MEASLES – THE AMERICAS 2025

MORBIDITY AND MORTALITY				
COUNTRY	RY CASES HOSPITALIZATIONS DEATH			
	NO	PRTH AMERICA		
US	1,366	171	3	
CANADA	4,382	335	1	
MEXICO	4,080	551	14	
	CEN	ITRAL AMERICA		
BELIZE	34	11	0	
COSTA RICA	1	0	0	
	so	UTH AMERICA		
BOLIVIA	243	0	0	
ARGENTINA	35	2	0	
BRAZIL	23	-	0	
PARAGUAY	7	12	0	
PERU	4	0	0	
THE CARRIBEAN	34	0	0	
TOTAL	10,209	1,057	18	

BACK TO SCHOOL MEASLES BY THE NUMBERS
BACKGROUND
UNITED STATES
MEXICO
BOLIVIA
CANADA
OUTLOOK: AMERICA
OUTLOOK: CENTRAL AND SOUTH AMERICA

Yale school of public health

8/17/2025 2300 HRS EDT

RISK ASSESSMENT IN OUTBREAK AREAS				
tisk for Localized Spread	Risk to unvaccinated populations in and around the outbreak areas	Risk to Children	Potential for sustained transmission	
HIGH	HIGH	HGH	HIGH	

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

ARGENTINA

BOLIVIA

BRAZIL

PARAGUAY

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

BACK TO SCHOOL – MEASLES BY THE NUMBERS

Yale school of public health

August 2025

Measles by the Numbers

Measles is an extremely contagious viral illness that spreads through the air when an infected person breathes, coughs, or sneezes. The best way to protect yourself and your family against measles is the safe and effective MMR vaccine.

Content written by Joanne E. McGovern, Lecturer in Medical and Public Health Disaster Planning and Operations, and Michael Cappello, MD, Department Chair and Professor of Epidemiology (Microbial Diseases).

What are the symptoms of measles?

- Starts with a high fever, along with a cough, runny nose, and irritated, watery eyes.
- · Followed by a red, blotchy rash that begins on the face and spreads downward.
- · Small white spots (called Koplik spots) may appear inside the mouth before the rash emerges.

Measles can cause serious health problems:

1 in 5

unvaccinated individuals who get measles in the U.S. require hospitalization.

1 in 20

children may develop pneumonia, the top cause of measles-related deaths in kids.

1 in 1,000

can experience brain inflammation (encephalitis), leading to seizures, hearing loss, or long-term disability.

1-3 in 1,000

measles cases in the U.S. are fatal.

2 hours

The time the measles virus can linger in the air after an infected person leaves a room.

9 in 10

The number of people without immunity who will get infected if exposed.



Measles can have other lasting consequences:

- It may lead to a rare but fatal condition called Subacute Sclerosing Panencephalitis (SSPE), developing years after infection.
- The virus can also suppress the immune system, leaving individuals more susceptible to other illnesses and infections.

Can measles be prevented?

Absolutely. The MMR vaccine (measles, mumps, and rubella) is highly effective—two doses protect about **97% of people**, which significantly reduces the risk of spread to others in the community who may not be eligible to receive the vaccine.

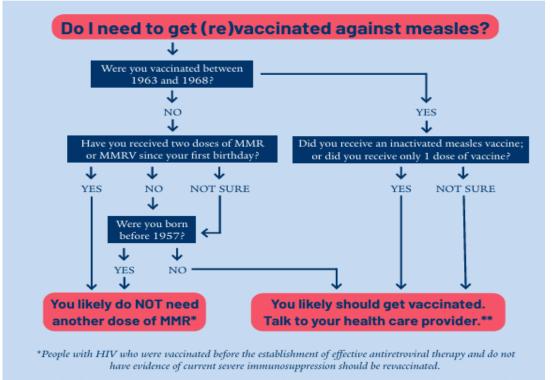


Download the Information Sheet Now

Download the full document for Measles by the Numbers in PDF format.

Is the MMR vaccine safe?

Yes, for almost everyone. The risks from the disease far outweigh the minimal risks associated with vaccination. Like any other medicine, it can have side effects like a sore arm, fever, mild rash, or temporary joint pain. In decades of global use, the MMR vaccine has been linked with a very small risk of febrile seizures, which are not associated with any long-term effects. Serious allergic reactions are extremely rare, but people allergic to any component of the vaccine should not get it.



- **People who should not receive the MMR vaccine include people who have had a severe allergic reaction after a previous dose, have an allergy to a vaccine component, have severe immunodeficiency, or are pregnant.
 - SOURCES: CDC, ACIP, Yale Medicine, MSN, Johns Hopkins, YALE ESF-8 Virtual Medical Operation Center

BACKGROUND

TYPE OF PUBLIC HEALTH EMERGENCY: LARGE MULTINATIONAL MEASLES OUTBREAK

OVERVIEW: The Americas have experienced a rate of measles infections 34 times higher than one year ago. In 2025, a total of 10,209 cases and 18 deaths have been reported across the region. Ten countries account for these cases, with Canada (4,382 cases, 1 death), Mexico (4,080 cases, 14 deaths), and the United States (1,366 cases, 3 deaths) representing the vast majority. Other affected countries include Bolivia (243 cases), Argentina (35), Belize (34), Brazil (23), Paraguay (4), Peru (4), and Costa Rica (1). In addition, 34 cases have been reported in the Caribbean, though 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 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

