GLOSSARY

Adverse Event — This term is used to describe a medical problem that occurs after a vaccination, which may or may not have been caused by the vaccine. (Saying adverse reaction, on the other hand, assumes that the vaccine was the cause.)

Antibody — A protein produced by the immune system that helps identify and destroy foreign substances that enter the body.

Antigen — A disease germ – generally a bacterium or virus.

Bacteremia — Presence of bacteria in the blood.

Clinical Trials — Testing of vaccines before they are licensed, during which they are given to increasingly larger groups of volunteer subjects to evaluate their safety and effectiveness.

Communicable Disease — A disease that can spread from one person to another.

Convulsion — See seizure.

Encephalitis — Inflammation of the brain.

Encephalopathy — Any illness affecting the brain.

Epidemic — A large outbreak of disease (see outbreak). A world-wide epidemic is called a pandemic.

Exposure — Contact with germs that cause disease. A person must be both exposed and susceptible to a disease to get sick from it.

Febrile Seizure — A seizure caused by a high fever.

Herd Immunity — Protection from disease in a community, due to a large enough proportion of the population having immunity to prevent the disease from spreading from person to person.

Immunity — Protection from disease. Having antibodies to a disease organism usually gives a person immunity.

Iron Lung — A cylindrical steel chamber that "breathes" for a person whose muscles that control breathing have been paralyzed. Some patients have been confined to an iron lung for life.

Local Reaction — A reaction that is confined to a small area. With vaccines, a local reaction usually refers to redness, soreness or swelling where an injection was given. A reaction that affects the body as a whole, such as a fever or bacteremia, is called a systemic reaction.

Meningitis — Inflammation of the covering of the brain or spinal cord.

Outbreak — An unusually large number of cases of a disease occurring at the same time and place, involving people who all got the disease from the same source or from each other.

Paralysis — Inability to move the muscles. Paralysis usually occurs in the arms or legs, but any muscle can become paralyzed, including those that control breathing.

Schedule — (Or vaccination schedule). The ages and/or intervals at which vaccines are recommended.

Seizure — A spell during which muscles may jerk uncontrollably, or a person stares at nothing. Usually a seizure lasts only a brief time and doesn't cause permanent harm. A seizure can have many causes, including epilepsy or other brain disorders, or a high fever (see febrile seizure). Also called convulsion or fit.

Susceptible — Vulnerable to disease. Someone who has never had a disease or been vaccinated against it is susceptible to that disease. Opposite of immune.

Toxin — Poison.

Vaccine-Preventable Disease — Any disease for which there is a vaccine.

LEARN MORE

Books

- ***What Every Parent Should Know About Vaccines*** by Paul A. Offit, MD and Louis M. Bell, MD. A good introduction to immunization. Includes chapters about foreign travel, how vaccines work and how they are made, and safety.

- ***Vaccinating Your Child: Questions & Answers for the Concerned Parent*** by Sharon G. Humiston, MD and Cynthia Goode. Another good introduction, which answers many of the questions parents have about childhood vaccinations.

- ***Autism's False Prophets: Bad Science, Risky Medicine, and the Search for a Cure*** by Paul A. Offit, MD. A comprehensive account of the controversy surrounding vaccines and autism.

- ***Vaccine-Preventable Disease: The Forgotten Story*** by Rachel M. Cunningham, Julie A. Boom, MD, and Carol J. Baker, MD. "Behind each person who has contracted a vaccine-preventable disease is the story of a life interrupted, of a family devastated. [This booklet] profiles families who have suffered the true cost of not vaccinating." Samples and ordering information can be found on the Texas Children's Hospital website at **http://www.texaschildrens.org/carecenters/vaccine/Vaccine_Book/default.aspx**

- ***Vaccines: 5th Edition***, edited by Stanley A. Plotkin, MD, Walter A. Orenstein, MD, and Paul A Offit, MD. This is a large (1,725 pages), expensive, and technically dense book. But it probably contains more information about vaccines and vaccine-preventable diseases than any other single source in the world, written by some of the world's leading experts in their field, and referencing thousands of scientific papers.

