



MISSISSIPPI STATE DEPARTMENT OF HEALTH

**This is an official  
MS Health Alert Network (HAN) - Advisory**

**MESSAGE ID:** MSHAN-20250714-00605-**ALT (Health Alert)**  
**RECIPIENTS:** All Physicians, Hospitals, ERs, ICPs, NPs, PAs, and Healthcare Providers –Statewide  
**SUBJECT:** **Monday, July 14, 2025**  
**Increase in Pertussis Cases Statewide**

Dear Colleagues,

An increase in reported pertussis cases has been noted both nationally and in Mississippi since 2024. The Mississippi State Department of Health (MSDH) is disseminating the information below to inform healthcare providers of the current pertussis situation in Mississippi, including its signs and symptoms, key prevention methods, and recommended actions if pertussis is suspected in a

### Key Messages

- Pertussis is a highly contagious vaccine-preventable respiratory illness that can be life-threatening for infants.
- As of July 10, 2025, **80** pertussis cases have been reported to MSDH from all nine Public Health Districts compared to **49** cases in 2024.
  - 76% (61 cases) occurred in those less than 18 years of age
  - 73 cases were age-eligible for vaccination
    - 38% (28 cases) were not vaccinated
    - Of those not vaccinated, 82% (23 cases) were less than 18 years of age
- No deaths due to pertussis have been reported in 2025.
- Pertussis vaccines are the best way to protect against pertussis.
- MSDH offers vaccinations for children and uninsured adults at MSDH county health departments.
- Mississippi physicians/clinicians must report any suspected cases of pertussis to the Mississippi State Department of Health by phone within 24 hours of first knowledge or suspicion.
  - Reporting Hotline: 1-800-556-0003 (Monday – Friday, 8am – 5pm)
  - After-hours, weekends, holidays: 601-576-7400

patient.

### Background and Current Situation

Reported pertussis cases were lower than usual during and immediately following the COVID-19 pandemic both nationally and in Mississippi; however, pertussis cases began increasing in 2024. During 2024, 49 pertussis cases were reported to MSDH which was a sharp increase from the three cases reported in 2023; however, this was comparable to the 54 cases reported in 2019. As of July 10, 2025, 80 pertussis cases have been reported to MSDH (Figure 1). The majority (76%) of the cases have occurred in children less than 18 years of age, including seven cases occurring in infants less than two months of age. Vaccination status for each case is assessed when feasible. Of the 73



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cases that were age-eligible for pertussis vaccination, 28 (38%) were not vaccinated. Among these unvaccinated cases, 23 (82%) were in children less than 18 years of age (Figure 2).

Ten people (12.5%) were hospitalized due to pertussis, with seven hospitalizations occurring in children less than 2 years of age. While pertussis cases have been reported statewide, 40% (32 cases) were identified in Public Health District 2 (Northeast Mississippi) (Figure 3). No pertussis-related deaths have been reported to MSDH.

