

# Vaccine Hesitancy

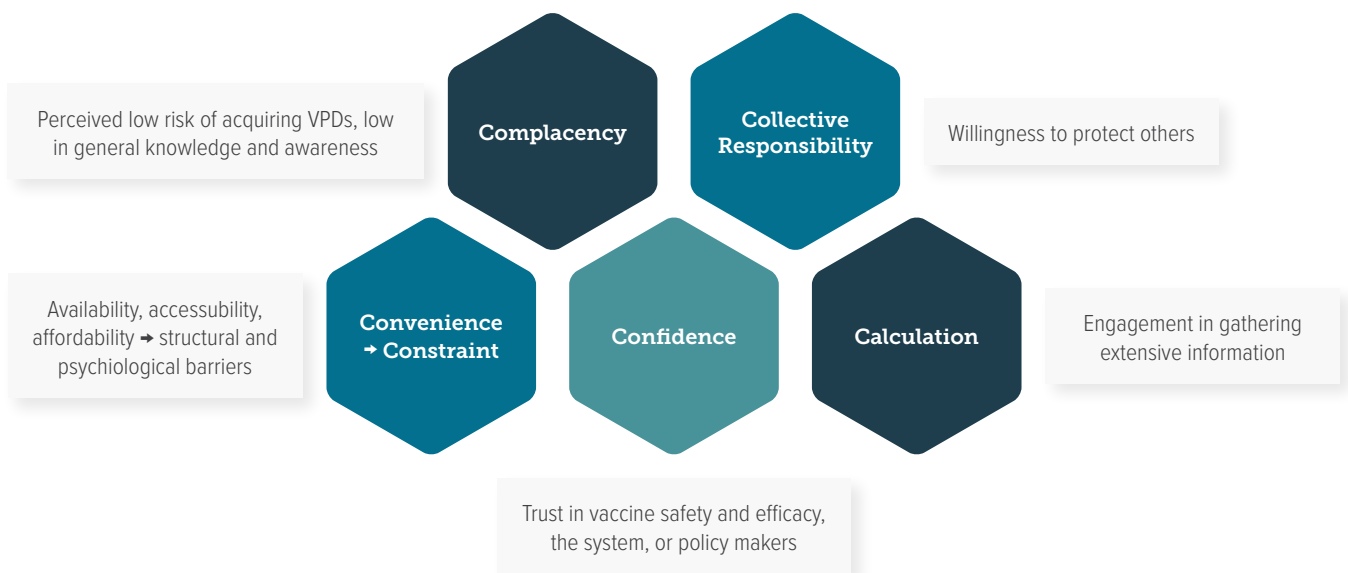


## Q: What is vaccine hesitancy?

A: According to the World Health Organization, vaccine hesitancy refers to delay in acceptance or refusal of safe vaccines despite availability of vaccination services. It has had numerous negative impacts on society, including the reemergence of preventable diseases, outbreaks, hospitalizations, and deaths in pediatric populations.

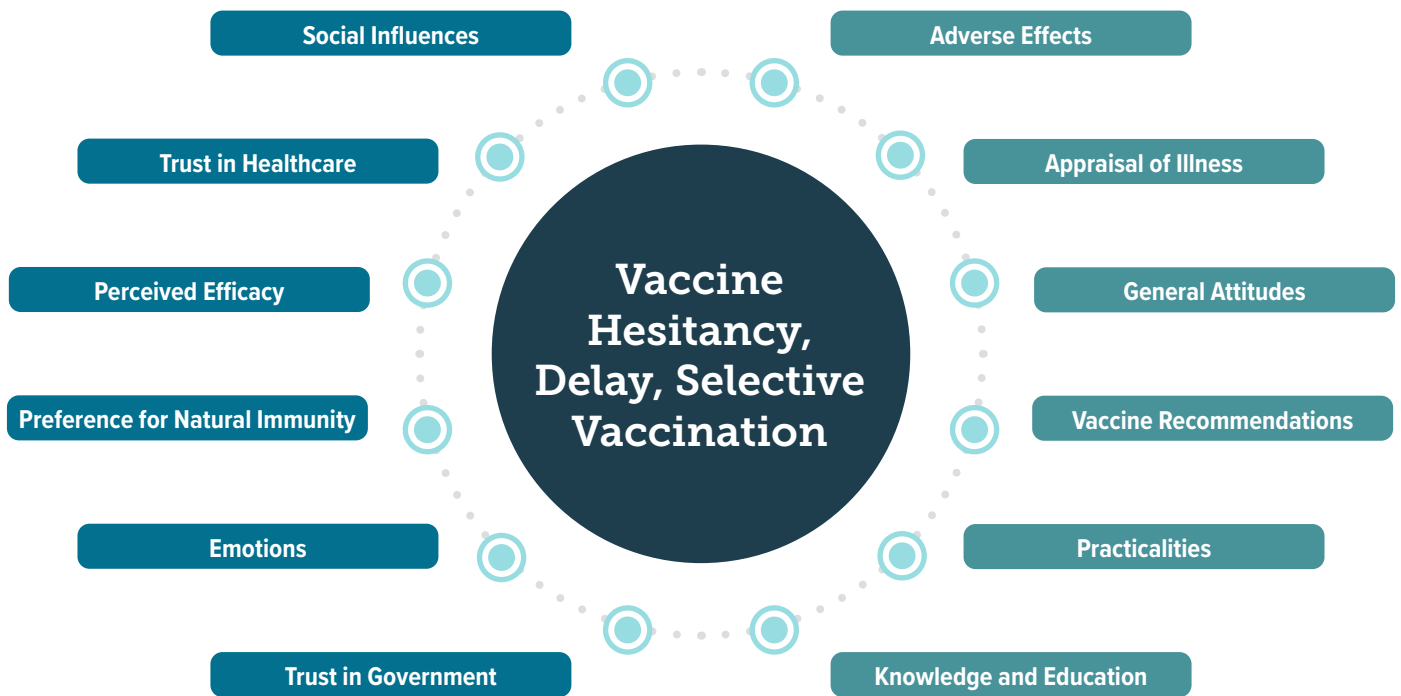
## Q: What are some of the contributing factors of vaccine hesitancy?