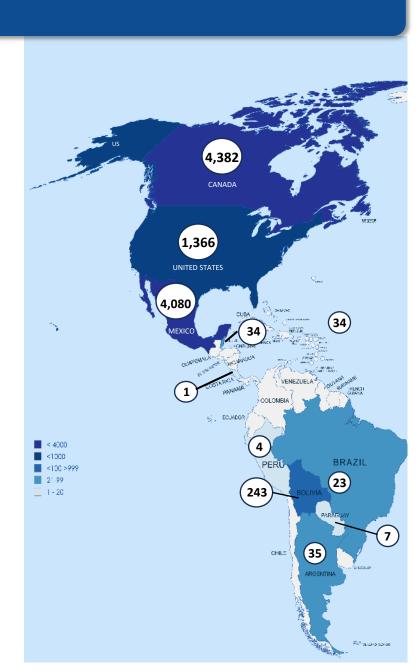
• First dose: 88%

• Second dose: 77%

• Target threshold to prevent outbreaks: ≥95%

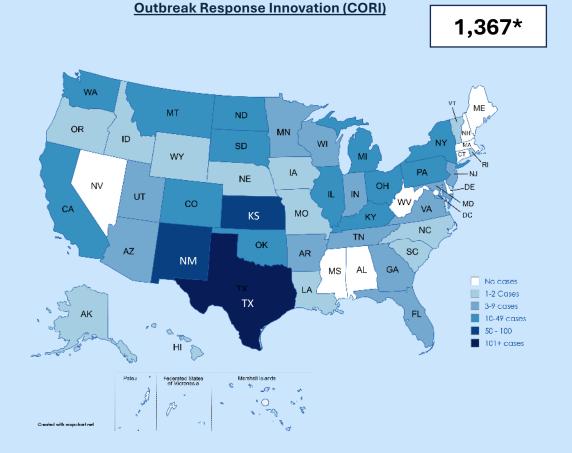
REGIONAL TRENDS:

- Canadian and Mexican outbreaks continue to grow rapidly.
- The outbreak in the United States appears to be slowing down compared to the peak in the spring. However, transmission is ongoing, and low vaccination rates among children are a risk for the upcoming school year.
- 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.



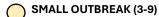
MEASLES US OUTLOOK 2025

* NOTE: The information on this page has been gathered by reviewing data from state and local health departments, news media sources, and the <u>Center for</u>



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 **	801
NEW MEXICO	100
<u>KANSAS</u>	90
NORTH DAKOTA	36
<u>OHIO</u>	35
MONTANA	30
MICHIGAN	27
OKLAHOMA	20
CALIFORNIA	20
COLORADO	20
PENNSYLVANIA	15
NEW YORK	15
KENTUCKY	14
SOUTH DAKOTA	12
<u>UTAH</u>	11
<u>ILLINOIS</u>	10
WASHINGTON	10
INDIANA	9
WISCONSIN	9
<u>ARKANSAS</u>	8
<u>IOWA</u>	8
WYOMING	8
MISSOURI	7
GEORGIA	6
NEW JERSEY	6
TENNESSEE	6
MINNESOTA	5
ARIZONA	5
FLORIDA	4
MARYLAND	3
VIRGINIA	3
<u>ALASKA</u>	2
HAWAII	2
<u>IDAHO</u>	2
LOUISIANA	2
SOUTH CAROLINA	1
<u>NEBRASKA</u>	1
NORTH CAROLINA	1
OREGON	1
RHODE ISLAND	1
VERMONT	1
TOTAL	1,367



OUTBREAKS

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 26 July 2025, EDT, there are approximately 1,330 measles cases (including confirmed and suspected cases) across 40 states.

This year, there have been at least 29 measles outbreaks. Here are some listed below:

- Texas, involving <u>37 counties</u>
- New Mexico, 6 counties
- Oklahoma, and the Cherokee Nation in Oklahoma
- 9 counties in Kansas
- Ashtabula and Knox Counties, Ohio
- Erie County, Pennsylvania
- Allen County, Indiana
- Bergen County, **New Jersey**
- · Metro Atlanta, Georgia
- Gallatin County, Montana
- Montcalm County, **Michigan** (linked to Ontario Outbreak) and a 2nd outbreak in Grand Traverse County
- Upper Cumberland region, **Tennessee**
- Williams County, Grand Rapids, North Dakota
- Faulkner County, **Arkansas**
- Utah County, Utah
- Navajo County, **Arizona**

** TEXAS CASES NOT ASSOCIATED WITH OUTBREAK: 39

- 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
- I case iviiaiana
- 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
- **TEXAS CASES ASSOCIATED WITH THE OUTBREAK: 762**

THE UNITED STATES - VACCINES FOR SCHOOL CHILDREN

According to the Centers for Disease Control and Prevention (CDC), childhood vaccination coverage declined for the fifth consecutive year during the 2024–25 school year. **All states require school children to receive the MMR vaccine but** allow for medical exemptions. Some states also allow for religious or philosophical exemptions. The increase in non-medical exemptions underscores the influence of vaccine misinformation and recent policy shifts. When such exemptions become geographically concentrated, they undermine herd immunity and heighten the risk of outbreaks that threaten all children.

VACCINATION GAPS

- MMR vaccination rates decreased in 37 states from 2018 to 2023.
- A recent study found MMR vaccination declined in 78% of counties that reported rates.
- Vaccination rates vary widely— even in states with a high overall vaccination rate, there are pockets with a high percentage of unvaccinated children.