Figure 1

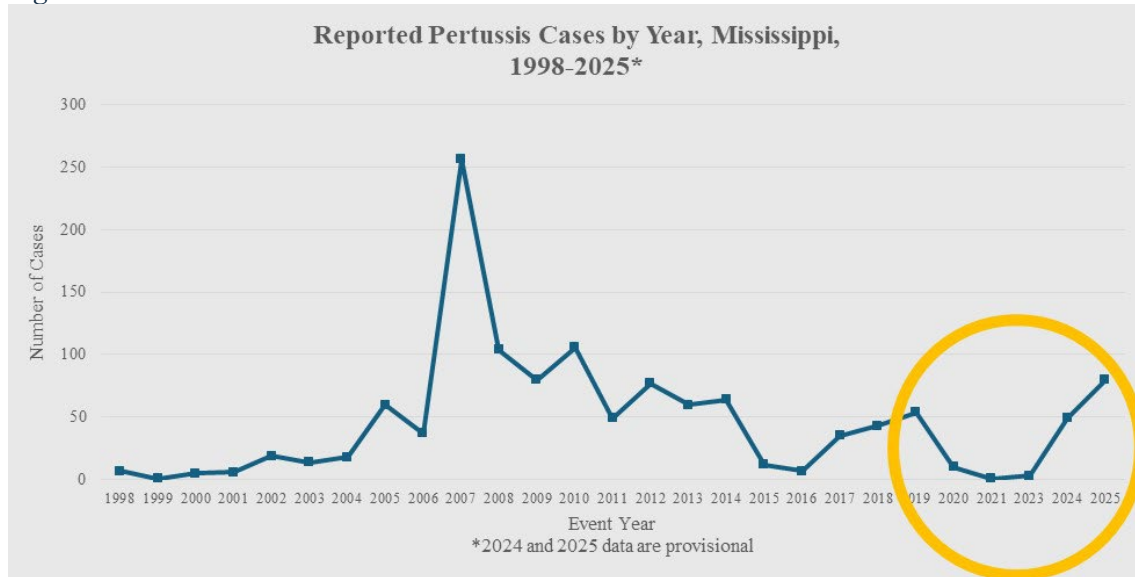


Figure 2

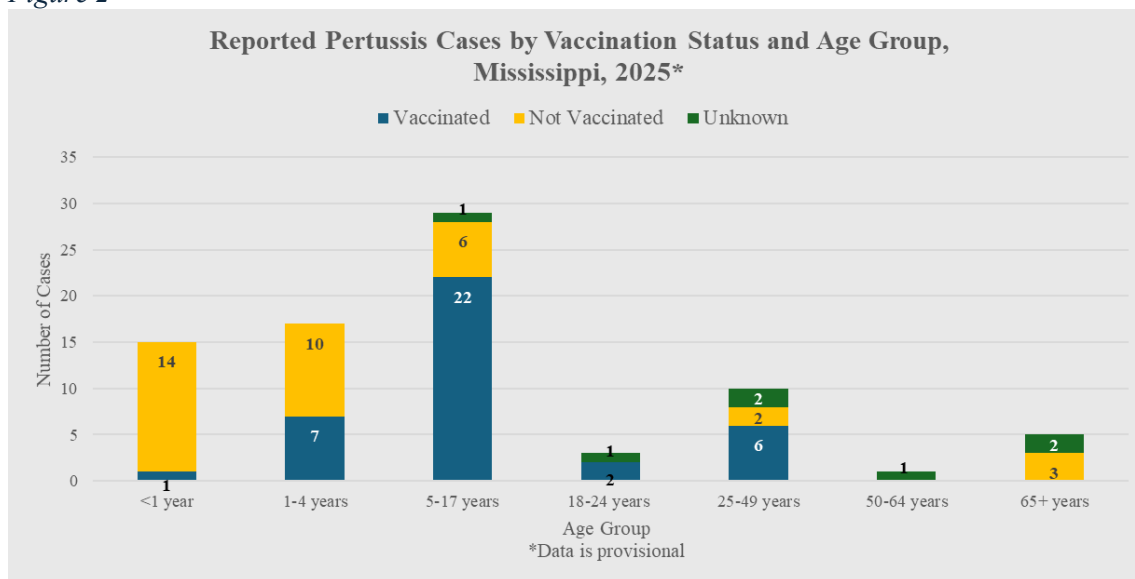
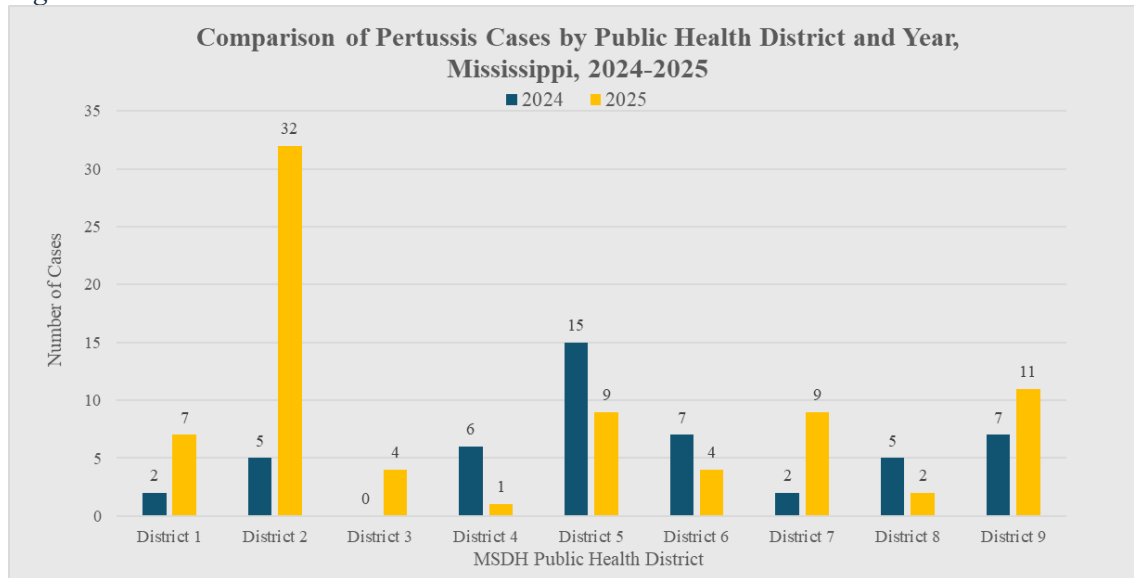




