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

MEASLES – THE AMERICAS 2025

MORBIDITY AND MORTALITY

COUNTRY	CONFIRMED CASES	DEATHS
NORTH AMERICA -3 ACTIVE OUTBREAKS		
US	1,443	3
CANADA	4,849*	1
* Includes the probable cases reported by Canada under the clinically confirmed column, due to alignment with PAHO's case definition.		
MEXICO	4,437	18
CENTRAL AMERICA - NO ACTIVE OUTBREAKS		
BELIZE (JULY 2025- OUTBREAK OVER)	34	0
COSTA RICA	1	0
SOUTH AMERICA – 2 ACTIVE OUTBREAKS		
BOLIVIA	286	0
ARGENTINA (NO NEW CASES)	35	0
BRAZIL (NO NEW CASES)	23	0
PARAGUAY	26	0
PERU (NO NEW CASES)	4	0
THE CARRIBEAN (NO NEW CASES)	34	0
TOTAL	11,161	22

Yale SCHOOL OF PUBLIC HEALTH

9/8/2025
1300 HRS EDT

RISK ASSESSMENT IN OUTBREAK AREAS

Risk for Localized Spread	Risk to unvaccinated populations in and around the outbreak areas	Risk to Children	Potential for sustained transmission
MODERATE	HIGH	HIGH	MODERATE

LINKS

UNITED STATES
CDC

TEXAS LINKS
- TEXAS DEPARTMENT OF STATE HEALTH SERVICES

NEW MEXICO LINKS
- NEW MEXICO DEPARTMENT OF HEALTH

OKLAHOMA LINKS
- OKLAHOMA STATE DEPARTMENT OF HEALTH

KANSAS
- KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

CANADA
- MEASLES AND RUBELLA WEEKLY MONITORING REPORT
- ALBERTA DASHBOARD
- BRITISH COLOMBIA
- MANITOBA HEALTH
- NEW BRUNSWICK
- NOVA SCOTIA
- PUBLIC HEALTH ONTARIO
- PRINCE EDWARDS ISLAND
- QUEBEC
- SASKATCHEWAN

MEXICO
INFORME DIARIO DEL BROTE DE SARAMPIÓN EN MÉXICO, 2025
MEDICHIHUAHUA

BOLIVIA
Estamos Salud

PARAGUAY
Salus Publica

WHO
Immunization data

MEASLES TESTING LABORATORIES
- CDC MEASLES VIRUS LABORATORY

RESOURCES FOR THE PUBLIC
- CDC – MEASLES
- MEASLES CASES AND OUTBREAKS
- NYSDOH: YOU CAN PREVENT MEASLES
- CDC VIDEO: GET VACCINATED AND PREVENT MEASLES
- CDC VACCINE SHOT FOR MEASLES
- DIRECTORY FOR LOCAL HEALTH DEPARTMENTS

RESOURCES FOR EMS PROVIDERS
- GUIDANCE FOR SUSPECTED MEASLES PATIENT
- NYSDOH POLICY STATEMENT

PORTALS, BLOGS, AND RESOURCES
- CIDRAP
- CORI
- FORCE OF INFECTION
- IVAC
- KAISER HEALTH NEWS
- MEDPAGE TODAY
- NY STATE GLOBAL HEALTH UPDATE
- THE PANDEMIC CENTER TRACKING REPORT
- YOUR LOCAL EPIDEMIOLOGIST

BACKGROUND

TYPE OF PUBLIC HEALTH EMERGENCY: LARGE MULTINATIONAL MEASLES OUTBREAK (7 SEPTEMBER 2025)

OVERVIEW: The Americas have experienced a rate of measles infections **34 times higher than one year ago**. In 2025, a total of **10,648 cases and 21 deaths** have been reported across the region. Ten countries account for these cases, with **Canada having 4,848 cases (1 death), Mexico (4,437 cases, 18 deaths), and the United States (1,443** cases, **3 deaths**) representing the vast majority. Other affected countries include **Bolivia (286 cases)**, **Argentina (35)**, **Belize (34)**, **Brazil (23)**, **Paraguay (26)**, **Peru (4)**, and **Costa Rica (1)**. Additionally, **34 cases** have been reported in the **Caribbean**, although PAHO has not specified the countries involved. This sharp rise underscores the urgent need to close gaps in routine immunization, improve access to healthcare, and address vaccine hesitancy.

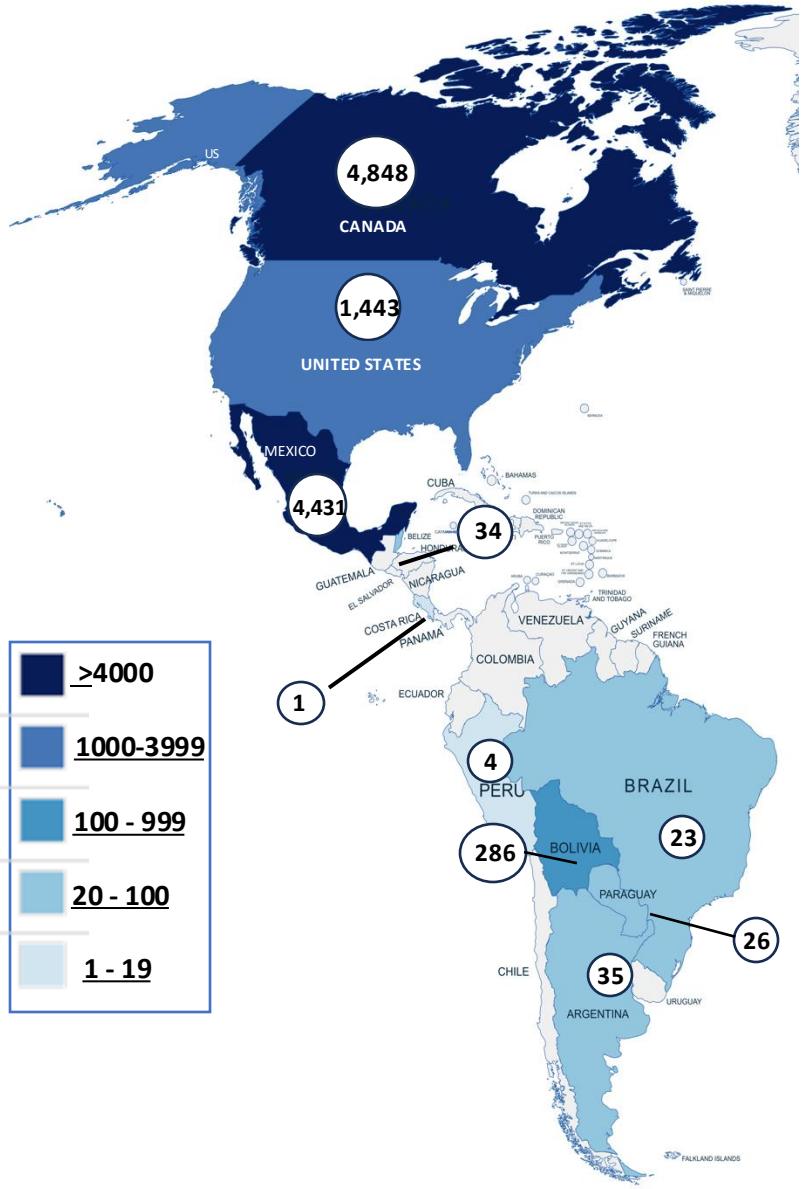
GENOTYPES: Genotype D8 is the primary driver of the current outbreaks and has been identified in cases across eight countries—particularly within Mennonite communities in **Canada, the United States, Mexico, Belize, Argentina, Bolivia, Brazil,** and **Paraguay**. In Brazil, transmission has been concentrated among members of a small **Russian Orthodox community in Tocantins state**. **Genotype B3** has also been detected, though far less frequently, and across a wider geographic area. These B3 detections are likely linked to sporadic introductions rather than the sustained local transmission seen with D8.

VACCINATION: Although entirely preventable through the MMR (measles, mumps, and rubella) vaccine, outbreaks continue to occur in under-vaccinated communities, leading to serious health outcomes and increased transmission risk (CDC). Since 2019, vaccination rates have declined globally, leading to a worldwide increase in measles cases.

