Health Expert Debunks Five Anti-Vaccine Myths

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Lately, there's been a big debate in the medical community over how to deal with anti-vaccination advocates. In the face of a rapidly growing measles outbreak, CNN's Sanjay Gupta, MD, debunks the five top myths anti-vaccination advocates are using to argue their case. Here's an overview:

Myth 1. Vaccines cause autism. This myth came from a 1998 paper published in the Lancet that the medical journal later discredited for ethics violations and misrepresenting facts. Several follow-up studies found no connection between vaccines and autism.

Myth 2. Vaccines contain poison. There is a claim that trace amounts of mercury included in vaccines caused autism. But many medical studies show no correlation between mercury and autism.

Myth 3. Vaccines are big profit-drivers for doctors and insurers. A 2009 study showed that up to a third of doctors actually lose money on vaccinations. Also, vaccines prevent illness, which is far more expensive in the long run than giving out shots.

Myth 4. Vaccines contain too many antigens. Some people believe children's immune systems are too weak to handle antigens, the viral parts of a vaccine that allow the body to build up resistance to illnesses. But today's vaccines actually contain far fewer antigens than they did 30 years ago.

Myth 5. Vaccines are unnecessary because the diseases they prevent are extinct. As evidenced by the huge outbreak across 14 states, measles is still here and still harmful. The highly contagious disease can lead to pneumonia, lifelong brain damage, deafness and even death.

Here are some facts: Vaccines prevent 6 million people from dying worldwide every year. Studies show only one in 1 million children experiences an adverse reaction to a vaccine.

For more information about vaccine safety, click here.

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