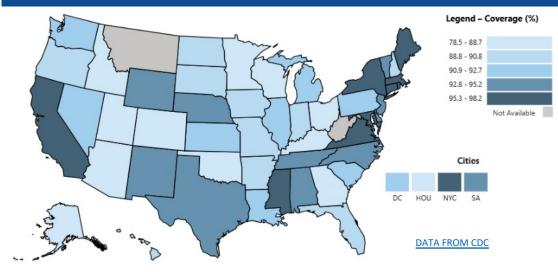
VACCINATION EXEMPTIONS (U.S.)

- Exemptions increased in 36 states.
- 17 states exceeded 5% exemption rates.
- Nearly all were non-medical (religious/personal exemptions).

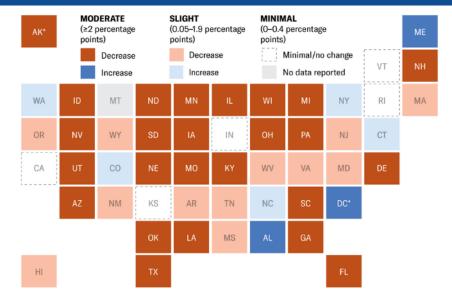
WHY IS THIS CONCERNING?

- MMR vaccines are safe and highly effective at protecting children against illness, hospitalization, and death.
- They also protect people who can't receive the vaccine, such as infants and immunocompromised people, through herd immunity.
- Children who are sick with the measles and unvaccinated children who are asked to stay at home after being exposed to an infectious individual miss valuable learning time at school.

MMR Vaccination Coverage among Kindergarteners by State 2024-2025

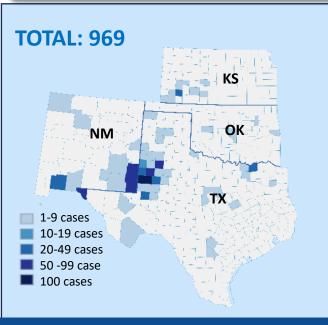


Change in Rate of MMR Vaccine Coverage among Kindergarteners, 2018–2023



SOURCES: CDC, Scientific American, NCSL, JHU

MEASLES: THE US SOUTHWEST OUTBREAK



5-17 Years

33 (38%)

5-17 Years

STATE	CASES	HOSPITALIZATIONS	DEATHS
KS	87	8	0
ОК	20	0	SOURCE: GENERAT
NM	100	7	1
тх	762	99	2
TOTAL	969	114	3

- KS has had no new cases in 5 weeks
- OK has had no new cases in 9 weeks
- NM has had three new cases this week
- TX has had no new outbreaks in 6 weeks

Pending

0

Pending

Total

87

Total

20

AGE OF CASES

0-4 Years

37 (42.5%)

0-4 Years

OKLAHOMA OUTBREAK n=20

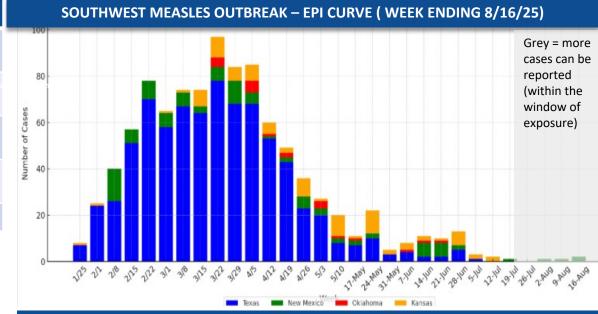
WEST TEXAS OUTBREAK n=762							
5-17 Years	18+ Years	Pending	Total				
286. (37.5%)	247 (32.5%)	4 (0.05%)	762				
NEW MEXICO OUTBREAK n=100							
5-17 Years	18+ Years	Pending	Total				
23 (23%)	53 (53%)	0	100				
KANSAS OUTBREAK n=87							
	5-17 Years 286. (37.5%) REAK n=100 5-17 Years 23 (23%)	5-17 Years 18+ Years 286. (37.5%) 247 (32.5%) EAK n=100 5-17 Years 18+ Years 23 (23%) 53 (53%)	5-17 Years 18+ Years Pending 286. (37.5%) 247 (32.5%) 4 (0.05%) REAK n=100 5-17 Years 18+ Years Pending 23 (23%) 53 (53%) 0				

18+ Years

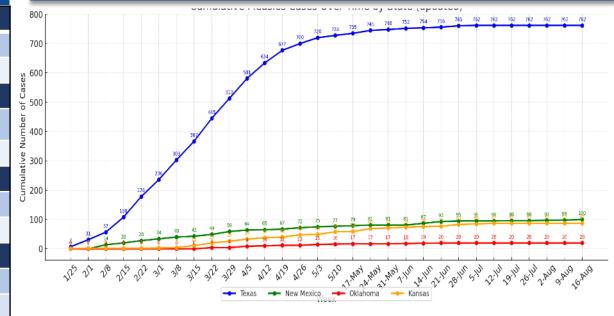
17 (19.5%)

18+ Years

17 Cases Confirmed, 3 Probable - no ages provided



SOUTHWEST MEASLES OUTBREAK – CUMULATIVE CASES OVER TIME (WEEK ENDING 8/17/2025)



MEXICO

OVERVIEW:

