# **Make the CASE for Vaccination**

Implementing a vaccine communication framework such as the CASE Method in your practice may reduce the time and resources it takes to answer parents' questions about vaccines while maintaining a positive rapport.

## What is the CASE method?

It is a four-step framework for communicating vaccine science. It was developed by the Autism Science Foundation as a way for providers to talk with parents about concerns around vaccines and autism.

## Why use the CASE method?

We know that there are many psych-social influences that drive people to make health decisions. By using a technique like the CASE method, you can help calm parents' fears and help them absorb your message.



## What are some ideas for incorporating the CASE Method into your practice?

- You can include this information as a SMART Set in your electronic medical record (EMR).
- You can share this information at a staff lunch-and-learn and practice how you would answer parents' questions.
- You can print the information and have it in the exam room to help answer questions for parents.

### How to use the CASE method?

When a parent asks a question, identify what they are actually asking. Most questions fall into one of six categories (these are described on pages 2-4).



Then, follow the steps in the CASE Method: Corroborate: Find some points on which you can agree with your parents and set the tone for a respectful talk.

About me: Tell them how you built your knowledge and expertise.

**S**cience: Describe what the science says (we provided some responses on the following pages).

Explain: Give your recommendation, based on the science.



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#### For example:

A parent says, "I have done a lot of vaccine research online and I think nowadays we are giving kids too many shots at once."

First, **Corroborate**. You can say something such as, "Yes, today we have more vaccines than we did when you and I were children."

Second, tell them **About you**, for example, "staying current about vaccine and medical information is important to me, and I just read a journal article (or attended a conference, or lecture) about this."

Third, tell them what the **Science** says. You can say something such as, "Our vaccines today are different than they used to be. We are giving 25 times less antigens today compared to the three vaccines given in 1960. The amount of shots we are giving is safe, effective, and tested vigorously."

Fourth, **Explain** your recommendation. You can say, "I strongly recommend giving all of the CDC recommended vaccines today to protect your child's health."

### How can I respond to parents' questions?

The majority of parents' questions fall within six categories. Here are the categories and scientific responses that you can use to respond to parents' questions.

#### Myth 1: Vaccines cause autism (MMR II vaccine and autism).

- Multiple studies from all over the world involving hundreds of thousands of children, have all shown NO link between MMR or other vaccines and autism.
- Vaccines do not cause autism. Nearly a dozen studies and record reviews conducted worldwide over the last 10 years, following millions of children show that vaccines do not cause autism.
- Often an autism diagnosis in children occurs between ages 1 and 4 years, which happens to be around the same time that children get many of their vaccines. Just because the two events are near each other in time does not mean that one causes the other.
- Where did this idea come from? In 1998, an English doctor, who used faulty science, and took large sums of money from trial lawyers, published false paper trying to show a link between autism and MMR vaccine. He failed. There is no link between vaccines and autism.

#### Myth 2: Vaccines are not safe

- Vaccines are studied and scrutinized as much or even more than any other medical treatment.
- Vaccines are studied in thousands of people before they are approved for routine use, and then are followed in post-approval studies in tens of thousands of subjects.
- In addition, there is a national database to track any concerns about any vaccine called VAERS (Vaccine Adverse Event Reporting system). This system is in place to identify rare problems with vaccines.
- Using all of these studies and tracking systems involving millions of people, we study the relationship of
  vaccines to 200 categories of illness, death, emergency room visits or hospitalizations. If any safety
  concerns are identified and scientifically proven, we change recommendations promptly. These systems
  are in place to make sure vaccines are as safe as anything we do in medicine.

### Myth 3: This vaccine is too new

Vaccines are studied and scrutinized as much or more than any other medical treatment. By the time a vaccine is recommended there are extensive scientific data collected over many years so you can be reassured that the vaccine is not too new to use.

- Prior to licensure, there are three sets of rigorous studies:
  - **Phase I:** Researchers test a new drug or treatment in a small group of people for the first time to evaluate its safety, determine a safe dosage range, and identify side effects.
  - **Phase II:** The drug or treatment is given to a larger group of people to see if it is effective and to further evaluate its safety.
  - **Phase III:** The drug or treatment is given to large groups of people to confirm its effectiveness, monitor side effects, compare it to commonly used treatments, and collect information that will allow the drug or treatment to be used safely.
- After licensure, there is ongoing surveillance for unexpected or rare problems.
  - Active surveillance (controlled and studied prospectively)
  - Passive surveillance (anybody can report any concerns) so we can find any unexpected or rare problems associated with the vaccines.

### Myth 4: We are giving too many vaccines (immune overload theory)

- Antigens are anything foreign to the immune system: a virus, bacteria, pollen, or fungi. Our immune systems can respond to billions of antigens and responds to many thousands of them in our day to day life.
- In the entire childhood vaccine series, we are giving 130-140 unique antigens. This is "a drop in the bucket" compared to the amount of antigens we are exposed to in everyday life and for common infections.
- Our vaccines are different than they used to be. In 1960, we were giving just three vaccines (small pox, polio, DTP). Those vaccines contained over 3,200 antigens. Today, in the entire series of vaccines, although we are giving many more shots and protecting against many more diseases, the amount of antigens we are giving is 25 times lower.
- The number of vaccines we are giving is safe, effective, and tested vigorously.

### Myth 5: Preservatives in vaccines are unsafe (toxic)

- Preservatives were used in some vaccines in the past to prevent contamination. Preservatives have been removed from almost all vaccines, **NOT** because they were shown to be toxic, but because most vaccines are packaged as single dose vials now which do not require preservatives.
- The only current vaccine that may contain Thimerosal is influenza (flu) vaccine. Thimerosal was a common preservative used in some vaccines before 2001.
- Thimerosal has never been shown to have any toxic effects in studies involving hundreds of thousands of patients, but was removed from almost all vaccines.

- Some vaccines contain aluminum to help with the immune response.
- Aluminum comes from the earth's crust. We are exposed to and ingest aluminum on a dailybasis including food, medicine, cosmetics, antiperspirants, etc.
- The amount of aluminum in vaccines is very small. Typically, adults ingest 7 to 9 milligrams of aluminum per day. For comparison, the aluminum contained in all vaccines is similar to that found in about 32 fluid ounces of infant formula which babies ingest safely each day.

#### Myth 6: It's better to become immune by getting the infection naturally

- Vaccines save lives, reduce suffering, and are cost effective. Vaccine-preventable infections do not have benefits.
- In some, but not all cases, natural immunity lasts longer than immunity from vaccines, but
  natural infection is associated with many risks and costs, including: death, hospitalizations,
  severe disability including brain damage, hearing loss, birth defects, loss of limbs, sterility,
  etc.
- The risks of vaccines are very small. The risk of a severe vaccine injury is very rare. A person is more likely to be struck by lightning or die while bathing than to have a vaccine injury.
- Vaccines are very cost effective. For every \$1 spent on childhood vaccinations, our country saves \$10.90. The CDC estimates that for the vaccination of children born between 1994 and 2018 has saved the U.S. nearly \$406 billion in direct medical costs and \$1.88 trillion in total society costs. Vaccines provide many benefits:
  - A report published in 2013 found 26 million illnesses were prevented in the U.S. population over the last decade due to vaccines.
  - A report published in 2007 found that 1–2 million illnesses per year were prevented due to vaccines.

### Preparing for parents' questions.

By preparing for and practicing aloud your responses to parents' questions, you will help calm their fears, build and build your trust and your relationship. Research has shown that a parents' health care provider is their most trusted resource for information.







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