

Highlights from our Caring Well podcast:

Understanding Vaccine Safety and Myths: From Testing to Trust (part 2), with Dr. Middleton and Sara Pate, APRN

## Vaccine Safety & Testing

- All vaccines go through rigorous safety testing:
  - Pre-clinical → Phase 1 → Phase 2 → Phase 3 (tens of thousands of people).
  - Post-approval monitoring continues for years with large surveillance systems.
- Standards for vaccines are much higher than for medications since they are given to healthy people.
- Serious side effects are extremely rare, and when they have happened, it has always been within a couple of weeks of the dose being given. The idea of a vaccine causing a serious side effect "years later" is not something that has ever been seen.

# Ongoing Monitoring

- VAERS (Vaccine Adverse Event Reporting System) allows anyone to report concerns. It's a signal system to identify issues, not proof of cause.
- Other active surveillance systems track health records across millions of patients to detect rare events.
- Vaccines remain under continuous safety review after approval.

### Ingredients & Safety

- Adjuvants (like aluminum) help vaccines work better and have been studied for decades.
- Thimerosal (a preservative) was removed from nearly all vaccines 20+ years ago, yet has repeatedly been shown to be safe.
- Pediatricians strongly affirm: the benefits of vaccines far outweigh the risks.

#### Why Vaccines Still Matter

- Measles the most contagious disease known; can infect 18 others from one person. Recently resurging due to declining vaccination.
- Mumps outbreaks occur on college campuses; can cause meningitis and infertility.
- Rubella mild in kids but dangerous in pregnancy (causing deafness, blindness, stillbirth). Eliminated in the U.S. thanks to vaccines.
- Chickenpox (Varicella) caused ~100 child deaths yearly before the vaccine. Now nearly eliminated; also saves healthcare costs.
- HIB & Pneumococcal once leading causes of childhood death, meningitis, and disability. Now largely prevented.
- Pertussis (Whooping Cough) still present and dangerous for infants; reason for early and multiple doses of DTaP.

#### Trust & Misinformation

- Be cautious of sources spreading fear while selling alternative products.
- Trust is best built with your child's pediatrician and reputable medical institutions.
- · Vaccines are safe, effective, and the reason many deadly diseases feel "gone."