- Contributing factors:
  - Socioeconomic inequities
  - Limited healthcare access
  - Under-resourced public health systems
  - Localized vaccine hesitancy
- **Coverage in The Americas**
  - **First dose:** 88%
  - **Second dose:** 77%
  - **Target threshold to prevent outbreaks:** ≥95%

REGIONAL TRENDS:

- *Canadian and Mexican outbreaks continue to grow rapidly.*
- *The outbreaks in the United States continue to occur, with the school year resuming in August/ September.*
- *Smaller outbreaks in other countries have been contained, including Belize.*
- *Countries are launching vaccination campaigns in response to the outbreak.*
- *The most affected age groups are children under 5 years and adolescents aged 10–19 years.*



UNITED STATES

BACKGROUND

Measles, declared eliminated in the U.S. in 2000, has made a troubling return**. As of September 3,** 2025, the U.S. has recorded **1,431 confirmed cases across 42 states**—already exceeding the totals from both 2019 and 1992 and marking the highest number since the disease was eliminated. This represents a sharp rise from just 285 cases in all of 2024. In 2025 alone, **35 outbreaks** have been reported, with **86% of confirmed cases (1,231 of 1,431)** outbreak-associated. By comparison, 2024 saw only 16 outbreaks, and 69% of cases (198 of 285) were outbreak-linked.

VACCINATION GAPS - Immunization rates have fallen below the 95% herd immunity threshold in many communities. Key drivers include:

- Public mistrust and misinformation, amplified by social media.
- Pandemic-era disruptions to routine immunization programs.
- Cuts to NIH and CDC funding for vaccine-hesitancy research and the sidelining of expert voices.

These gaps have fueled localized outbreaks, enabling broader chains of transmission.

SURVEILLANCE & INTERVENTION - Public health responses are evolving:

- **Wastewater surveillance** in Maryland, California, New Mexico, Texas, and Connecticut is detecting measles circulation– sometimes before clinical symptoms emerge.
- **Community-based vaccination drives** (door-to-door outreach, rapid-response brigades, and culturally tailored education) are raising local uptake.
- **Targeted interventions** in close-knit, under-vaccinated populations (Mennonite, Amish, and select religious or rural communities) remain central to outbreak control.

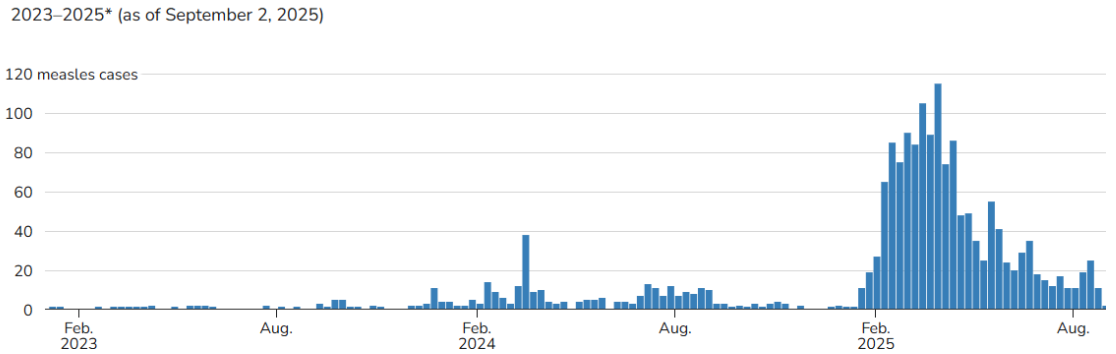
THE ROAD FORWARD

To re-secure measles elimination, the U.S. must:

- **Reinforce Vaccination Coverage** – Push childhood coverage back above 95%.
- **Invest in Public Health Infrastructure** – Restore outbreak response capacity weakened by funding cuts.
- **Rebuild Trust** – Partner with community leaders to deliver empathetic, accurate communication.
- **Scale Surveillance Innovations** – Expand wastewater monitoring and integrated early-warning systems.
- **Align Policy with Science** – Ensure state and national health policies follow evidence-based guidance.

MEASLES CASES IN 2025 - CDC

1,431 (+23) CONFIRMED MEASLES CASES (AS OF 9/3/2025)



As of September 2, 2025, there have been a total of 1,431 confirmed* measles cases reported in the United States. Among these, 1,413 of the measles cases were reported by 42 jurisdictions: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Idaho, 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, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin, and Wyoming. A total of 18 measles cases were reported among international visitors to the U.S.

Age
Under 5 years: **400 (28%)**
5-19 years: **542 (38%)**
20+ years: **482 (34%)**
Age unknown: **7 (0%)**

Vaccination Status
Unvaccinated or Unknown: **92%**
One MMR dose: **4%**
Two MMR doses: **4%**

Percent Hospitalized: 12%
Under 5 years: 21% (85 of 400)
5-19 years: 7% (40 of 542)
20+ years: 11% (53 of 482)
Age unknown: 0% (0 of 7)

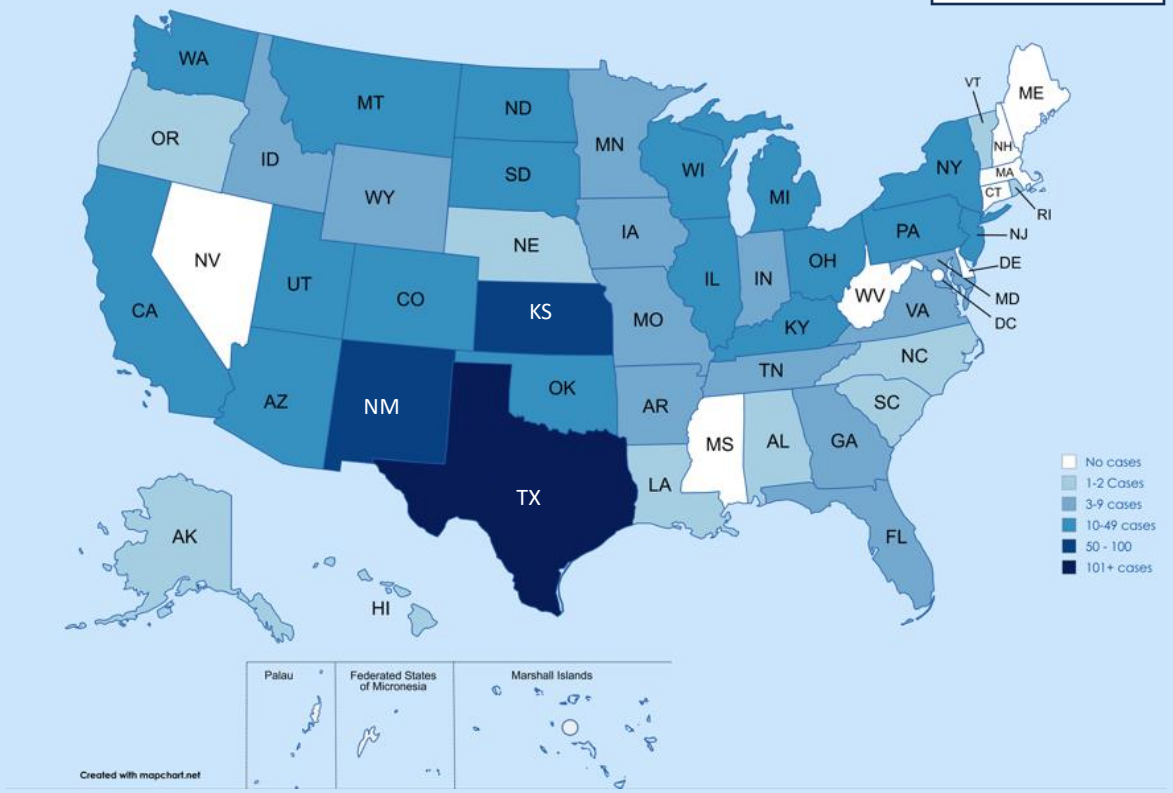
Deaths: 3

There have been 3 confirmed deaths from measles.

