

# How to help protect your patients' babies from pertussis

## How does pertussis affect infants?

In 2018, there were  
**>169,000** cases  
of pertussis globally<sup>1\*</sup>

\*Approximate cases by region: Africa, 14,000; Americas, 24,000; South-East Asia, 17,500; Europe, 57,000; Eastern Mediterranean, 3,500; Western Pacific, 53,000



**One in three infants** aged <12 months with pertussis require hospitalization;<sup>2</sup> of which, unfortunately **~1 in 100** will die<sup>2</sup>

Infants aged  
**<2 months**

are at the **highest risk** of severe complications and are too young to be vaccinated<sup>2,3</sup>

## How can we protect infants from pertussis infection by using Tdap vaccination in pregnancy?

Tdap vaccination during pregnancy focuses on preventing pertussis infection/complications in the infant during the time of highest risk, the first few months of life.<sup>3</sup> This benefit continues through the infant's first year<sup>5</sup>

### What are the wider benefits to vaccinating pregnant individuals against pertussis?



#### Pregnant individuals:

Provides **direct protection** to the person vaccinated<sup>4</sup>



#### Young infants:

**Reduces** the risk of **secondary transmission** to the **newborn**<sup>4</sup>

Protection during the **first few months** of life<sup>5,6</sup>



#### Infants:

Continued protection throughout the first year of life, in addition to their pertussis vaccination series<sup>5</sup>

**Reduces risk of pertussis disease, hospitalizations, and deaths**<sup>3,5</sup>

- In 2012–17, the UK Tdap vaccination in pregnancy program was estimated to prevent:<sup>7</sup>

**~1,400–4,300**  
infant hospitalizations

**~82–170**  
infant deaths

Tdap vaccination during pregnancy is recommended by WHO,<sup>8</sup> the CDC (US),<sup>9</sup> PHE (UK),<sup>10</sup> PHAC (Canada),<sup>11</sup> ATAGI (Australia),<sup>12</sup> and HAS (France),<sup>13</sup> among others



### When should you vaccinate your patients to ensure optimal protection?



During the **third trimester** to maximize neonatal antibody acquisition<sup>14–16</sup> (and ideally, at least 2 weeks before delivery<sup>16</sup>)

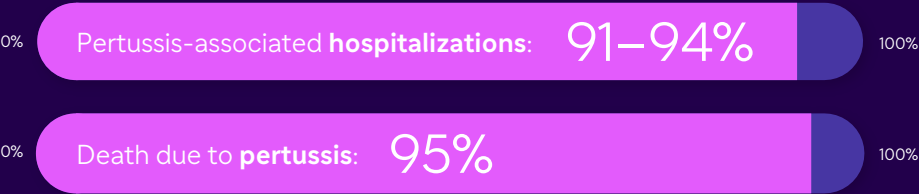
## Are there any safety concerns for Tdap vaccination during pregnancy?



Tdap vaccination is **well tolerated** by the: pregnant individual, with **similar safety profiles** in vaccinated and unvaccinated pregnancies<sup>17</sup> and neonate, where no specific safety concerns were raised<sup>17</sup>

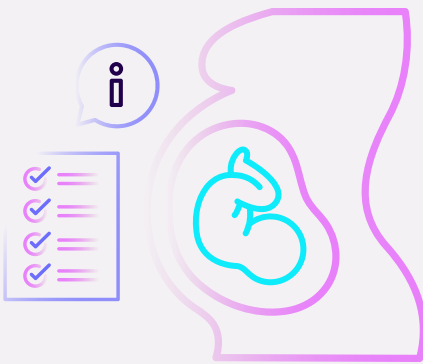
### What data are available to show how effective Tdap vaccination is at preventing disease?

A review of studies in infants aged 0–3 months found that **vaccine effectiveness is high and protected against**:<sup>3</sup>



## How can I help to protect my pregnant patients and their babies from pertussis?

- Recommend Tdap vaccination for your patients during prenatal care visits, (this is critical for facilitating vaccination in pregnancy)
- Address any queries and concerns to facilitate informed choices for the patient
- Explain the benefits of Tdap vaccination for maternal and neonatal health



**Please speak to a medical representative at the booth to talk about pertussis and Tdap vaccination in pregnancy**

### Abbreviations

**ATAGI**, Australian Technical Advisory Group on Immunization; **CDC**, Centers for Disease Control and Prevention; **HAS**, Haute Autorité de Santé; **PHE**, Public Health England; **Tdap**, tetanus, diphtheria, and pertussis; **PHAC**, Public Health Agency of Canada; **WHO**, World Health Organization.

### References

1. WHO. Available at: [https://apps.who.int/gho/data/view.main.1520\\_43?lang=en](https://apps.who.int/gho/data/view.main.1520_43?lang=en) (Accessed September 2023);
2. CDC. Available at: <https://www.cdc.gov/pertussis/index.html> (Accessed September 2023);
3. Vygen-Bonnet S, et al. BMC Infect Dis 2020;20:136;
4. Skoff TH, et al. Clin Infect Dis 2021;73:e3836–e41;
5. Baxter R, et al. Pediatrics 2017;139:e20164091;
6. Halperin SA, et al. Clin Infect Dis 2018;67:1063–71;
7. Sandmann F, et al. Clin Infect Dis 2020;71:1984–7;
8. WHO. Available at: Pertussis vaccines: WHO position paper, August 2015 Recommendations. Vaccine. 2016;34:1423–5;
9. CDC. Available at: <https://www.cdc.gov/vaccines/pregnancy/hcp-toolkit/tdap-vaccine-pregnancy.html#:~:text=Protection%20from%20pertussis%20vaccines%20does,27%20and%2036%20weeks%20gestation> (Accessed September 2023);
10. PHE. Pertussis (whooping cough) vaccination programme for pregnant women. 5th ed. London: Public Health England Publications; 2020;
11. PHAC. Available at: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-15-pertussis-vaccine.html> (Accessed September 2023);
12. ATAGI. Australian Immunisation Handbook, Pregnant Women Are Recommended to Receive a Single Dose of Pertussis-containing Vaccine in Each Pregnancy. Canberra: Australian Government Department of Health; 2018;
13. HAS. Available at: <https://www.nitag-resource.org/resources/french-nitag-recommends-whooping-cough-vaccine-pregnant-women#:~:text=The%20French%20NITAG%20recommends%20the,the%20cocooning%20strategy%20be%20maintained> (Accessed September 2023);
14. Munoz FM & Jamieson DJ. Obstetrics and Gynecology 2019;133:739–53;
15. Liang JL, et al. MMWR Recomm Rep 2018;67:1–44;
16. Switzer C, et al. Infect Dis Ther 2019;8:499–541;
17. Campbell H, et al. J Med Microbiol 2018;67:1426–56.