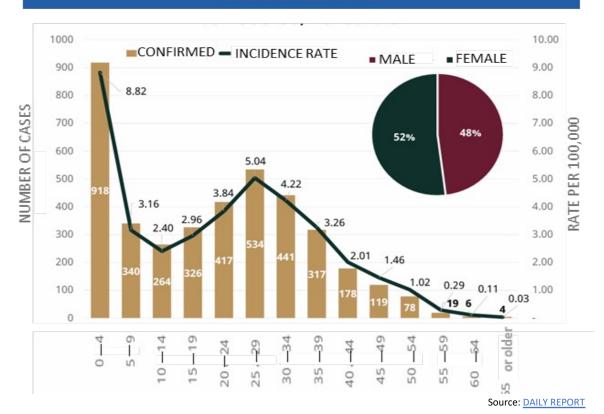
- The origin of the outbreak is traced to a large Mennonite community near Cuauhtémoc, where vaccination rates are estimated at only 50–70%. It was introduced into the community when an unvaccinated 8-year-old who became infected during a visit to relatives in Texas and returned to Mexico, where the 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. 20 states and 82 municipalities have confirmed measles cases.
- To date, Mexico has reported 14 measles-related deaths—13 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 70% of deaths have been among the Rarámuri, 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 93.29% of all confirmed measles cases in Mexico and 93% of all deaths.
- The 0–4-year-old group reported the highest incidence rate (8.82 cases per 100,000 inhabitants under 4 years of age), followed by the 25–29-year-old and 30–34-year-old groups with incidence rates of 5.04 and 4.22 respectively.

RESPONSE MEASURES & VACCINATION EFFORTS

- Enhanced surveillance and laboratory diagnostics.
- Quicker identification and isolation of cases.
- Strengthened **control measures** in health clinics and within communities to disrupt transmission chains.

Juárez Shield Strategy: In response to the rapidly escalating situation, the government launched the "Juárez Shield Strategy"—a mass vaccination campaign targeting individuals aged **6 months to 49 years**, across Chihuahua. The goal is to deliver 500,00 doses to the three largest municipalities in Chihuahua (Juárez, Chihuahua City, and Cuauhtemoc) and vaccinate children before the start of the new school year in late August.

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



MEXICO

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

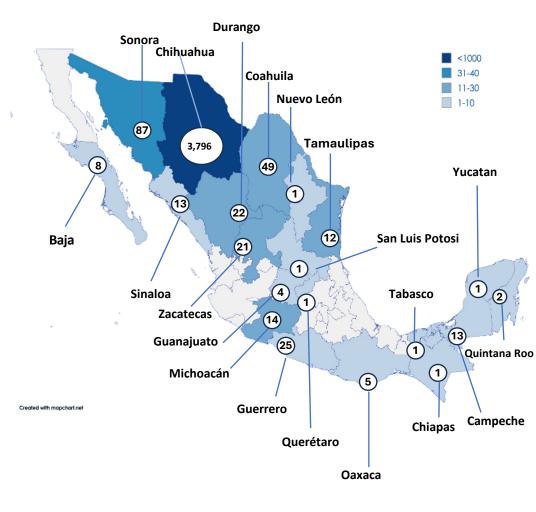


EPI WEEK

CONTINUED MEASELS CASES			
STATE	CASES		
JIAIL	CONFIRMED	PROBABLE	
BAJA	8	52	
САМРЕСНЕ	13	31	
CHIAPAS	1		
CHIHUAHUA	3,796 (+90)	538	
CIUDAD DE MÉXICO	2 (New)	305	
COAHUILA	49 (+4)	233	
DURANGO	22	194	
GUANAJUATO	4	441	
GUERRERO	25 (+18)	82	
MICHOACÁN	15 (+1)	143	
NUEVO LEÓN	1	213	
OAXACA	5	61	
QUERÉTARO	1	88	
QUINTANA ROO	2	55	
SAN LUIS POTOSI	1	114	
SINALOA	13 (+1)	87	
SONORA	87 (+1)	244	
TABASCO	1	62	
TAMAULIPAS	12	105	
YUCATAN	1	41	
ZACATECAS	21	128	
TOTAL	4.080 (+117)	3,217	