MEASLES CASES - AS OF 8 SEP 2025

** 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)*

1,443*



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 **	802
NEW MEXICO	100
KANSAS	90
OHIO+	38
NORTH DAKOTA	36
MONTANA	31
ARIZONA+	28
COLORADO+	27
MICHIGAN	27
WISCONSIN+	24
OKLAHOMA	20
CALIFORNIA	20
UTAH+	20
NEW YORK	17
PENNSYLVANIA	16
KENTUCKY	14
SOUTH DAKOTA	12
WASHINGTON	11
ILLINOIS	10
NEW JERSEY+	10
INDIANA	9
WYOMING	9
ARKANSAS	8
IOWA	8
MISSOURI	7
FLORIDA	6
GEORGIA	6
TENNESSEE	6
MINNESOTA	5
IDAHO+	4
VIRGINIA+	4
MARYLAND	3
SOUTH CAROLINA+	3
ALASKA	2
HAWAII	2
LOUISIANA	2
ALABAMA+	1
NEBRASKA	1
NORTH CAROLINA	1
OREGON	1
RHODE ISLAND	1
VERMONT	1
TOTAL	1443

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 1800 hours on 7 September 2025, EDT, there are approximately 1,442 measles cases (including confirmed and suspected cases) across 42 states. There have been 36 Outbreaks in the US this year this includes the following:

- ***Arizona*** *- Navajo County, Mohave County*
- ***Arkansas*** *- Faulkner County*
- ***Colorado*** *– 10 cases linked to an infectious traveler*
- ***Georgia*** *- Metro Atlanta*
- ***Illinois*** *- Southern Illinois (Franklin–Williamson region)*
- ***Indiana*** *- Allen County*
- ***Iowa*** *- Johnson County*
- ***Kansas*** *9 counties*
- ***Kentucky*** *- Woodford, Fayette, and Jefferson Counties*
- ***Montana,*** *Gallatin, Hill, and Yellowstone Counties.*
- ***Michigan*** *- Montcalm County (linked to Ontario Outbreak) and a 2nd outbreak in Grand Traverse County*
- ***Missouri*** *- Cedar County*
- ***Oklahoma*** *and the Cherokee Nation*
- ***Ohio*** *- Ashtabula and Knox Counties*
- **Pennsylvania** *- Erie County*
- ***New Jersey*** *- Bergen County*
- ***New Mexico*** *- 6 counties*
- ***North Dakota*** *- Williams County, Grand Rapids*
- ***Texas*** *- 37 counties*
- ***Tennessee*** *- Upper Cumberland Region*
- ***Utah*** *- Utah County*
- ***Wisconsin*** *- Oconto County*
- ***Wyoming*** *- Carbon County*

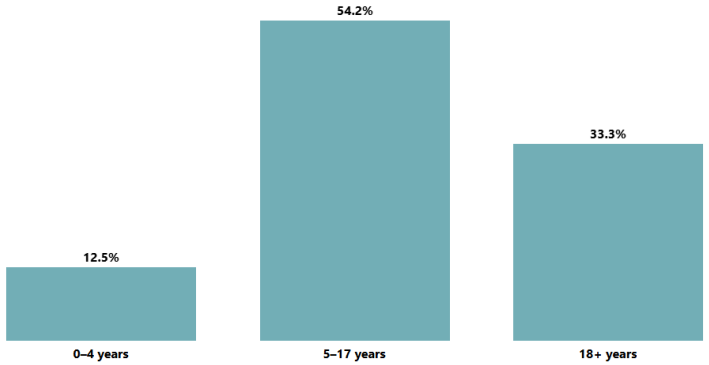
**** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 40**

- 1 case – Bell County
- 1 case - Bexar
- 1 case – Brazoria County
- 3 cases– Collin County
- 1 case – Dallas County
- 2 cases – Denton County
- 2 cases – El Paso County
- 1 Case – Adult, Fort Bend (travel-related)
- 5 cases – Harris County
- 1 case – Harrison County.
- 1 case – Hays County
- 1 case - Midland
- 2 cases – Randall County
- 1 case – Adults, Rockwall County (travel-related)
- 1 Case – Scurry County
- 1 case – Shackelford
- 4 cases – Tarrant
- 2 cases – Travis County
- 8 cases - Williamson

TEXAS CASES ASSOCIATED WITH THE OUTBREAK: 762

UNITED STATES – OUTBREAKS AND NEW CASES

WISCONSIN: As of September 5, 2025, the Wisconsin Department of Health Services (DHS) and Oconto County Public Health have confirmed **25 measles cases** in Oconto County. Two hospitalizations have been reported. The ongoing investigation indicates that measles is spreading locally. DHS is coordinating with Oconto County and neighboring local health departments to identify and directly notify individuals with known exposures. Health officials previously reported that the original cases were linked to travel to another state.



NEW JERSEY: The New Jersey Department of Health (NJDOH) **alerted residents** to a new measles case in Bergen County that's not linked to any previously reported cases in the state. It's the tenth measles case recorded in the state this year.

VIRGINIA: A student at Trantwood Elementary in the Great Neck community has been diagnosed with measles, raising concerns among some parents. Virginia Beach City Public Schools notified families and staff of a reported case of measles at Trantwood Elementary. They said the first appearance of measles symptoms was on August 26.

OHIO: The Zanesville-Muskingum County Health Department has reported three laboratory-confirmed cases of measles in three children in Muskingum County. All three children are from the same family, and they are all currently home and improving. The Health Department has been working with the family and hospital to identify and follow up with any exposures and contacts and help where needed.

COLORADO: The Colorado Department of Public Health and Environment (CDPHE) on Saturday announced additional exposures of measles but made no mention of the extra cases in the county. After a closer examination of the state's measles case information webpage, additional cases were discovered, bringing the total so far this year to 27.

SOUTH CAROLINA: The South Carolina Department of Public Health (DPH) has confirmed a case of measles in an Upstate resident. This is the third confirmed case of measles reported in South Carolina since July 2025. The person is unvaccinated and does not have immunity from a previous measles infection. They do not have a specific, known exposure to someone with measles. Still, they did have a recent international trip to a country with an ongoing measles outbreak and were not contagious while traveling.

UTAH: A new measles case has been confirmed in Grand County, marking the **20th measles case** in Utah as of September 6, 2025. The Southeast Utah Health Department confirmed an unvaccinated individual under the age of 18 was diagnosed after being exposed outside the county, according to a press release from the department.

ARIZONA: The measles outbreak in the Arizona-Utah border community continues to grow. Mohave County public health officials are working to contain a measles outbreak in a small town on the Arizona-Utah border, where cases have doubled in the last week. As of September 3, **24 measles cases were confirmed in the Colorado City** area, up from 12 cases a week earlier. Eight cases have also been reported recently in neighboring communities in southwest Utah. Colorado City has about 2,500 residents, many of whom are members of the Mormon-offshoot polygamist sect known as the Fundamentalist Church of Jesus Christ of Latter-day Saints (FLDS). The community has very low vaccination rates. One Colorado City elementary school last year reported a kindergarten MMR vaccination rate of just 7% – the lowest rate reported by any school in the state, records from the Arizona Department of Health Services show. The other school in the town reported a 40% kindergarten MMR vaccination rate last year. According to the Mohave County Department of Public Health, the majority of measles cases in Colorado City have been among school-aged children, with infected individuals ranging in age from one to 45 years old. Arizona has had **28 cases** of measles in 2025.

CANADA

BACKGROUND: The 2025 measles outbreak in Canada is the product of a perfect storm: a sparking importation event, weakening population immunity, rising hesitancy and misinformation, structural vulnerabilities in public health and healthcare access, and social dynamics that allowed the virus to spread through susceptible networks.

IMPORTATION AND INITIAL SPARK: The current outbreak began in **October 2024** when an imported case attending a large gathering in New Brunswick– which included attendees from multiple provinces– introduced the measles virus into Canada.

MULTI-JURISDICTION SPREAD: From late 2024 into 2025, the outbreak continued to spread across several provinces: Ontario, Alberta, Manitoba, British Columbia, Saskatchewan, Nova Scotia, New Brunswick, Prince Edward Island, the Northwest Territories, and Quebec.

