

Realize the Need to Immunize

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History and Perspective

Diseases such as measles, diphtheria, and whooping cough that used to be common among children have decreased dramatically since the start of widespread immunization. These vaccines have saved thousands of lives, leading some parents to question the need for them. Some parents perceive that there is no longer serious risk of contracting these diseases. In fact, these diseases have not disappeared, nor are their risks relevant only to our parents' generation. Each child who is not immunized gives these diseases a chance to spread – as recently as outbreaks of whooping cough in Japan in the 1970s, measles in the United States from 1989-1991, and encephalitis in New York in 1999. The increase in international travel in recent decades also provides these diseases opportunity to spread, especially among those not vaccinated.

Through immunization initiatives, we have done an excellent job making sure that kindergarten and first graders are vaccinated - over 95% of school-age children are up-to-date on their vaccines. School nurses and registration personnel have kept in touch with families and tracked students needing vaccines before entering school. However, the picture is not so pretty for preschoolers. More than 20% of children in this age group have not had required immunizations, according to the National Immunization Survey. This is true whether or not the child attended preschool. Of the 76% lacking vaccines, over 90% were missing more than one dose. The impact of a number of children not receiving vaccines can be dangerous - each child not vaccinated is one more chance for an outbreak.



How Vaccines Work

Vaccines work by preparing the body to fight illness. Most vaccines use either dead bacteria or only part of the disease-causing bacteria. This makes it impossible to get the disease from the vaccines, but enables the body to create antibodies against them. When a child who has received one of these vaccines is exposed to that disease, the body already knows how to fight it and is “immune.” Other vaccines, such as measles-mumps-rubella (MMR) and chickenpox are made from very weakened viruses, not dead ones. It is possible for children to get a mild form of the disease after vaccination, but it will be much less severe than if they had not been vaccinated. Some vaccines (such as measles) last a lifetime, while others (such as tetanus) need to be updated to maintain their effectiveness.

Advances in medicine and technology are making immunizations safer and more effective. One such advancement is the polio vaccine (IPV), now made from dead viruses rather than weakened live viruses. Newer immunizations include MMRV (MMR and Varicella in one vaccine instead of separately), and a



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Rotavirus vaccine to come out soon. New vaccines are licensed only after thorough lab testing, clinical trials, and safety monitoring. Side effects for most vaccines are very rare, but may include redness and swelling where the shot was given, fever, or rash. Any side effect from a vaccine is still quite minor compared to the risk of serious illness to a child who does not receive it.

Dispelling Common Myths

Many parents fear that vaccines may cause their child to contract the disease, or suffer other diseases as a result. Numerous studies by the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) have shown no link between vaccinations and Sudden Infant Death Syndrome (SIDS), multiple sclerosis, or autism. Worries that vaccines containing thimerosal (a preservative) cause autism have also been proven false, and in fact, many vaccines no longer contain the ingredient.

Many parents still question the need to vaccinate at all. Again, while these diseases are not necessarily prevalent among school children (thanks to immunizations), the risk is continually there. If one parent assumes “all the other children are immunized, mine don’t need to be” it is reasonable to assume many other parents have the same idea, leading to a lapse in immunizations. During once such lapse in the United States from 1989-1991, the incidence of measles among preschoolers jumped, as did the number of deaths and children with permanent brain damage. This is why it is important for every child to stay current with their vaccination schedule.

Other myths are that vaccines can weaken the immune system, and that children do not need vaccines if they are breastfed. Vaccines do not weaken the immune system, but instead help to keep a child healthy by enabling their immune system to protect the body before disease strikes. And, while breastfeeding does provide the best nutrition for babies and may keep them from catching as many colds, it does not protect against serious illnesses such as whooping cough, polio, and diphtheria.

In Summary

Everything we do for our children will not prevent every disease or injury, but vaccines are a very important step. Some help protect against non-life-threatening diseases such as chicken pox, and others have almost eradicated the occurrence of serious diseases that jeopardized entire childhood populations for generations before us. As caretakers for our children, we must remember that immunizations are a critical component in maintaining their health and well being. Help us help your children- keep their vaccines up to date. Immunizations are the most preventative tool in medicine!

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