CONFIRMED MEASLES CASES

Data as of 8/15/2025



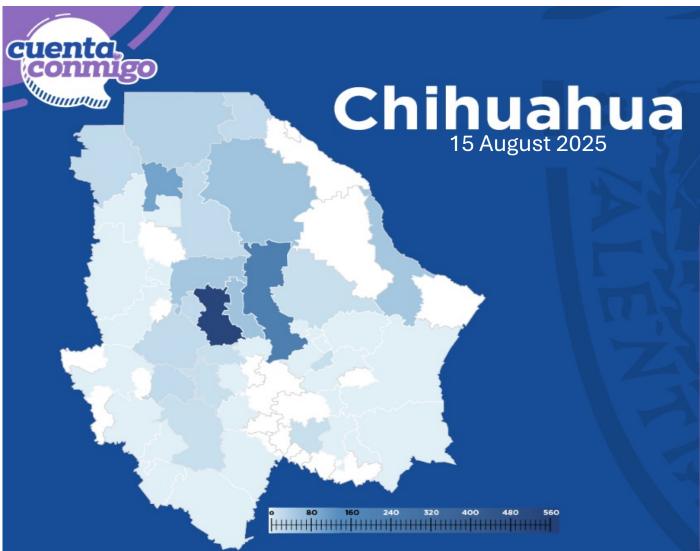
4,080 CONFIRMED CASES 14 DEATHS

Source: DAILY REPORT

MEXICO – DEATHS FROM MEASLES 2025

#	Patient Description	Age	Location (State)	Vaccinated?	Date	Underlying Conditions / Notes	Source(s)
1	Adult male, Mennonite community	31	Ascensión, Chihuahua	No	11 Apr 25	Diabetes	<u>DW</u>
2	Boy, Mennonite community	11 months	Namiquipa, Chihuahua	No	20 May 25	mother unvaccinated, no passive immunity, underlying renal condition)	Chihuahua Secretaría de Salud; TV Azteca
3	Girl, agricultural laborers	1 year old	(Originally from Chihuahua) Died in Sonaro	No	20 May 25	Severe malnutrition	<u>Informador.mx</u> La Secretaría de Salud de Sonora
4	Boy, Mennonite community	7 years	Ojinaga, Chihuahua	No	20 May 25	Underlying health problem (leukemia)	Chihuahua Secretaría de Salud; TV Azteca
5	Adult male, Rarámuri	45 years	Carichí, Chihuahua	No	29 May 25	_	N+ Noticias
6	Girl, Rarámuri community	2 years, 11months	Ojinaga, Chihuahua	No	2 June 25	Dehydration, diarrhea, pneumonia	Chihuahua Secretaría de Salud
7	Girl, Rarámuri community	4 years	Guachochi, Chihuahua	No	5 Jun 25	Moderate malnutrition, pneumonia	<u>N+ Noticias</u>
8	Boy, Mixtec community	5 years	(Originally from Sinaloa) Died in Chihuahua	No	15 Jun-25	Severe malnutrition, anemia, respiratory issues, pneumonia	<u>N+ Noticias</u>
9	Woman, Rarámuri	27 years	Meoqui, Chihuahua	No	16 Jun-25	pneumonia, no comorbidities	N+ Noticias
10	Boy, agricultural laborer family	2 years 11 months	Campo Nueva Holanda, Ojinaga, Chihuahua	No	27 June	Dehydration and diarrhea	Chihuahua Secretaría de Salud
11	Woman, Rarámur community	48 years old	San José Baqueachi, Carichí, Chihuahua	No	13 July	Complications from pneumonia, no comorbidities	Chihuahua Secretaría de Salud
12	Man, Rarámur community	46 years old	Cuauhtémoc, Chihuahua	No	21 July	Respiratory failure and pneumonia	Chihuahua Secretaría de Salud
13	Girl, Rarámur community	6 years old	Carichí, Chihuahua	No	30 July 25	Respiratory failure and pneumonia	N+ Noticias Secretaría de Salud del Estado de Chihuahua
14	Man, Rarámur community	54 years old	Bocoyna, Chihuahua	No	30 July 25	Respiratory failure and pneumonia	N+ Noticias Secretaría de Salud del Estado de Chihuahua

MEXICO: CHIHUAHUA'S OUTBREAK



Case

3,796

Currently Hospitalized

Recovered

3,669

Dead

*de enero a la fecha de corte

			_
No.	Municipio	No.	%
1	CUAUHTEMOC	1382	36.41
2	CHIHUAHUA	712	18.76
3	NCG	202	5.32
4	GUACHOCHI	163	4.29
5	OJINAGA	162	4.27
6	AHUMADA	113	2.98
7	JUAREZ	110	2.9
8	NAMIQUIPA	84	2.21
9	GUERRERO	83	2.19
10	CARICHI	78	2.05
11	CAMARGO	71	1.87
12	DELICIAS	70	1.84
13	BOCOYNA	66	1.74
14	RIVA PALACIO	61	1.61
15	BUENAVENTURA	56	1.48
16	BACHINIVA	38	1
17	ASCENSION	38	1
18	CUSIHUIRIACHI	30	0.79
19	MEOQUI	25	0.66
20	BATOPILAS	25	0.66
21	GUADALUPE Y CALVO	25	0.66
22	JANOS	22	0.58
23	CASAS GRANDES	22	0.58
24	JIMENEZ	18	0.47

No.	Municipio	No.	%
25	URIQUE	18	0.47
26	ALDAMA	18	0.47
27	SAUCILLO	12	0.32
28	HIDALGO DEL PARRAL	12	0.32
29	GUAZAPARES	9	0.24
30	ROSALES	9	0.24
31	GENERAL TRIAS	9	0.24
32	GALEANA	8	0.21
33	MORELOS	7	0.18
34	MADERA	6	0.16
35	GRAN MORELOS	6	0.16
36	NONOAVA	5	0.13
37	ALLENDE	4	0.11
38	BALLEZA	3	0.08
39	AQUILES SERDAN	3	0.08
40	LOPEZ	3	0.08
41	ОСАМРО	2	0.05
42	GOMEZ FARIAS	1	0.03
43	JULIMES	1	0.03
44	TEMOSACHIC	1	0.03
45	SAN FRANCISCO DE BORJA	1	0.03
46	SAN FRANCISCO DE CONCHOS	1	0.03
47	URUACHI	1	0.03
	Total	3796	100.0

Fuente: Secretaría de Salud

SOURCE OF GRAPHIC: MediChihuahua







BOLIVIA:

- Bolivia has reported 243 cumulative measles cases. The department of Santa Cruz is the most affected, accounting for 204 cases (84% of the national total).
- A National Health Emergency was declared on 23 June 2025.
- The first case of the year was reported in April in Santa Cruz in an infant. The second case involved an individual who attended two large gatherings of an evangelical church in Santa Cruz, each drawing more than 30,000 participants from Bolivia and abroad.
- Cases have been detected in 8 out of 9 departments and 45 municipalities nationwide, 21 of which are in Santa Cruz.
- More than half of all cases are linked to Mennonite colonies in the department, where daily commercial interactions with the broader population increase transmission risk. About 1% are linked to another church, and 49% to the general population.