CONTRIBUTING FACTORS

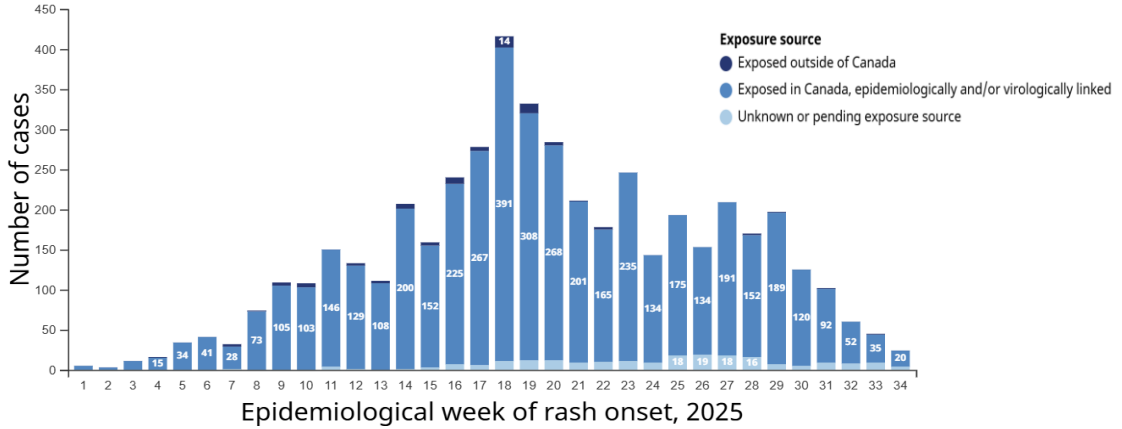
- **Low Vaccination Coverage**
  - **Erosion of herd immunity:** National first-dose measles vaccination coverage fell from 90% in 2019 to around 83% by 2023—well below the 95% threshold.
  - **Concentration in under-vaccinated communities**: The majority of cases are among unvaccinated individuals, with many arising within close-knit communities and groups with limited engagement with public health.
- **Vaccine Hesitancy & Misinformation**
  - **Lingering hesitancy and misinformation**: Distrust in public health, fueled partly by the COVID-19 pandemic and growing anti-vaccine movements, has played a role in lower vaccination rates.
  - **Attitudinal challenges**: Studies show that declining familiarity with vaccine-preventable diseases can reduce perceived threat, leading to complacency or skepticism toward vaccination.

Public Health System and Access Gaps

- **Disrupted immunization services**: COVID-19 strained public health infrastructure, leading to missed routine vaccinations.
- **Gaps in healthcare access and systems**:
  - About **20% of Canadians lack a consistent family doctor**, reducing opportunities for routine vaccine discussions.
  - There's **no comprehensive national vaccine registry**, making it hard to track immunization status.
- **Looser exemption policies**: In some regions like Alberta, religious and personal exemptions for school-entry vaccination are common and hard to challenge.

Community Dynamics: The outbreak spread swiftly among tightly interlinked religious groups—such as Mennonite communities—that span Canada, the U.S., and Mexico.

EPIDEMIOLOGICAL CURVE FOR MEASLES CASES, BY EPIDEMIOLOGICAL WEEK - 34



SOURCES:

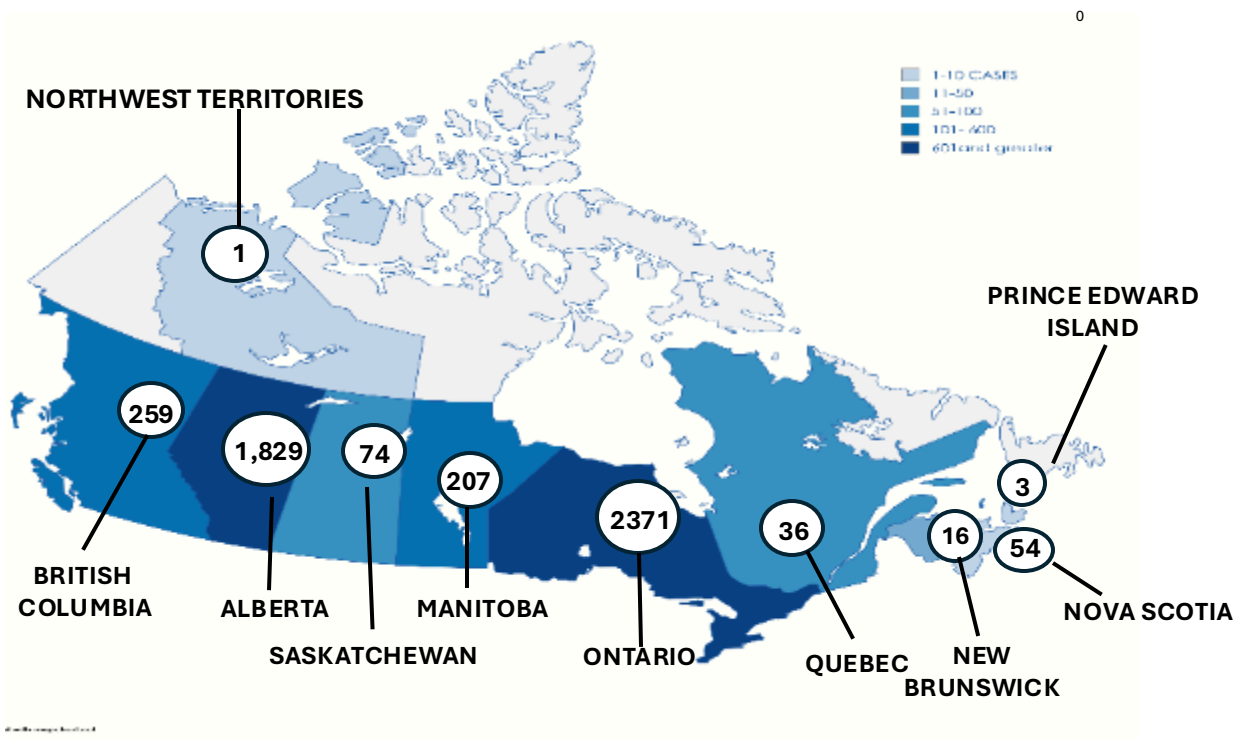
Measles and rubella weekly monitoring report – Week 34
Updated Public Health Risk Assessment: Measles In Canada - 26 July 2025
WHO - Measles – Region of the Americas
Measles jumps borders in North America with outbreaks in Canada, Mexico, and the US
PAHO - Measles cases rise in the Americas in 2025
PAHO - Epidemiological Update - Measles in the Americas Region - 1 July 2025
PAHO - Ten countries in the Americas report measles outbreaks in 2025- 15 August 2025

CANADA – CURRENT SITUATION

Brief Timeline of Outbreak

As of 9/7/2025

MEASLES 2025			
PROVINCE	CONFIRMED CASES	PROBABLE CASES	TOTALS
ONTARIO	2,054	317	2,371
ALBERTA	1,829 (+10)	0	1,829
MANITOBA	191 (+4)	16	207
BRITISH COLUMBIA	242 (+27)	17	259
SASKATCHEWAN	74	0	74
QUEBEC	36	0	36
PRINCE EDWARD ISLAND	3	0	3
NOVA SCOTIA	53	0	53
NORTHWEST TERRITORIES	1	0	1
NEW BRUNSWICK	15	0	15
TOTAL	4,498 (+21)	347	4848 (+21)



