
 **Reduction in hospitalization rates for pneumonia after vaccination** (*N Engl J Med* 2013; 369:155-63)


The introduction of 7-valent pneumococcal conjugate vaccine (PCV7) into the U.S. childhood immunization schedule in 2000 has substantially reduced the incidence of vaccine-serotype invasive pneumococcal disease in young children and in unvaccinated older children and adults. By 2004, hospitalizations associated with pneumonia from any cause also declined markedly among young children. Because of concerns about increase in disease caused by nonvaccine serotypes, it was important to determine whether the reduction in pneumonia-related hospitalizations among young children had been sustained through 2009 and whether such hospitalizations in older age groups had also declined. The annual rates of hospitalization for pneumonia from any cause using the Nationwide Inpatient Sample database were determined in the United States. Average annual rates of pneumonia-related hospitalizations from 1997 through 1999 (before the introduction of PCV7) and from 2007 through 2009 (well after its introduction) were used to estimate annual declines in hospitalizations due to pneumonia. The annual rate of hospitalization for pneumonia among children younger than 2 years of age declined by 551.1 per 100,000 children (95% confidence interval [CI], 445.1 to 657.1), which translates to 47,000 fewer hospitalizations annually than expected on the basis of the rates before PCV7 was introduced. Overall, an age-adjusted annual reduction of 54.8 per 100,000 or 168,000 fewer hospitalizations for pneumonia annually was estimated. Substantial reductions in hospitalizations for pneumonia among adults were also observed.

 **Ivermectin versus lindane for scabies** (*Ann Parasitol* 2013; 59:37-41)

The treatment of choice for scabies is still controversial. This study aimed at comparing the efficacy of oral ivermectin vs. lindane lotion 1% for the treatment of scabies. 440 patients with scabies were randomized: the first group received a single dose of oral ivermectin 200 mcg/kg body weight, and the second group was treated with two applications of topical lindane lotion 1%, with a 1-week interval. Treatment was evaluated at intervals of 2 and 4 weeks, and if there was treatment failure at the 2-week follow-up, treatment was repeated. Single dose of oral ivermectin provided a cure rate of 63.6% at the 2-week follow-up, which increased to 81.8% at the 4-week follow-up

after repeating the treatment. Treatment with two applications of lindane lotion 1%, with a 1-week interval between them, was effective in 45.4% of patients at the 2-week follow-up, which increased to 63.6% at the 4-week follow-up after this treatment was repeated. Single dose ivermectin was as effective as two applications of lindane lotion 1% at the 2-week follow-up. After repeating the treatment, ivermectin was superior to lindane lotion 1% at the 4-week follow up.

COMMENT Ivermectin is an effective drug for scabies. Oral tablets are far easier to take than topical applications of lindane.

 **Increasing fruit and vegetable consumption among schoolchildren** (*Food Nutr Bull* 2013; 34:75-94)

To reverse the trend of rising child obesity rates in many middle-income countries, recommendations include increasing fruit and vegetable consumption. Schools can positively impact children's eating behavior, and multicomponent interventions that include the curriculum, school food environments, and parental involvement are most effective. The aim of this study was to find out how fruits and vegetables feature in the dietary guidelines provided to schools, what specific schemes are available for providing these foods, the extent to which nutrition education is included in the curriculum, and how vegetables and fruits are procured in primary schools. In 2008, a survey questionnaire previously validated and revised was sent electronically to national program managers and focal points for school feeding programs in 58 middle-income countries. The rationale was to obtain information relevant to the entire country from these key informants. The survey response rate was 46%. Few countries have any special fruit and vegetable schemes; implementation constraints include cost and lack of storage facilities. Although 11 of 18 countries have both nutrient-based guidelines and school food guidelines for meals, fruits and vegetables are often not adequately specified. In some countries, nutrition education, special activities, school gardens, and parental participation are used to promote fruits and vegetables.

COMMENTS Specific schemes are needed in some countries, together with school food guidelines that include fruits and vegetables. Fruits may be provided as a midday meal in countries like India where cooking of food for children at schools is emerging as a difficult option.

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