	53	7.16%	92.25%	8
Brown	1	0.14%	93.64%	5	Lynn	2	0.28%	92.16%	2
Carson	1	0.14%	91.67%	3		3	0.42%	00 500/	1
Cochran	14	1.97%	95.20%	1	Martin	3	0.42%	96.59%	1
Collins	1	0.14%	93.31%	16	Midland	5 (+2)	0.42%	94.77%	4
Dallam	7	0.98%	95.30%	2	Parmer	5	0.70%	95.04%	1
Dawson	26	3.65%	88.10%	4	Potter	1	0.28%	96.32%	3
Eastland	2	0.28%	95.63	2	Foller	1	0.20/0		3
Ector	11	1.54%	91.30%	5	Randall	1	0.14%	93.95%	1
El Paso	57	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	407 (+2)	56.49%	82.00%	3	Terry	60	8.43%	95.52%	2
Garza	2	0.28%	97.10%	0		5	0.70%	93.3	2
Hale	5	0.84%	98.30%	2	Upshur		0.70%		2
Harderman	1	0.14%	94.40%	3	Yoakum	20	2.81%	92.50%	1

SOURCES: Measles Outbreak – May 23, 2025 | Texas DSHS 2023-2024 School Vaccination Coverage Levels by District/Private School and County - Kin



EPI SUMMARY (KS, NM, OK)

COUNTY	MEASLES CASES (NUMBER OF NEW CASES)	% of TOTAL CASES	% KINDERGARTENERS VACCINATED (2023-2024)
KANSAS (n=56) AS OF 5/25/2025			
Finney	Between 1-5		98%
Ford	Between 1-5		87%
Grant	Between 1-5		99%
Gray	21	38.89%	66%
Haskell	10 (+2)	14.81%	58%
<u>Kiowa</u>	6	11.11%	92%
Morton	Between 1-5		82%
<u>Stevens</u>	7	12.96%	83%
	Kansas has reported 2 addition	onal cases NOT associated with the outbreak, in Reno and Sedgwick C	Counties.
NEW MEXICO (n=78) AS OF 5/25/2025			
Chaves	1	1.28%	98%
Curry	1	1.28%	95%
Doña Ana	2	2.35%	95%
Eddy	3	4.05%	93%
Lea	65	83.33%	94%
Sandoval	6	7.69	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 5/25/2025			
Tulsa and Cherokee Nation	17	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
TEXAS **	751
NEW MEXICO	78
<u>KANSAS</u>	59
<u>OHIO</u>	34
NORTH DAKOTA	21
<u>OKLAHOMA</u>	17
PENNSYLVANIA	13
CALIFORNIA	11
<u>MICHIGAN</u>	9
<u>MONTANA</u>	9
<u>ILLINOIS</u>	8
<u>INDIANA</u>	8
NEW YORK	7
<u>ARKANSAS</u>	6
<u>TENNESSEE</u>	6
WASHINGTON	6
COLORADO	5
<u>GEORGIA</u>	4
MARYLAND	3
<u>NEW JERSEY</u>	3
<u>ALASKA</u>	2
<u>FLORIDA</u>	2
<u>HAWAII</u>	2
LOUISIANA	2
<u>MINNESOTA</u>	2
<u>MISSOURI</u>	2
<u>VIRGINIA</u>	2
<u>IOWA</u>	1
KENTUCKY	1
RHODE ISLAND	1
VERMONT	1
TOTAL	1076

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

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

As of 1600 hours on May 25, 2025, EDT, there are approximately 1.076 measles cases (including confirmed and suspected cases) across 31 states.

This year, there have been **13 measles outbreaks**:

- 1. Texas, involving 34 counties
- 2. New Mexico, 6 counties
- 3. Oklahoma, and the Cherokee Nation in Oklahoma
- 8 counties in Kansas 4.
- Ashtabula and Knox Counties, Ohio 5.
- Erie County, Pennsylvania 6.
- Allen County, Indiana 7.
- Bergen County, New Jersey 8.
- 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

** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 22

- 1 case Brazoria County
- 2 case Collin County
- 2 case Denton
- 1 case Adult, Fort Bend (travel-related)
- 4 cases Harris County
- 1 case Harrison County.
- 1 case Hays County 1 case - McLennan County
- 2 case Randall County
- 1 case Adults, Rockwall County (travel-related)
- 1 Case Scurry County
- 1 case Shackelford
- 2 cases Tarrant
- 2 case Travis County
- TEXAS CASES ASSOCIATED WITH THE OUTBREAK: 729