4,848 Cases (4,499 Confirmed, 347 Probable)
1 Death

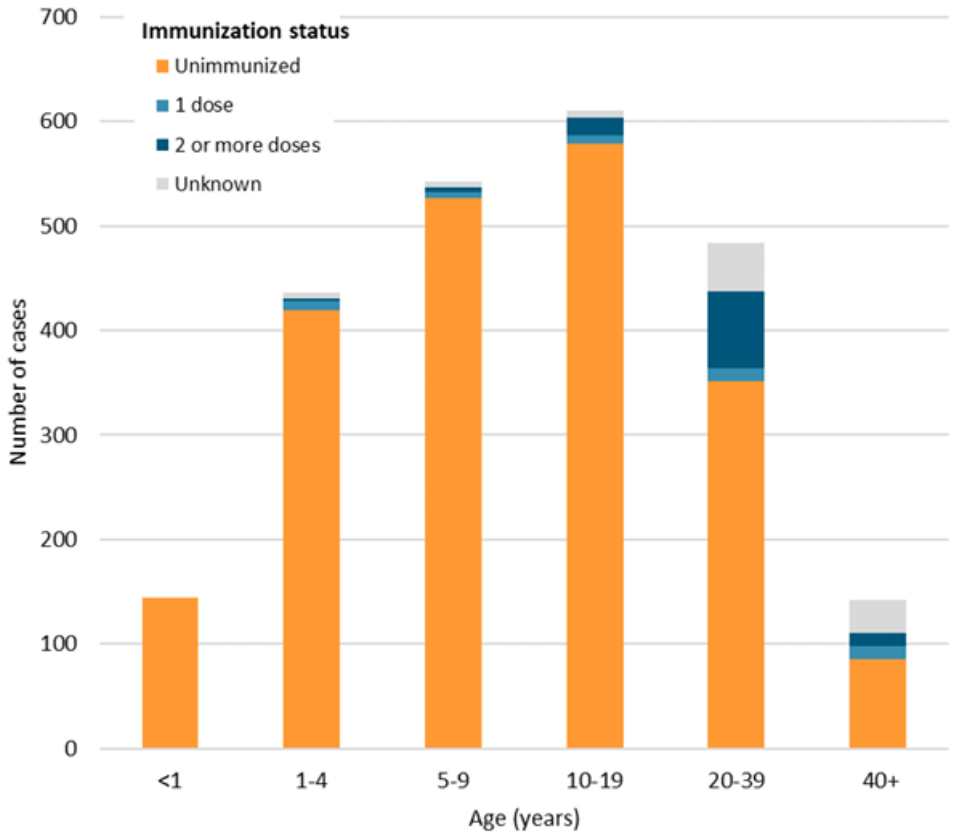
* Count includes 43 cases not associated with the outbreak and the outbreak numbers that began on 21 October 2024

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

OUTBREAK – ONTARIO
(OCTOBER 18, 2024, TO September 2, 2025)

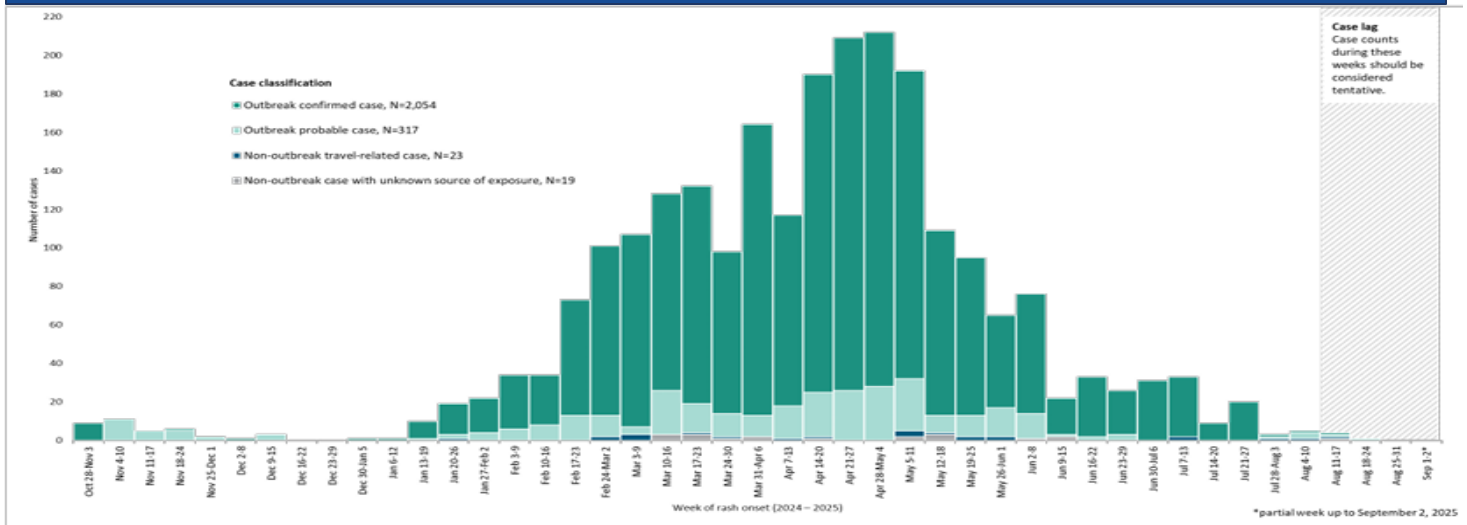
MORBIDITY AND MORTALITY			
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS
ONTARIO*	2,371 (2,054 confirmed, 317 probable)	165 (12 ICU)	1

IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 – SEPTEMBER 2, 2025



- As of September 2, Ontario has reported a total of 2,371 measles cases (2,054 confirmed, 317 probable) associated with the multi-jurisdictional outbreak occurring in 26 public health units. This represents an increase of seven new cases.
- Among all outbreak cases, the majority (73.1%, n=1,732) were infants, children, and adolescents (19 years old or younger), while 26.4% (n=626) were adults, and 0.5% (n=13) had unknown age.
- Almost all infant, child, and adolescent outbreak cases (96.4%, n=1,669) were unimmunized, while 69.9% (n=437) of adults were unimmunized.
- A total of 2.2% (n=51) of outbreak cases were pregnant at the time of their measles infection.
  - Of these, 82.4% (n=42) were unimmunized, 2.0% (n=1) received one dose of measles-containing vaccine, 9.8% (n=5) received two or more doses, and 5.9% (n=3) had unknown immunization status.
  - There have been nine cases of congenital measles (i.e., measles diagnosed in the first 10 days of life).
- Overall, 7.0% (n=165) of outbreak cases were hospitalized, and 0.5% (n=12) were admitted to the intensive care unit (ICU).
  - Overall, 7.0% (n=165) of outbreak cases were hospitalized, and 0.5% (n=12) were admitted to the intensive care unit (ICU).
  - 94.5% (n=156) of hospitalized cases were unimmunized, of whom 122 were infants, children and adolescents.
- One death 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 – 09/2/2025



SOURCES: PUBLIC HEALTH ONTARIO

OUTBREAK – ALBERTA

MORBIDITY AND MORTALITY			
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS
Alberta	1,829	153 (15 ICU) (1 Currently Hospitalized)	0

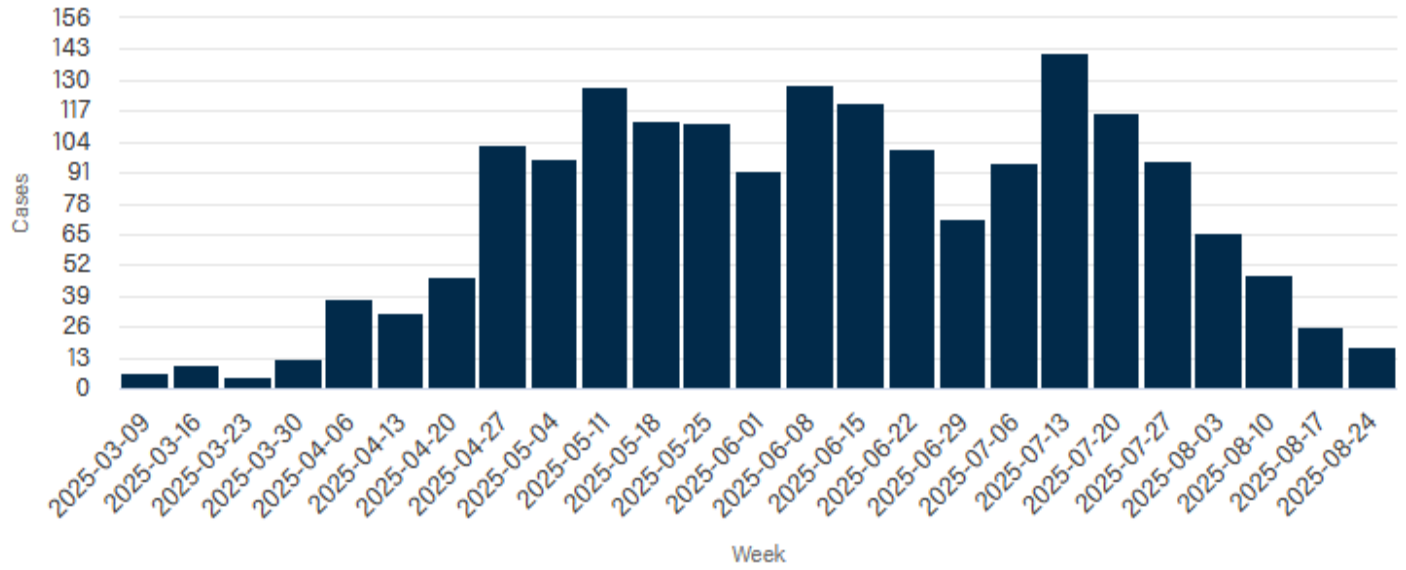
IMMUNIZATION STATUS	COUNT
Unimmunized	1,627
1 dose	54
2 or more doses	77
Unknown	67

AGE RANGE	NUMBERS
<5 years	517 (+2)
5 to 17 years	803 (+5)
18 to 54 years	500 (+3)
55 years and older	9

Multi-Jurisdictional Outbreak

- Measles transmission is currently occurring in Alberta, affecting individuals of all ages – including infants, children, and adults. Most reported cases have been in children under 5 years old and those aged 5 to 17 who are not immunized.
- Cases have been reported in all zones of the province, with the highest numbers in the north, south, and central zones. Due to the number of people in these areas who may not be immune to measles, some cases are likely going undetected or unreported.
- Alberta Health Services shares known public exposure locations for the Edmonton, Calgary, Central, and parts of the North Zone. A standing exposure advisory has been issued for the South Zone and areas of the North Zone. Site-specific exposure advisories will no longer be issued in these locations.

NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 1/1/2025 – 08/24/2025



ALBERTA DASHBOARD
CA MEASLES AND RUBELLA WEEKLY

MEXICO

BACKGROUND

- The origin of the outbreak is traced to a large Mennonite community near Cuauhtémoc, where vaccination rates are estimated at only 50–70%. It was introduced into the community when an unvaccinated 8-year-old who became infected during a visit to relatives in Texas returned to Mexico, where the virus rapidly spread through schools, churches, and neighboring communities.

- The outbreak has since expanded into Indigenous and working-class populations, including individuals with underlying health conditions that increase the risk of severe illness and death. Twenty-one states and 94 municipalities have confirmed measles cases.

CURRENT SITUATION

- There are **4,437** confirmed cases, with **4,133** of those cases in the state of Chihuahua.

- To date, Mexico has reported **18 measles-related deaths—17 in Chihuahua** and **1 in Sonora**—all among unvaccinated individuals. Indigenous communities have been hardest hit, with a case-fatality rate 20 times higher than in the general population.

- Approximately **78% of deaths have been among the Rarámur**i, an indigenous people. The combination of low vaccine coverage, geographic barriers, and pre-existing health vulnerabilities (like malnutrition) has amplified the impact.

- Chihuahua remains the epicenter, accounting for **93.56% of all confirmed measles** cases in Mexico and **94.12% of all deaths.**

- In terms of incidence rate, the 0–4 years age group reported the highest incidence (9.88 cases per 100,000 inhabitants under 4 years), followed by the 25–29 years and 30–34 years groups with incidence rates of 5.39 and 4.46, respectively.

GENOTYPES IDENTIFIED:

- **D8 (Ontario.CAN/47.24)** – dominant strain, linked to outbreaks in Texas and Canada.
- **B3 (NSW.AUS/10.24)** – limited to Oaxaca, contained importation.

KEY DRIVERS OF THE OUTBREAK:

- **Systemic Weaknesses:** Post-2018 budget cuts (69% reduction in vaccination funds) and procurement delays.
- **Coverage Gaps:** Vaccine uptake as low as 30–50% in Mennonite and some Indigenous communities.
- **Misinformation & Distrust:** Resistance to vaccination in rural and religious groups.
- **Access Inequalities:** Farmworkers and Indigenous groups face barriers to healthcare.

PUBLIC HEALTH RESPONSE

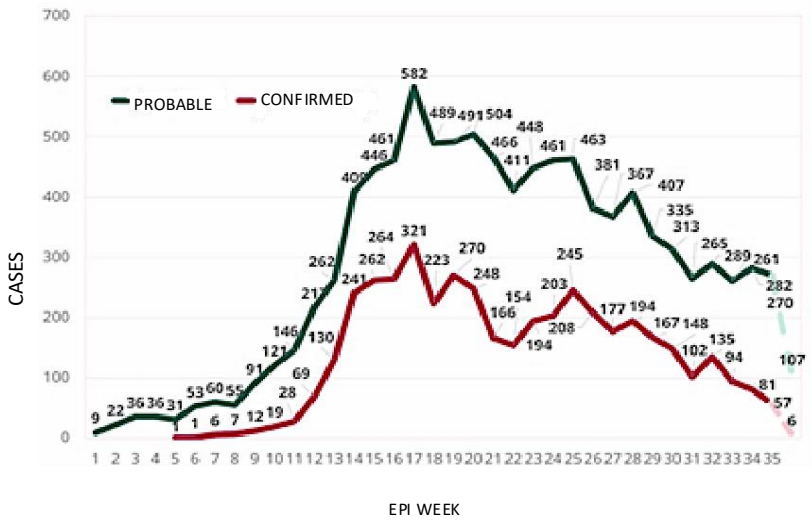
- **"Juarez Shield Strategy"** – Mass vaccination campaign; 42,000 vaccinated in Chihuahua.
- **Rapid Response Plan** – Enhanced surveillance, lab confirmation, case isolation.
- **Door-to-Door Vaccination** – Community engagement with local and religious leaders.
- **Vitamin A Supplementation** – For children under 5 with suspected or confirmed measles.

SOURCES:

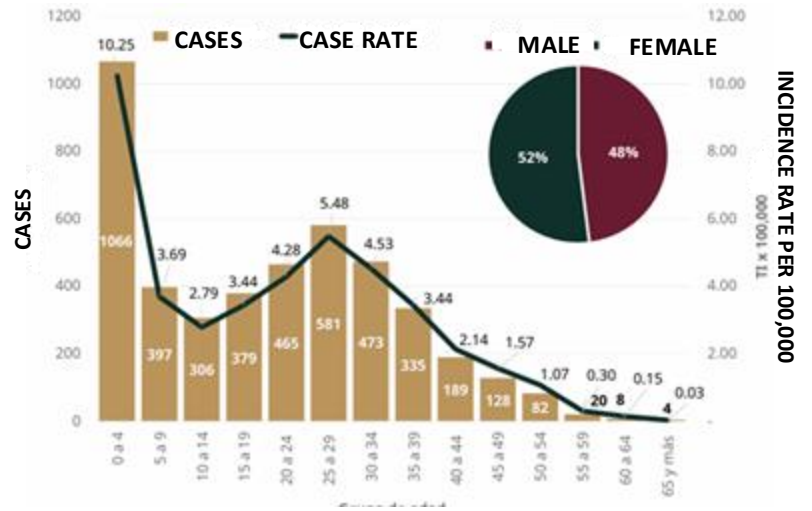
Daily Report – Mexico
Epidemiological Situation of Vaccine-Preventable Diseases in Mexico – Report 33
MediChihuahua – 5 SEP
Bi Weekly Bulletin – August (PAHO)
Think Global Health - Measles Takes Root In Mexico
A Population-based Measles Serosurvey In Mexico: Implications For Re-emergence

