

Reduce Pertussis With Vaccination and Antibiotics

Questions will come up about **vaccination and antibiotics for pertussis**...since US cases in 2024 climbed past pre-pandemic levels.

Pertussis (whooping cough) is most serious in infants under 1 year old...and can lead to hospitalization and death.

Cases decreased during the COVID-19 pandemic...but the recent rebound to 2019 levels may be due to waning immunity after vaccination.

Ask patients about their vaccine history. This can help the pharmacist identify vaccination opportunities.

Expect kids to get pertussis vaccine at the same time as most tetanus vaccinations...since pertussis is always combined with tetanus vaccine (DTaP, Tdap, etc).

Expect nonpregnant adults to get at least one Tdap dose at age 19 or older...then Td or Tdap boosters every 10 years. Similarly, a single Tdap dose is needed at age 65 or over.

On the other hand, pregnant patients require a Tdap dose in the third trimester of EVERY pregnancy...regardless of past doses.

Help address confusion between vaccine options. DTaP is for kids under age 7. Older patients should only get Tdap. To help remember, think of the “T” in “Tdap” as meaning it should be used in TALL patients.

Be prepared for antibiotic Rx's. These may be needed for post-exposure prophylaxis and treatment...regardless of vaccination history.

For example, infected patients should start treatment antibiotics ASAP to limit spread...and symptom severity.

And household members should start post-exposure prophylaxis within 21 days after the contagious patient began coughing.

Keep in mind, antibiotic regimens are the same for both indications.

You'll see azithromycin daily for 5 days used first-line...it has less GI side effects and a shorter regimen than other options.

Trimethoprim/sulfamethoxazole (TMP/SMX) for 14 days is an alternative for patients over 2 months old with an azithromycin allergy.

Be aware, these doses should be weight-based for kids. Confirm the child's weight with caregivers so your pharmacist can calculate doses.

Watch for other errors when processing these Rx's. For example, young children and newborns should receive po suspensions...NOT tabs.

And double-check suspension strengths...azithromycin comes as 100 mg/5 mL and 200 mg/5 mL options.

Apply auxiliary labels...“Shake well” and “Do not refrigerate”...to these antibiotic suspension bottles...to promote proper use.

Point out that azithromycin should be discarded 10 days after reconstitution...and assign TMP/SMX's beyond-use date based on the manufacturer's expiration.

Key References:

-CDC. Whooping Cough (Pertussis): Postexposure Prophylaxis. April 2, 2024.

Cite this document as follows: Article, Reduce Pertussis With Vaccination and Antibiotics, Prescriber Insights: APRN, January 2025

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<https://www.cdc.gov/pertussis/php/postexposure-prophylaxis/index.html> (Accessed October 28, 2024).

-Tiwari T, Murphy TV, Moran J; National Immunization Program, CDC. Recommended antimicrobial agents for the treatment and postexposure prophylaxis of pertussis: 2005 CDC Guidelines. MMWR Recomm Rep. 2005 Dec 9;54(RR-14):1-16.

-Havers FP, Moro PL, Hunter P, et al. Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccines: Updated Recommendations of the Advisory Committee on Immunization Practices - United States, 2019. MMWR Morb Mortal Wkly Rep. 2020 Jan 24;69(3):77-83.

-CDC. Whooping Cough (Pertussis): Pertussis Surveillance and Trends. November 7, 2024.

<https://www.cdc.gov/pertussis/php/surveillance/index.html> (Accessed November 11, 2024).

Pharmacy Technician's Letter. January 2025, No. 410119

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