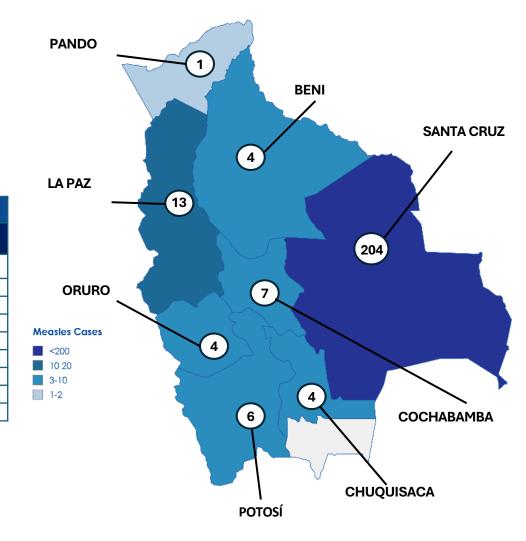
TARGETED INTERVENTION: The Ministry of Health & SEDES Santa Cruz launched an intensive vaccination, surveillance, and control campaign focused on Mennonite colonies.

ACTIVITIES:

- Contact tracing, population censuses, and active case finding.
- Vaccination blockades in affected areas; preventive campaigns in unaffected communities.
- Meetings with Mennonite leaders to secure cooperation.

COORDINATION: Municipal, education, and community authorities are engaged to ensure access for health teams.

CONFIRMED MEASLES CASES		
STATE CASES		
SANTA CRUZ	204	
LA PAZ	13	
COCHABAMBA	7	
POTOSÍ	6	
BENI 4		
ORURO 4		
CHUQUISACA	4	
PANDO	1	
TOTAL 243		



243 CASES 0 DEATHS

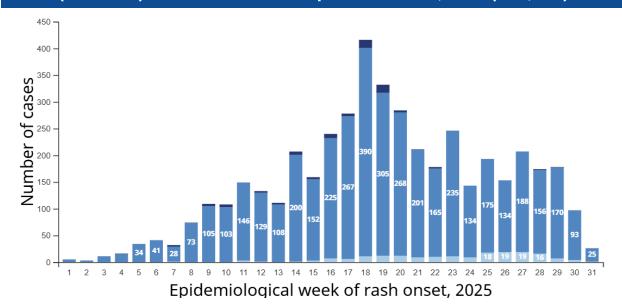
CANADA

- There is a multijurisdictional measles outbreak in Canada.
- As of 15 August 2025, a total of **4,695 measles cases** (4,382 confirmed, 313 probable) have been reported by 10 jurisdictions (Alberta, British Columbia, Manitoba, New Brunswick, Northwest Territories, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan).
- Of these cases, the vast majority are linked to an imported case at a large gathering in New Brunswick during October 2024, which spread to other provinces and across Canada's borders. The measles strain circulating in this outbreak is wild-type (genotype D8).
- **31** health units within 8 jurisdictions: Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Saskatchewan.
- There has been one death reported by Ontario in a congenital case of measles, who was born pre-term and had other underlying medical conditions.
- Ontario and Alberta continue to be Canada's hotspots for measles.

KEY FACTORS BEHIND THE OUTBREAK

- Vaccine hesitancy remains a major driver, especially among religious or close-knit communities such as Mennonite groups, where public health messaging may have limited reach.
- **COVID-19 disruptions** have undermined routine immunizations, dropping national vaccination coverage from **90% in 2019 to 83% in 2023.**
- Legal Framework: Ontario's legal framework allows religious and personal exemptions from school vaccination mandates, which are reportedly easy to obtain in many cases. In Alberta, allowing students to attend public schools without proof of immunization.

Epidemiological curve for measles cases, by epidemiological week 31 (8/2/2025) of rash onset and exposure source, 2025 (n=4,548)



Exposure source

- Exposed outside of Canada
- Exposed in Canada, epidemiologically and/or virologically linked
- Unknown or pending exposure source

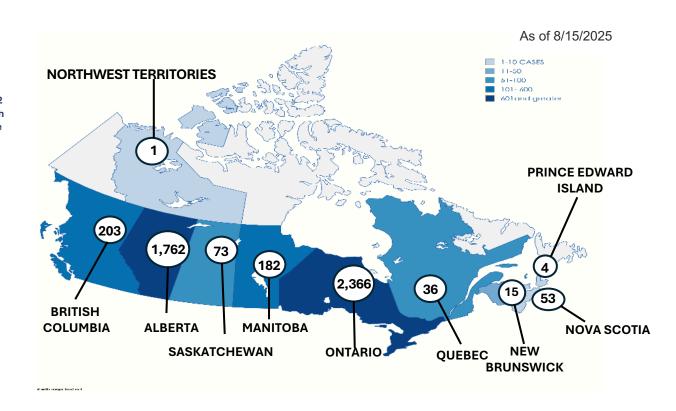
CANADA

Brief Timeline of Outbreak



Measles cases in Ontario are linked to exposure to a travel-related case in New Brunswick. New Brunswick declares its measles outbreak over. Ontario reports 2,362 (2,050 confirmed, 312 probable) cases of measles associated with this outbreak in 26 public health units since October 18, 2024.