A: There are five main contributing factors to vaccine hesitancy, which can be described via the 5C's Model: complacency, collective responsibility, convenience/constraint, confidence, and calculation. The model can be seen below:



**Q: What are specific concerns parents have about vaccines?**

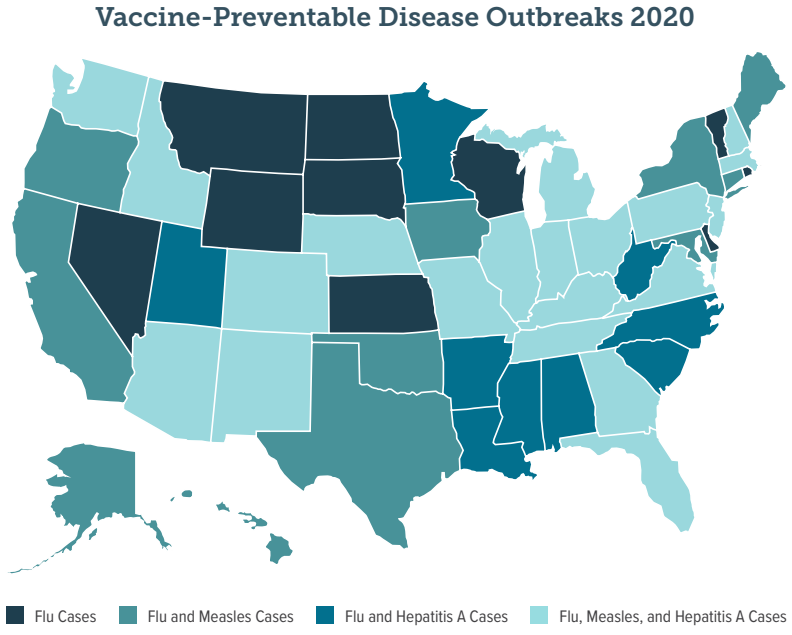
A: There are numerous concerns parents have about vaccines, and the concerns can vary greatly from parent to parent. Many of these concerns stem from the Wakefield paper in the early 2000's, which fraudulently claimed that the MMR vaccine caused autism in patients. Other concerns stem from a lack of understanding of the diseases vaccines prevent, or concerns about the adverse effects of the vaccine. Misinformation also has a profound impact on parents, especially with the widespread use of social media and the algorithms generated from them. However, general themes can be seen in the figure below:



**Q: How has vaccine hesitancy affected pediatric patients over the past few years?**

A: There have been significant outbreaks within the past decade due to a downward trend in pediatric vaccination. While the general statistics can be seen below, there are numerous personal impacts associated with a lack of vaccination. Children who contract measles have a 20% chance of being hospitalized, and patients can experience brain damage, immune system amnesia, and subacute sclerosing panencephalitis, a brain disorder which is always fatal. 1-3 out of 1000 patients will die. Half of children < 1 yr who contract pertussis will be hospitalized, and patients experience painful coughing fits with vomiting and exhaustion up to 10 weeks. There is a lag of young boys who have received the HPV vaccine, and while cases of cervical cancer have plummeted, males have had increasing rates of HPV-related cancers, including penile, anal, and oropharyngeal cancer. Statistics regarding outbreaks can be seen below:

<b>Measles</b>	2019 1,282 cases from 31 states
<b>Pertussis</b>	2014–2019 120,000 cases reported in US
<b>Mumps</b>	2015–2017 150 Outbreaks (9,200 cases)
<b>Hep A</b>	Since 2016 30 states report 42,049 cases, 25,524 hospitalizations, 383 deaths
<b>Flu</b>	2019–2020 199 children died, highest number of pediatric deaths reported during a regular flu season; 20k kids < 5 hospitalized