MEXICO

PROBABLE AND CONFIRMED MEASLES CASES BY EPIDEMIOLOGICAL WEEK AND DATE OF RASH ONSET



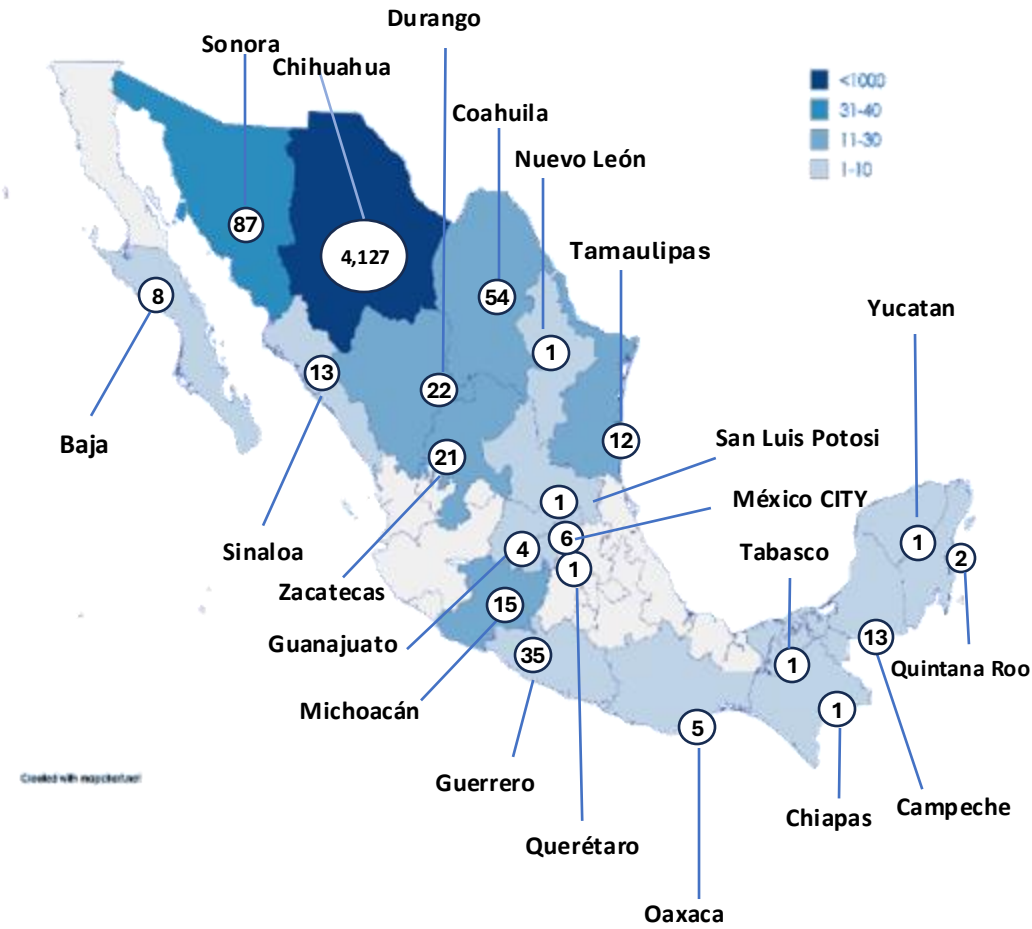
CONFIRMED CASES BY SEX, AGE, AND INCIDENCE RATE



CONFIRMED MEASLES CASES

STATE	CASES	
	CONFIRMED	PROBABLE
BAJA	8	58
CAMPECHE	14 (+1)	73
CHIAPAS	1	30
CHIHUAHUA	4,133 (+101)	5,707
MÉXICO CITY	6 (+2)	456
COAHUILA	54 (+1)	246
DURANGO	22	209
GUANAJUATO	4	460
GUERRERO	35	107
MICHOACÁN	15 (+1)	152
NUEVO LEÓN	1	231
OAXACA	5	65
QUERÉTARO	1	105
QUINTANA ROO	2	62
SAN LUIS POTOSI	1	117
SINALOA	13	98
SONORA	87	251
TABASCO	1	64
TAMAULIPAS	12	113
YUCATAN	1	45
ZACATECAS	21	135
TOTAL	4,437 (+106)	8,784

Data as of 9/8/2025

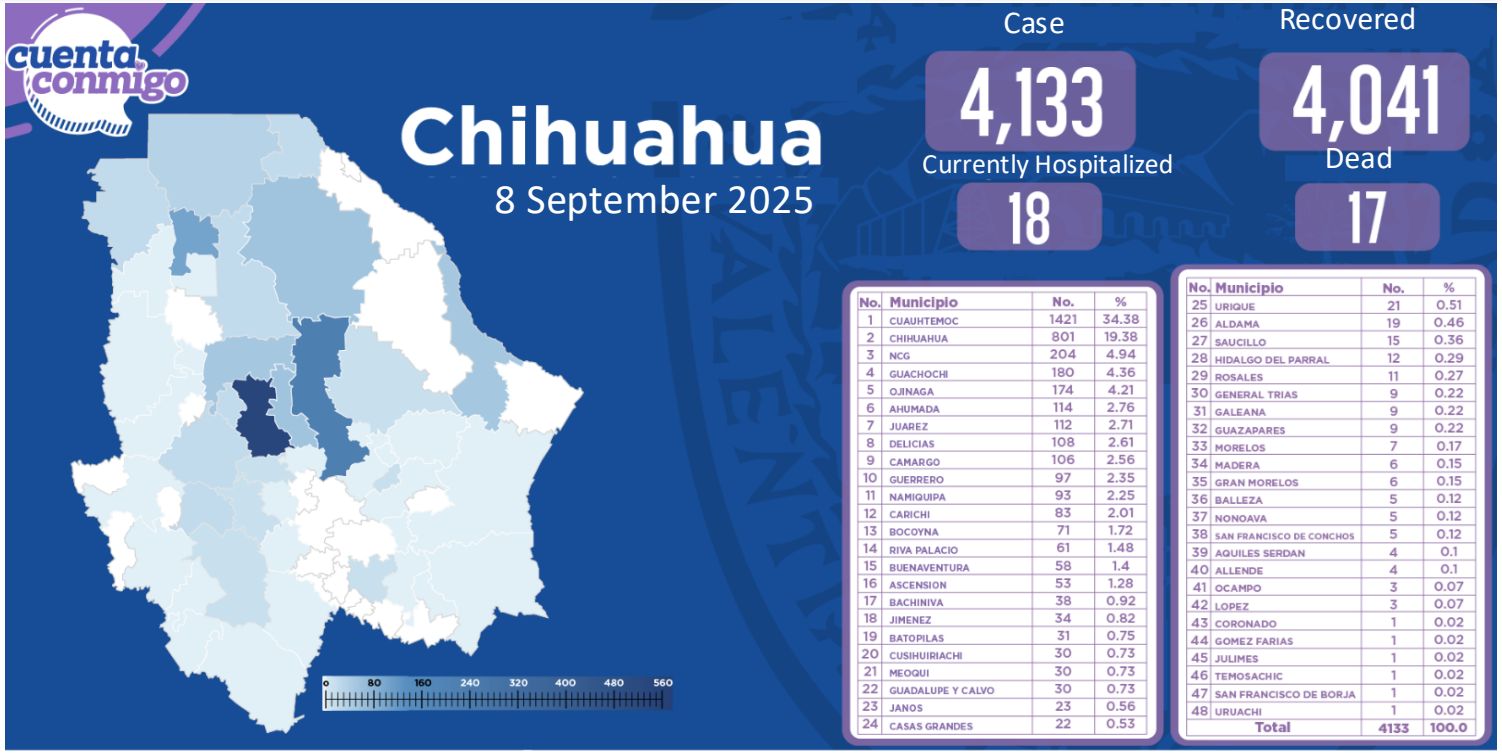


4,431 CONFIRMED CASES
18 DEATHS

Source: DAILY REPORT

OUTBREAK – CHIHUAHUA, MEXICO

- **Current Trend:** While the outbreak is no longer growing at an exponential rate, sustained transmission persists, creating an ongoing risk. Densely populated areas and communities with low vaccination coverage remain vulnerable to new clusters.
- **Herd Immunity Challenge:** Reaching and maintaining **95% vaccination coverage** is essential to halt measles transmission. Until coverage is uniformly achieved, including among vaccine-hesitant and hard-to-reach groups, measles will continue to be a threat.
- **Border & Regional Spillover:** Chihuahua's **geographic proximity and cultural ties to U.S. border states** heighten the risk of cross-border spread, especially given recent travel-related introductions (e.g., the initial case linked to Texas). Without containment, additional regional seeding is possible.