Figure 3



### Clinical Presentation and Transmission

Pertussis, or whooping cough, is a highly contagious vaccine-preventable respiratory illness caused by *Bordetella pertussis*. Pertussis infections can cause mild illness in older children and adults but can be life-threatening for infants. Symptoms typically develop within five to 10 days, but can take up to 21 days, after exposure. Pertussis progresses through three stages: catarrhal, paroxysmal, and convalescent.

1. **Catarrhal Stage** (1 – 2 weeks): Symptoms include runny or stuffy nose, low-grade fever (less than 100.4°F), and a mild, occasional cough.
2. **Paroxysmal Stage** (1 – 6 weeks, up to 10 weeks): Paroxysms (coughing fits) develop causing a high-pitched "whooping" sound, post-tussive vomiting, and difficulty sleeping and breathing can occur, as well as rib fractures. Infants may not present with a cough; however, they may develop apnea causing cyanosis or difficulty breathing. Infants may also only present with common cold symptoms for the entirety of their illness.
3. **Convalescent Stage** (weeks to months): Characterized by a residual cough that may take weeks to months to resolve.

Pertussis is transmitted person-to-person through respiratory droplets or contact with airborne droplets. Individuals are considered infectious from the onset of symptoms until three weeks after the start of the paroxysmal cough, or until completing 5 days of appropriate antibiotics.

### Vaccination Recommendations

Vaccination is one of the safest and most effective ways to protect against pertussis and is recommended for everyone. There are two types of combination vaccines that include protection against pertussis, as well as diphtheria and tetanus: DTaP and Tdap.

DTaP is recommended for younger children, while Tdap is recommended for older children, pregnant women and adults. Infants should receive DTaP vaccinations at 2, 4, and 6 months followed by two booster doses at 15 to 18 months and at 4 to 6 years. Pre-teens should receive a



single dose of Tdap at 11 to 12 years to boost their immunity. Pregnant women should receive a single dose of Tdap **during each pregnancy** in the 27<sup>th</sup> – 36<sup>th</sup> week of pregnancy to help protect their newborns from pertussis during their first few months of life. CDC also recommends a single dose of Tdap for adults who have never received Tdap. Although there is no routine recommendation for pertussis boosters, pertussis immunity wanes over time. It is recommended for adults to receive booster doses every 10 years to maintain protection against tetanus and diphtheria; healthcare providers can administer either Td or **Tdap**.

### **Testing and Treatment Recommendations and Reporting Requirements**

If you suspect or have a patient infected with pertussis, MSDH recommends the following:

**Test:** Collect a nasopharyngeal swab for pertussis polymerase chain reaction (PCR) testing at a commercial laboratory **within three weeks following cough onset**.

- For best results, collect specimens prior to beginning antibiotic regimen.
- **Note:** Serology is not recommended to diagnose an acute pertussis infection.

**Treat:** Antibiotic treatment within the first one to two weeks is most effective for reducing symptom severity. Recommended treatment guidelines include treating people 1 year of age and older within three weeks of cough onset and infants younger than 1 year of age and pregnant women (especially if near term) within six weeks of cough onset. The recommended antibiotics for treatment or postexposure prophylaxis of pertussis are Azithromycin, Clarithromycin, Erythromycin, as well as trimethoprim-sulfamethoxazole.