1,076*

US OUTLOOK

NORTH DAKOTA: North Dakota Health and Human Services (HHS) reports two measles cases were confirmed in Grand Forks County, making it the third county in the state impacted by measles. These are the first cases reported in Grand Forks County. The cases in Grand Forks County are linked to international travel. Confirmed measles cases in the state have increased to 21 since May 2. This includes two additional cases in Williams County, four in Cass County and two in Grand Forks County. To date, one person has been hospitalized. All reported cases have involved unvaccinated individuals. The new cases in Williams and Cass counties were linked to contact with known measles cases. (5/23/2025)

IOWA: An unvaccinated adult in central Iowa has tested positive for measles, marking the first confirmed case of the highly contagious respiratory virus in the state since 2019, the state Department of Health and Human Services said in a release Friday, May 23. Iowa HHS wrote that the person's case tested positive through the State Hygienic Laboratory. (5/23/2025)

VIRGINIA: The Virginia Department of Health (VDH) confirms the state's second measles case of 2025. The patient is a teenager aged 13 to 17 in the state's northwest region who recently traveled internationally. (5/24/2025)

INDIANA – The state's measles outbreak was declared over this week. (5/24/2025)

KANSAS: Health officials have confirmed a case of measles in a Pawnee County resident, the Kansas Department of Health and Environment announced Saturday. The KDHE and the Pawnee County Health Department are now working to notify individuals who may have been exposed. It's unknown if the case is connected to a wider measles outbreak impacting southwest Kansas, the department said. (5/24/2025)

ALASKA: An unvaccinated Anchorage youth tested positive for measles on May 21, according to the Anchorage Health Department. The minor wasn't attending school but spent time in several public areas while likely contagious, according to the health department, which is now <u>asking people to check</u> if they might have been exposed. (5/24/2025)

MONTANA: Flathead County health officials on Wednesday said they had confirmed a case of measles in a local adult who had recently traveled out of state. The announcement brings Montana's total number of identified measles cases this year up to nine, with the rest in Gallatin County. (5/22/2025)

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.

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





14

1,753

ZACATECAS

TOTAL

SOURCE: MEDICHIHUAHUA, DAILY INFIRMATION - MEASLES 23 MAY 2025

MEXICO OUTLOOK: CHIHUAHUA

DEATHS:

- 2 children, aged 11 months and seven years, died of complications from measles this month. Both children had underlying medical problems,
- A 31-year-old unvaccinated man died in April.
- A one-year-old girl lost her life to measles in neighboring Sonora. She and her family came from Chihuahua.



Fuente: Secretaría de Salud



CANADA OUTLOOK

Brief Timeline of Outbreak



MEASLES 2025				
PROVINCE	CASES			
ONTARIO	1,795 (+173)			
ALBERTA	560 (+55)			
ΜΑΝΙΤΟΒΑ	64			
BRITISH COLUMBIA	10 (+1)			
SASKATCHEWAN	45 (+8)			
QUEBEC	40			
PRINCE EDWARD ISLAND	2			
NOVA SCOTIA	1 (+1)			
NORTHWEST TERRITORIES	1 (+1)			
TOTAL	2,518 (+239)			

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 continue to climb.
- We are starting to see numbers increase in Saskatchewan.
- 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, CA MEASLES AND RUBELLA WEEKLY MONITORING REPORT, BC

CANADA OUTLOOK: ONTARIO

MORBIDITY AND MORTALITY						
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS			
ONTARIO	1,795 (+173)	129 (+10)	0			

IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 - MAY 20, 2025



Age group	<1	1-4	5-9	10-19	20-39	40+		
Unimmunized	99.0%	95.7%	96.5%	95.2%	69.8%	53.3%		
1 dose	0.0%	1.8%	0.4%	0.6%	1.5%	5.6%		

0.9%

2.2%

1.9%

2.3%

14.7%

14.1%

7.8%

33.3%

0.0%

2.4%

ONTARIO:

- Among all outbreak cases, the majority were in infants, children and adolescents (75.9%, n=1,363),
- while 23.6% (n=424) were in adults, and 0.4% (n=8) had unknown age •
- 2.1% (n=38) of outbreak cases were pregnant.
- 98.4% (n=1,767) of outbreak cases were born in or after 1970.
- Among infant, child and adolescent outbreak cases, 96.0% (n=1,309) were unimmunized, while
- among adults, 66.3% (n=281) were unimmunized •
- Overall, 7.2% (n=129) of outbreak cases have required hospitalization, and 0.6% (n=10) were admitted to the ICU.
- Of those hospitalized, 93.8% (n=121) were unimmunized, including 92 children.

NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 10/28/2024 - 05/20/25



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).3,4 Cases are considered to be infectious from four days before rash onset to four days after rash onset.3

SOURCES: PUBLIC HEALTH ONTARIO

0.0%

1.0%

2 or more doses

Unknown

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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