MEASLES 2025				
PROVINCE	CONFIRMED CASES	PROBABLE CASES	TOTALS	
ONTARIO	2,080 (+3)	286	2,366	
ALBERTA	1,762 (+38)	0	1,762	
MANITOBA	171 (+4)	11	182	
BRITISH COLUMBIA	187 (+11)	16	203	
SASKATCHEWAN	73 (+2)	0	73	
QUEBEC	36	0	36	
PRINCE EDWARD ISLAND	4	0	4	
NOVA SCOTIA	53	0	53	
NORTHWEST TERRITORIES	1	0	1	
NEW BRUNSWICK	15	0	15	
TOTAL	4,382 (+58)	313	4,695	



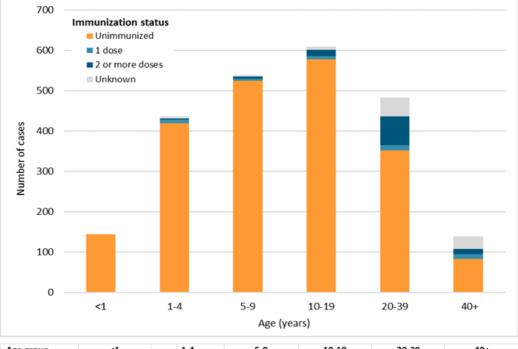
4,695 Cases (4382 Confirmed, 313 Probable)
1 Death

CANADA OUTLOOK: ONTARIO'S OUTBREAK

(OCTOBER 18, 2024 TO AUGUST 12, 2025)

MORBIDITY AND MORTALITY				
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS	
ONTARIO*	2,362 (2050 confirmed, 312 probable)	164 (12 ICU)	1	

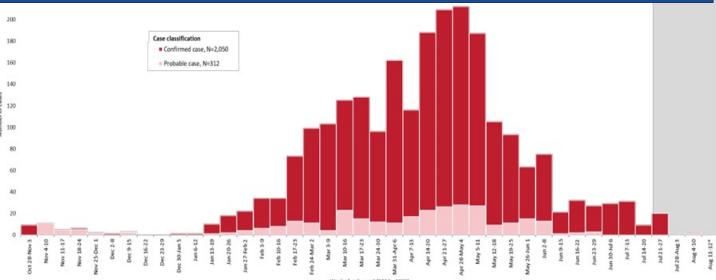
IMMUNIZATION STATUS OF MEASLES OUTBREAK CASES BY AGE GROUP: OCTOBER 28, 2024 – AUGUST 12, 2025



10-19 20-39 Age group <1 1-4 5-9 40+ Unimmunized 100.0% 96.1% 97.2% 94.9% 72.7% 59.7% 0.0% 2.1% 0.9% 1.3% 2.7% 8.6% 1 dose 0.0% 0.5% 0.9% 2.6% 14.9% 8.6% 2 or more doses 0.0% 1.4% 0.9% 1.2% 9.7% 23.0% Unknown

- As of August 12, 2025, Ontario has reported a total of 2,362 measles cases (2,050 confirmed, 312 probable) associated with this outbreak occurring in 26 public health units.
- Among all outbreak cases, the majority (73.1%, n=1,727) were infants, children, and adolescents (19 years old or younger), while 26.3% (n=622) were adults, and 0.6% (n=13) had unknown age
 - O Almost all infant, child, and adolescent outbreak cases (96.4%, n=1,664) were unimmunized, while 69.8% (n=434) of adults were unimmunized.
 - o 98.1% (n=2,318) of outbreak cases were born in or after 1970
- 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, 6.9% (n=164) of outbreak cases were hospitalized, and 0.5% (n=12) were admitted to the
- intensive care unit (ICU)
 - 94.5% (n=155) of hospitalized cases were unimmunized, of whom 121 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 three and a half days (range: 1–54 days).
- 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 – 08/12//2025



SOURCES: PUBLIC HEALTH ONTARIO

CANADA OUTLOOK: ALBERTA'S OUTBREAK

MORBIDITY AND MORTALITY				
PROVINCE	CASES	HOSPITALIZATIONS	DEATHS	
Alberta	1,731 (+7)	142 (+6) (15 ICU)	0	

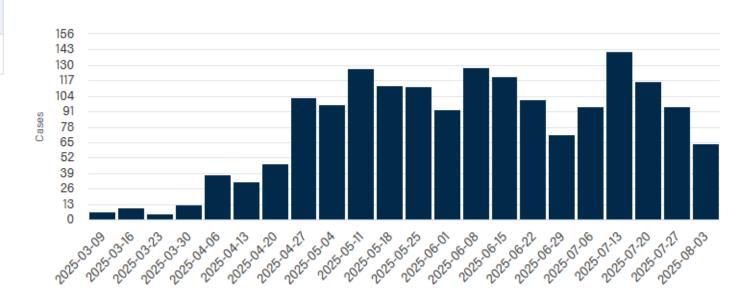
IMMUNIZATION STATUS	COUNT	
Unimmunized	1,538	
1 dose	52	
2 or more doses	76	
Unknown	65	
Total	1,731	

AGE RANGE	NUMBERS	
<5 years	497	
5 to 17 years	770	
18 to 54 years	486	
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 <u>exposure locations</u> for the Edmonton, Calgary, Central, and parts of the North Zone. A standing exposure advisory has been issued for the <u>South Zone</u> and areas of the <u>North Zone</u>. Site-specific exposure advisories will no longer be issued in these locations.

NUMBER OF MEASLES CASES BY WEEK OF RASH ONSET, 1/1/2025 – 08/15/2025



OUTLOOK - NORTH AMERICA

UNITED STATES

IDAHO: On 12 August, an unvaccinated child who lives in Kootenai County was diagnosed with measles (Panhandle Health District). This occurred just weeks after the virus was found in the area's wastewater. In late July, measles was found in the city of Coeur d'Alene's wastewater, an indicator that someone in the area was infected, even though no official cases were yet reported. A second case was reported in a child from Bonneville County on 14 August (Eastern Idaho Public Health).