- ***Epidemiology & Prevention of Vaccine-Preventable Diseases (The "Pink Book")***, edited by William L. Atkinson, MD, et al. This CDC publication is a comprehensive introduction to the principles of vaccination, vaccines and vaccine-preventable diseases, and recommendations for vaccine use in the United States. Written for healthcare providers, it also contains information of interest to parents. Available online, or may be purchased through the Public Health Foundation (see **www.cdc.gov/vaccines/pubs/pinkbook**).

Internet

You can find vast amounts of information about vaccinations on the internet. The problem is that, unlike with book publishing, there are few controls on internet materials. Anyone can create a website or blog and say anything they want to say without having to back it up. So the question becomes, How do you know what to believe?

Of course there is no sure way to know whether information on a website is accurate or not, but several websites offer suggestions for evaluating web content. These sites include:

http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/Evaluate.html

http://www.library.jhu.edu/researchhelp/general/evaluating/

http://www.nlm.nih.gov/medlineplus/webeval/webeval.html

http://www.virtualchase.com/quality/

Based on information from these sources, here are a few questions to ask when trying to determine the accuracy of information you find on the web:

- Is the website's "domain" (government, education, commercial, nonprofit, etc.) appropriate for the type of information you are seeking?

- Can you identify an author or authors for the website's content?

- What are the author's credentials? Are they appropriate?

- Where did the author get his or her information? How reputable are their sources?

- If information is reproduced from other sources, does it seem to be complete, or is it edited or taken out of context? Are there links to the original source?

- What are the apparent motives of the creators of the website? To inform you? Sell you something? Influence your opinion? Make you angry?

- Can information on the website be verified?

- Does information on the website seem objective? Do there appear to be political, ideological, or other biases? Is personal opinion presented as fact?

- What is the author's tone? Is it reasonable? Uncomfortably opinionated? Ranting? Does the language seem objective, or overly biased or manipulative? Do the author's arguments rest on conspiracy theories?

- If they link to other websites, what kind of sites are they?

- Are grammar and spelling reasonably correct?

Here are some websites we like, and think you will find useful:

- CDC Websites:
  - General vaccine information: **www.cdc.gov/vaccines**
  - Information about hepatitis: **www.cdc.gov/ncidod/disease/hepatitis**
  - Information about flu: **www.cdc.gov/flu**
  - International travel information: **wwwn.cdc.gov/travel**
- American Academy of Pediatrics: **www.aap/org/new/immpublix.htm**
  - Information about vaccine contents: **http://www.aap.org/immunization/families/faq/Vaccineingredients.pdf**
  - Information about the vaccine schedule: **http://www.aap.org/immunization/families/faq/Vaccineschedule.pdf**
  - Information about vaccine safety: **http://www.aap.org/immunization/families/VaccineSafety_parenthandout.pdf**
- World Health Organization: **www.who.int/vaccines**
- Vaccine Education Center at the Children's Hospital of Philadelphia: **www.chop.edu/service/vaccine-information-center/home.html**
- National Network for Immunization Information: **www.immunizationinfo.org**
- Pediatrician Dr. Ari Brown's website, baby411: **www.baby411.com** (for a good piece specifically on vaccinations, see **www.windsorpeak.com/baby411/Vaccine.pdf**)
- The Autism Science Foundation: **www.autismsciencefoundation.org**
- Dr. Reddy's Pediatric Office on the Web: **www.drreddy.com/shots**
- National Vaccine Injury Compensation Program: **www.hrsa.gov/vaccinecompensation**
- Vaccine Adverse Event Reporting System: **www.vaers.hhs.gov**
- The Immunization Action Coalition's website (**www.immunize.org**) is primarily for healthcare providers, but an area of the site called "Unprotected People reports" (**www.immunize.org/reports/**) contains reports about people who suffered injury or even death from diseases that could have been prevented by vaccines.

Telephone

- **Your state health department's immunization program.** To find the phone number for your state, go to **www.immunize.org/nslt.d/n18/coord18.htm** and look for the state immunization coordinator for your state. (Thanks to the Immunization Action Coalition for maintaining this list.)
- **CDC-INFO**. Live professionals are available 24 hours a day to answer your questions about vaccines and vaccine-preventable diseases. Call 800-232-4636 (800-CDC-INFO).

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Centers for Disease Control and Prevention
National Center for Immunization and Respiratory Disease

Live professionals are available 24 hours a day to answer your questions about vaccines and vaccine-preventable diseases.
Call 800-232-4636 (800-CDC-INFO).

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