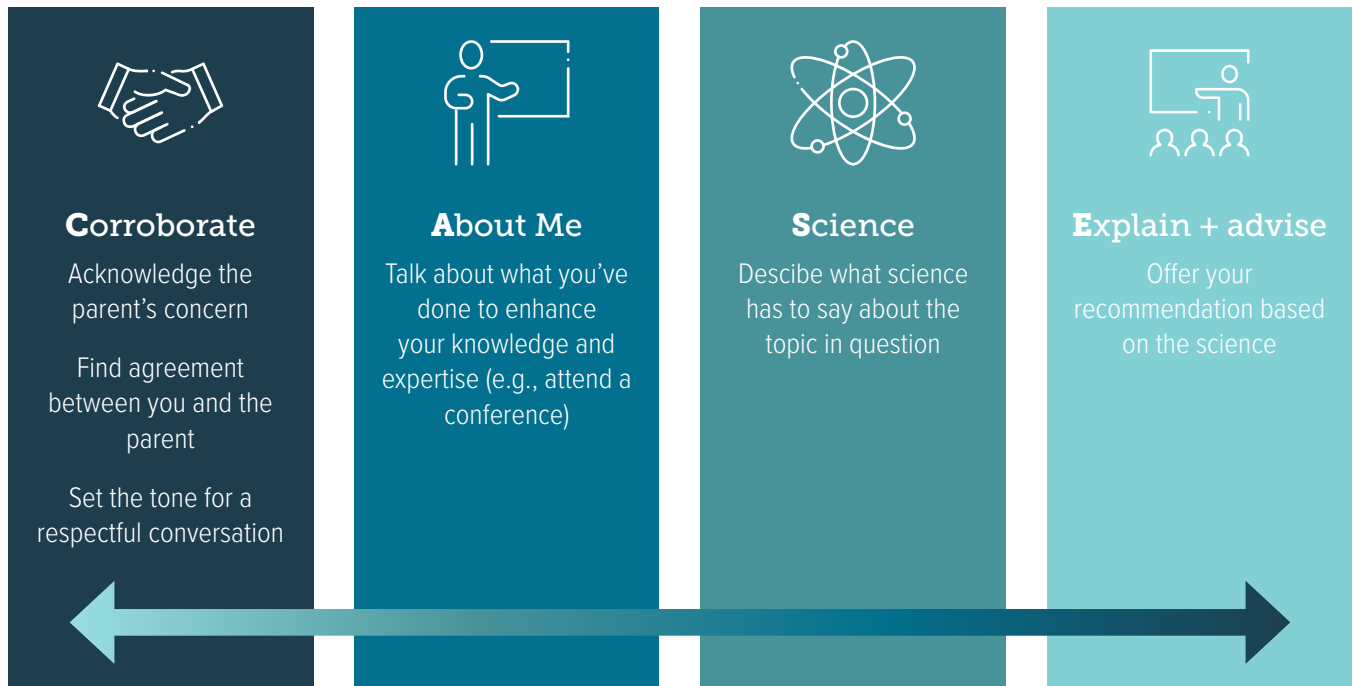
**Q: How can nurses have more effective conversations with parents about vaccines?**

A: There are many ways to have more effective conversations with parents about vaccines. One evidence-based method to improving vaccine adoption is to approach conversations with a presumptive approach. Instead of asking, “Would you like your child to get their vaccines today?”, state, “it’s time to start all those vaccines. We’re going to be doing the MMR and chicken pox vaccine today.” In one study, 74% of hesitant parents in one cohort accepted vaccines using the presumptive approach, whereas only 17% of hesitant parents in the participatory cohort accepted vaccines. Other tips and guidance regarding effective conversations can be seen below:

Use These Words MORE	Use These Words LESS	Tips
The benefits of taking it	The consequences of not taking it	Tailor your message for your audience
Getting the vaccine will keep your children safe	Getting the vaccine is the right thing to do	Explain the benefits, not just the consequences
Your family	Your community	Talk about the people behind the vaccine
Medical experts	Scientists/health experts	Avoid judgmental language
Medical researchers	Drug companies	Use and repeat the word “every” to explain the vaccine development process
Safety	Security	
Pharmaceutical companies	Drug companies	
Advanced/groundbreaking	Historic	
Vaccination	Injection	
America’s leading experts	The world’s leading experts	
Skeptical/concerned about the vaccine	Misled/confused about the vaccine	

**Q: Are there specific models I can use to structure my conversations?**

A: One model that has been used effectively is the CASE model, which stands for corroborate, about me, science, and explain/advice. Guidance regarding the use of this model can be seen below:



**Q: Are there resources I can go to that are specific to nurses?**

A: The American Nurses Association has numerous resources for use, and can be seen at <https://www.nursingworld.org/practice-policy/work-environment/health-safety/immunize/immunization-resources/>. Your state nursing associations can also be contacted for additional information regarding state-specific information.