**Post-exposure Prophylaxis:** Azithromycin post-exposure prophylaxis (PEP) is recommended for household contacts and anyone at high risk for severe illness or in close contact with someone at high risk. This includes infants under 12 months, pregnant women in their third trimester, individuals with pre-existing health conditions, and those who care for or live with these groups. PEP is also recommended for contacts in high-risk settings such as NICUs, daycare centers, and maternity wards where vulnerable individuals may be present.

**Report:** Notify MSDH by phone **within 24 hours of first knowledge or suspicion** at 1-800-556-0003 (Monday – Friday, 8am – 5pm) and after-hours, weekends, holidays at 601-576-7400. The MSDH Office of Epidemiology investigates each reported case of pertussis to identify onset of illness, sources of infections and contacts at risk.

### **Additional Resources**

- Pertussis Surveillance and Trends: <https://www.cdc.gov/pertussis/php/surveillance/index.html>
- Clinical Features of Pertussis: [https://www.cdc.gov/pertussis/hcp/clinical-signs/index.html#:~:text=Key%20points%20\\*%20There%20are%20three%20stages,differ%20based%20on%20age%20and%20vaccination%20status](https://www.cdc.gov/pertussis/hcp/clinical-signs/index.html#:~:text=Key%20points%20*%20There%20are%20three%20stages,differ%20based%20on%20age%20and%20vaccination%20status).
- Immunization Schedules: <https://www.cdc.gov/vaccines/hcp/imz-schedules/>
- Pertussis Vaccination Recommendations: <https://www.cdc.gov/pertussis/hcp/vaccine-recommendations/>
- Pertussis Treatment: <https://www.cdc.gov/pertussis/hcp/clinical-care/index.html>



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Regards,

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*Alerting Message Specification Settings*



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**Originating Agency:** Mississippi State Department of Health  
**Alerting Program:** **MS Health Alert Network (MS HAN)**  
**Message Identifier:** MSHAN-20250714-00605-**ALT**  
**Program (HAN) Type:** **Health Alert Update**  
**Status (Type):** Actual ()  
**Message Type:** Alert  
**Reference:** MSHAN-00605  
**Severity:** Unknown  
**Acknowledgement:** No  
**Sensitive:** Not Sensitive  
**Message Expiration:** Undetermined  
**Urgency:** Undetermined  
**Delivery Time:** 600 minutes

**Definition of Alerting Vocabulary and Message Specification Settings**

**Originating Agency:** A unique identifier for the agency originating the alert.

**Alerting Program:** The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.

**Message Identifier:** A unique alert identifier that is generated upon alert activation (MSHAN-yyymmdd-hhmm-TTT (**ALT=Health Alert**, **ADV=Health Advisory**, **UPD=Health Update**, **MSG/INFO=Message/Info Service**)).

**Program (HAN) Type:** Categories of Health Alert Messages.

**Health Alert:** Conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** Provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** Provides updated information regarding an incident or situation; unlikely to require immediate action.

**Health Info Service:** Provides Message / Notification of general public health information; unlikely to require immediate action.

**Status (Type):**

Actual:	Communication or alert refers to a live event
Exercise:	Designated recipients must respond to the communication or alert
Test:	Communication or alert is related to a technical, system test and should be disregarded

**Message Type:**

Alert:	Indicates an original Alert
Update:	Indicates prior alert has been Updated and/or superseded
Cancel:	Indicates prior alert has been cancelled

**Reference:** For a communication or alert with a Message Type of “Update” or “Cancel”, this attribute contains the unique Message Identifier of the original communication or alert being updated or cancelled. “n/a” = Not Applicable.

**Severity:**

Extreme:	Extraordinary threat to life or property
Severe:	Significant threat to life or property
Moderate:	Possible threat to life or property
Minor:	Minimal threat to life or property
Unknown:	Unknown threat to life or property

**Acknowledgement:** Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the timeframe in which a response is required (Yes or No).

**Sensitive:**

Sensitive:	Indicates the alert contains sensitive content
Not Sensitive:	Indicates non-sensitive content

**Message Expiration:** Undetermined.

**Urgency:** Undetermined. Responsive action should be taken immediately.

**Delivery Time:** Indicates the timeframe for delivery of the alert (15, 60, 1440, 4320 minutes (.25, 1, 24, 72 hours)).

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