
HEALTH COMMISSIONER CORNER

Prevention, Public Health Begin with Immunization

Scientific discoveries have led to great achievements in public health. For more than 200 years, vaccine development has kept people free from dreadful diseases. English physician Edward Jenner performed the first vaccination in 1796, using weaker cowpox virus to inoculate a boy against deadly smallpox, and French chemist Louis Pasteur took science a step further by artificially weakening the incurable rabies virus and successfully vaccinating a child, bitten by a rabid dog.

Today, modern vaccines protect us from more than a dozen serious illnesses that previously claimed lives. In the early 1900s, outbreaks of pertussis and diphtheria were commonplace, and for children often deadly. Infectious disease in fact was the most common cause of death and disability among all ages. We take the absence of these scourges for granted—forgetting that nearly one out of every five children born back then did not reach their fifth birthday.

Decades later, the heartbreaking images of a child's small limp legs, in braces from polio, or the struggle to breathe caused by diphtheria, have become faded memories. On the other hand, with recent lapses in pertussis protection, we are witnessing the re-emergence of whooping cough's signature gasp. So far this year more than 20,000 new cases have been

reported. We should not be complacent. Failure to avail ourselves of these life-saving vaccines will allow these illnesses to return.

By far, the most devastating disease outbreak dates back to 1918. The Spanish influenza pandemic infected about one third of the globe and killed more than 40 million people. Unlike usual flu outbreaks, which affect the young and the elderly most severely, the 1918 virus struck hardest among young adults, ironically because their healthy immune systems produced an uncharacteristic respiratory response, literally choking them to death.

These historic glimpses offer insight into what can happen when germs take the upper hand. They also remind us why immunization stands as one of the most successful public health achievements of all time. Smallpox was eradicated worldwide in 1977 and polio no longer threatens the western hemisphere.

Some may question vaccine necessity, others their safety. People have done so since Jenner's first inoculation centuries ago. The fact is immunizations are one of the most studied and monitored public health practices in existence and one of the most clinically sound and cost-effective medical interventions available.

September is upon us: families are pre-



paring for schools' reopening and flu season won't be far behind. It's a good time to check that children's vaccines are up to date and make plans to get a flu shot. Everyone six months and older needs a flu shot. Each year it's reformulated by researchers, based on current prevailing influenza strains, with your ultimate protection in mind. Watch for the Putnam County Department of Health flu clinics beginning in September. We provide convenient, cost-effective protection to safeguard the community's health needs.

*Allen Beals, MD
Commissioner of Health
Putnam County
Department of Health*