



A CUP OF HEALTH WITH CDC

New and Improved Vaccine

Invasive Pneumococcal Disease in Young Children Before Licensure of 13-Valent Pneumococcal Conjugate Vaccine — United States, 2007

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[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC — safer, healthier people.

[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the *MMWR*, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

Invasive pneumococcal disease, or IPD, is one of the leading causes of serious illness and death among young children and the elderly worldwide. A vaccine was developed in 2000 which substantially decreased the number of IPD cases, particular in children under five years. Recently, a new vaccine was approved and is expected to prevent even more cases of this serious disease.

Dr. Pekka Nuorti is a medical epidemiologist with CDC's National Center for Immunization and Respiratory Diseases. He's joining us today to discuss the new vaccine to prevent invasive pneumococcal disease. Welcome to the show, Pekka.

[Dr. Nuorti] Thanks Bob. It's nice to be here.

[Dr. Gaynes] How serious of a problem is IPD in the U.S.?

[Dr. Nuorti] IPD is caused by a bacteria called pneumococcus, and each year about 44,000 cases and some 4,500 deaths are caused by this disease, which can be very serious.

[Dr. Gaynes] Which groups are most at risk?

[Dr. Nuorti] The groups that are most at risk for IPD are young children, elderly persons, and younger adults who have some chronic underlying illnesses, such as chronic lung disease or heart disease, diabetes, or a weakened immune system.

[Dr. Gaynes] How is it transmitted?

[Dr. Nuorti] The bacteria pneumococcus is often carried in the noses of young children without causing any disease. It is transmitted through respiratory droplets as a result of coughing and sneezing.

[Dr. Gaynes] Pekka, what are the most common manifestations of pneumococcal disease?

[Dr. Nuorti] The most severe manifestations of pneumococcal disease are meningitis and blood infections. Fortunately, those infections are relatively rare. The pneumococcus also causes milder infections that are very common, such as ear infections and sinusitis. In addition, pneumococcus is a leading cause of pneumonia which can be either a very serious disease or relatively mild.

[Dr. Gaynes] Pekka, an IPD vaccine has been available for about 10 years now, but a new vaccine has just recently been approved. What's the difference between the old and the new vaccine?

[Dr. Nuorti] The new vaccine is really an improved version of the old vaccine; they're manufactured in the same way. The new vaccine will prevent even more cases because it covers more pneumococcal types that are currently causing disease.

[Dr. Gaynes] If a child received the old vaccine, do they need to be given the new one?

[Dr. Nuorti] Both vaccines are given as a four dose series to infants, and for children who have not completed their immunization series, these children should complete the vaccination series with the new vaccine. For those who *have* completed the four dose series of the old vaccine, an additional dose of the new vaccine is recommended.

[Dr. Gaynes] Pekka, where can listeners get more information about IPD?

[Dr. Nuorti] For more information, go to www.cdc.gov/vaccines and in the search box, type "pneumo;" that's spelled p-n-e-u-m-o.

[Dr. Gaynes] Thanks, Pekka. I've been talking today with CDC's Dr. Pekka Nuorti about the new IPD vaccine.

IPD is one of the leading causes of serious illness and death among young children, worldwide. Check with your healthcare provider to see if your child should receive the new IPD vaccine.

Until next time, be well. This is Dr. Robert Gaynes for *A Cup of Health with CDC*.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.