No.	Municipio	No.	%
1	CUAUHTEMOC	1421	34.38
2	CHIHUAHUA	801	19.38
3	NCG	204	4.94
4	GUACHOCHI	180	4.36
5	OJINAGA	174	4.21
6	AHUMADA	114	2.76
7	JUAREZ	112	2.71
8	DELICIAS	108	2.61
9	CAMARGO	106	2.56
10	GUERRERO	97	2.35
11	NAMIQUIPA	93	2.25
12	CARICHI	83	2.01
13	BOCOYNA	71	1.72
14	RIVA PALACIO	61	1.48
15	BUENAVENTURA	58	1.4
16	ASCENSION	53	1.28
17	BACHINIVA	38	0.92
18	JIMENEZ	34	0.82
19	BATOPILAS	31	0.75
20	CUSIHUIRIACHI	30	0.73
21	MEOQUI	30	0.73
22	GUADALUPE Y CALVO	30	0.73
23	JANOS	23	0.56
24	CASAS GRANDES	22	0.53

No.	Municipio	No.	%
25	URIQUE	21	0.51
26	ALDAMA	19	0.46
27	SAUCILLO	15	0.36
28	HIDALGO DEL PARRAL	12	0.29
29	ROSALES	11	0.27
30	GENERAL TRIAS	9	0.22
31	GALEANA	9	0.22
32	GUAZAPARES	9	0.22
33	MORELOS	7	0.17
34	MADERA	6	0.15
35	GRAN MORELOS	6	0.15
36	BALLEZA	5	0.12
37	NONOAVA	5	0.12
38	SAN FRANCISCO DE CONCHOS	5	0.12
39	AQUILES SERDAN	4	0.1
40	ALLENDE	4	0.1
41	OCAMPO	3	0.07
42	LOPEZ	3	0.07
43	CORONADO	1	0.02
44	GOMEZ FARIAS	1	0.02
45	JULIMES	1	0.02
46	TEMOSACHIC	1	0.02
47	SAN FRANCISCO DE BORJA	1	0.02
48	URUACHI	1	0.02
	Total	4133	100.0

Fuente: Secretaría de Salud

SOURCE OF GRAPHIC: MediChihuahua

GOBIERNO DEL ESTADO DE CHIHUAHUA | SECRETARÍA DE SALUD MediChihuahua

The situation in Chihuahua is **stabilizing but remains unresolved**. Effective control will depend on:

- Rapidly scaling vaccination coverage,
- Strengthening surveillance and rapid response capacity, and
- Sustaining public trust in immunization efforts.

The **implementation of Mexico's response plans is encouraging**, but **long-term vigilance and outreach** are critical to preventing the outbreak from undermining measles elimination in the region.

BOLIVIA

BOLIVIA – MEASLES OUTBREAK UPDATE (AS OF AUGUST 25, 2025)

- **Cumulative Cases: 286** measles cases reported nationwide.
  - 270 cases have recovered.
  - 16 cases remain active.
- **Most Affected:** Santa Cruz accounts for **244 cases (85% of the national total)**.
- **Emergency Declaration:** National Health Emergency declared on **23 June 2025**.

EPIDEMIOLOGICAL BACKGROUND:

- First case of 2025: Infant in Santa Cruz (April).
- Second case linked to large evangelical church gatherings in Santa Cruz, each with >30,000 attendees from Bolivia and abroad.

GEOGRAPHIC SPREAD: Cases reported in **8 of 9 departments** and **45 municipalities.**

DEMOGRAPHICS OF TRANSMISSION

- **83%** of cases: in individuals under 19 years
- **17%** of cases: in adults aged 20–44 years

COMMUNITIES AT RISK: ~50% of cases concentrated in Mennonite communities.

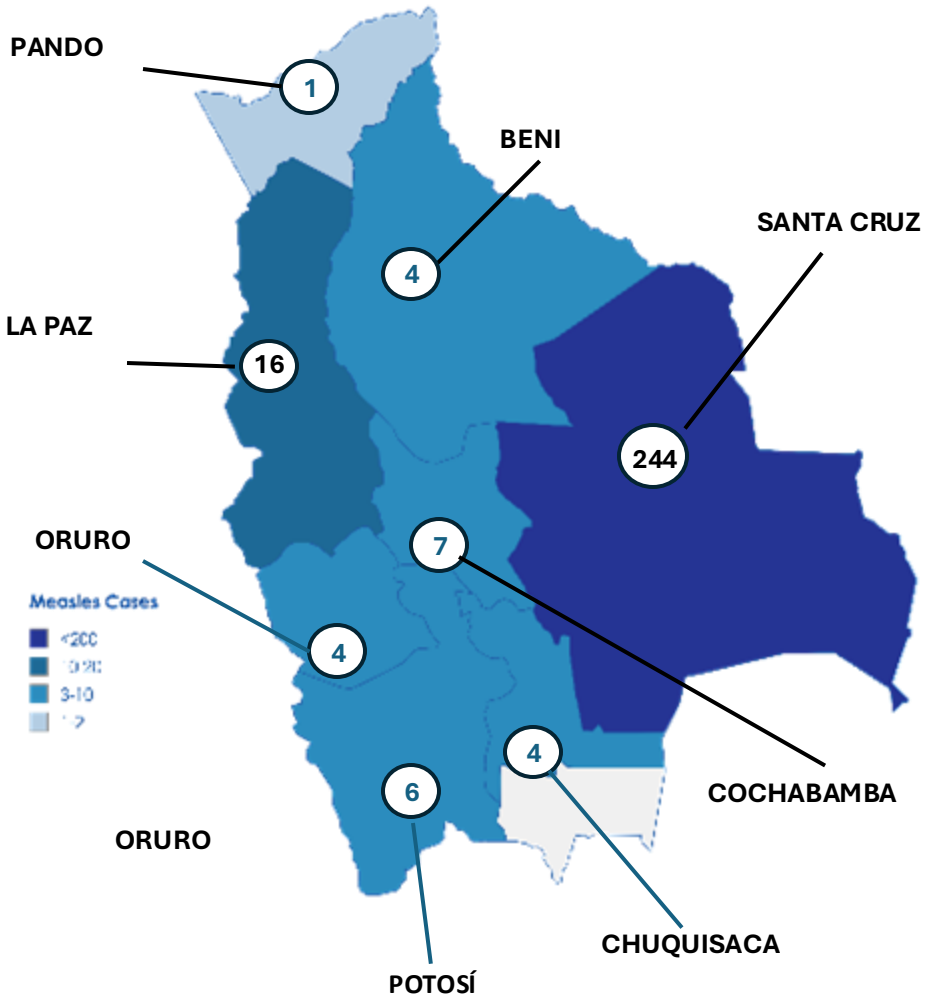
TARGETED INTERVENTION – SANTA CRUZ MENNONITE COLONIES: Vaccination, surveillance, and control campaign led by the Ministry of Health and SEDES Santa Cruz.

CONFIRMED MEASLES	
STATE	CASES
SANTA CRUZ	244
LA PAZ	16
COCHABAMBA	7
POTOSÍ	6
BENI	4
ORURO	4
CHUQUISACA	4
PANDO	1
TOTAL	286

ACTIVITIES IMPLEMENTED

- Contact tracing, household censuses, and active case finding.
- Vaccination blockades in affected areas.
- Preventive campaigns in unaffected communities.
- Engagement with Mennonite leaders to secure cooperation and build trust.

COORDINATION: Municipal governments, the education sector, and community authorities mobilized to ensure access to vaccination and health teams.



286 CASES
0 DEATHS

SOURCES: BOLIVIA MINISTRY OF HEALTH

PARAGUAY

BACKGROUND: Paraguay declared a **public health emergency** in August 2025 following the confirmation of its **first measles outbreak with local transmission** since 1998. On August 4, 2025, health authorities confirmed a case of measles in a five-year-old child in San Pedro, who had no vaccination history and apparently had contact with people from abroad.

TOTAL CONFIRMED CASES: 26 (+2)

- 1 imported case
- 24 associated with importation
- 1 under epidemiological investigation

LOCATIONS:

- Nueva Germania: 12 cases
- Santa Rosa del Aguaray: 7 cases
- Tacuati: 7 cases

VACCINATION STATUS:

- 88% of confirmed cases had no prior measles vaccination.
- In the last month, there was a **36% increase** in administration of the MMR vaccine nationwide.
- In the affected zones of San Pedro:
  - Santa Rosa del Aguaray reached **95.1% coverage**
  - Nueva Germania reached **90.2%**
  - Tacuati reached **64.8%**

CURRENT INVESTIGATIONS: 13 suspected cases from outbreak zones and nearby districts.

HOSPITALIZATIONS: 4

DEATHS: None

AGE RANGE: 1–54 years, includes both children and adults

ACTIVITIES IMPLEMENTED

The National Rapid Response Team is supporting local teams, working together in affected areas of San Pedro and surrounding districts, where various actions and control measures are being carried out: active searches for suspected measles cases, contact tracing, home visits, and vaccinations.

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.

LTC (R) Joanne McGovern – Joanne.McGovern@yale.edu
Lecturer, Department of Environmental Health Sciences, Yale School of Public Health

Shoa Moosavi (Editor)