COLORADO: The Colorado Department of Public Health and Environment has confirmed another case of measles, bringing the total number of measles cases in the state so far this year to 17. The CDPHE and the Adams County Health Department have confirmed the case of measles in a child under 5 years from Adams County. According to health officials, the child had not received the measles, mumps and rubella vaccine and traveled with their family to Chihuahua, Mexico, where there is an ongoing measles outbreak. The child remains hospitalized.

NEW MEXICO: Three new cases of measles have been reported in New Mexico, according to the New Mexico Health Department. NMDOH says these three new cases are impacting unvaccinated Santa Fe County residents. A total of 48,620 people received the measles, mumps, rubella vaccine between Feb. 1 and Aug. 13.

MEXICO

In Mexico, measles outbreaks remain active despite containment efforts. This week, confirmed cases surpassed 4,000, underscoring the urgent need to strengthen vaccination coverage, intensify containment measures in under-immunized communities, and maintain robust epidemiological surveillance to prevent further spread.

CHIHUAHUA: Chihuahua has emerged as the epicenter of the outbreak. Low vaccination uptake in close-knit Mennonite communities, compounded by widespread misinformation, has fueled transmission.

In response, Mexican health authorities launched the *Juárez Shield Strategy*, offering free immunizations to millions. Rapid-response measures and strengthened surveillance reinforce this initiative, all aimed at achieving nationwide measles elimination by November 2025.

Yet, despite progress in limiting wider spread, Chihuahua remains the primary hot spot—demanding sustained attention to vaccination and community trust-building in the areas most affected.

CANADA

Canada is experiencing its largest measles surge since the disease was declared eliminated in 1998.

The provinces most affected are Ontario and Alberta, followed by British Columbia, Manitoba, and Saskatchewan.

ONTARIO: Case numbers continue to decline. This week, there were only 3 new cases. Public health officials believe the downward trend suggests transmission is slowing, though continued vigilance remains necessary.

ALBERTA: While Ontario has seen a sharp decline in confirmed cases, Alberta has become Canada's hotspot. 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.

MANITOBA: The case count has slowed, with just 5 cases reported in August so far and no probable cases.

BRITISH COLUMBIA: The outbreak continues to climb. In the northeast, a cluster of unvaccinated children allowed the virus to spread "like wildfire" since June.

OUTLOOK – CENTRAL AND SOUTH AMERICA

PARAGUAY

Paraguay has declared a health emergency after confirming its first measles outbreak in a decade. The outbreak began on August 2 with a 5-year-old boy hospitalized for pneumonia, fever, cough, and a rash. By August 14, 2025, seven cases had been confirmed, all in San Pedro. The patients, ranging in age from 1 to 19 years, had no history of measles vaccination. Another 12 suspected cases are under investigation in the outbreak zone and surrounding districts. Nationwide, measles, mumps, and rubella (MMR) vaccination coverage stands at 82% for the first dose and 68% for the second—well below the 95% threshold needed for herd immunity. Coverage in San Pedro is even lower, at 69% for the first dose and 54% for the second. For the past two weeks, the National Rapid Response Team has been working alongside local health teams in San Pedro and neighboring districts. Control measures include active case-finding, home visits, and ring vaccination campaigns. To date, more than 1,500 vaccinations have been administered: 60 "zero doses," 1,046 first doses, and 412 second doses of MMR among children 6 months to 10 years old, and MR (measles-rubella) vaccines for those over 10 years. These efforts have raised vaccination coverage in the affected area from 69% to 76%. (SOURCES: UPI, Ministry of Public Health)

ARGENTINA AND BELIZE

No new cases since late June.

BRAZIL

Beginning in July 2025, Brazil's Ministry of Health confirmed 9 cases of measles in Campos Lindos, Tocantins. As August 14, 2025, the Tocantins State Health Department confirmed the 18th case of measles in Campos Lindos. The department is still investigating five suspected cases, all in the same municipality. None of the individuals were vaccinated. Since the first suspected cases, the state health department has intensified vaccination efforts in the region. In March 2025, five additional imported measles cases were confirmed in Brazil: two in Rio de Janeiro, one in the Federal District, one in São Paulo, and one in Rio Grande do Sul. All of these were contained through vaccination block measures. Since the beginning of the year, the Ministry of Health has distributed more than 13.6 million doses of the measles vaccine, and by August 4, approximately 3 million doses had already been administered.

(SOURCES: Brazil Ministry of Health, ctt20ANOS

BOLIVIA:

Deputy Minister of Epidemiological Surveillance Max Enríquez reported that 243 cumulative measles cases have been confirmed in Bolivia, with the department of Santa Cruz remaining the most affected, accounting for 204 cases—or 84% of the national total. The Ministry of Health and Sports, through the Expanded Immunization Program (PAI) and in coordination with the Departmental Health Service (SEDES) of Santa Cruz, has launched a comprehensive surveillance, control, and vaccination plan targeting Mennonite colonies, which account for more than 50% of the department's reported measles cases.

Of the 204 cases confirmed in Santa Cruz, at least 121 have been linked to Mennonite colonies across nine municipalities: Cabezas (18), El Puente (12), San Ignacio de Velasco (21), Cuatro Cañadas (14), Pailón (27), San Miguel de Velasco (1), Charagua (15), San José de Chiquitos (12), and San Julián (1). (SOURCES: El Mundo, Ministry of Health and Sport)

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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