

A preventable killer: Pneumonia

World Pneumonia Day, 2 November 2009

K. P. Klugman¹, on behalf of PACE (Pneumococcal Advisory Council of Experts)* and J. Garau², on behalf of ESCMID (European Society of Clinical Microbiology and Infection)

1) *Departments of Global Health, Epidemiology and Medicine, Emory University, Atlanta, GA, USA and 2) Department of Medicine, Hospital Universitari Mutua de Terrassa, Barcelona, Spain*

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Corresponding author and reprint requests: K. P. Klugman, Rollins School of Public Health, Emory University, 1518 Clifton Road, N.E.—Room 720, Atlanta, GA 30322, USA
E-mail: keith.klugman@emory.edu

*PACE (Pneumococcal Advisory Council of Experts)

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When you think of the most pressing health concerns facing the world today, pneumonia is probably not the first disease that comes to mind. Yet this eminently treatable disease is the number one child killer, claiming the lives of two million children under 5 years of age annually—more than AIDS, malaria and measles combined [1]. Pneumonia is also the leading infectious cause of death in adults.

While the steady toll of pneumonia far surpasses the threat of new afflictions such as avian flu and swine flu, it barely registers in the news or on the world health agenda. A coalition of health organizations aims to change that, declaring this November 2 the first annual World Pneumonia Day.

While many lives can be saved through early diagnosis and treatment of pneumonia, the sheer scale of the disease demands a more proactive and systemic approach that prioritizes prevention. The widespread implementation of vaccines for pneumonia's common bacterial causes, including *Haemophilus influenzae* type b (Hib) and the pneumococcus, could help save millions of children's lives. Without a doubt, increasing access to these low-cost vaccines, which have virtually eliminated such infections in infants in the industrialized world, is the single most effective way to solve this ongoing health crisis.

Pneumococcal vaccination of at-risk adults and pneumococcal conjugate vaccination of all infants are also important

components to include in any influenza pandemic preparedness plan [2]. Immunization of children reduces pneumonia not only in those immunized, but protects the whole community through interruption of the transmission of vaccine type pneumococci to older susceptible adults. A recent study by the National Institute of Allergy and Infectious Diseases and the National Institutes of Health found that the majority of the estimated 50 million deaths caused by the 1918 Spanish flu pandemic were likely the result of secondary bacterial pneumonia [3]. There are also signs that bacterial superinfections led to pneumonia and death during the flu pandemics in 1957 and 1968, as well as recent data from the 2009 H1N1 (Swine Flu) pandemic [4].

Clinicians in developing countries, while understandably focused on important diseases such as tuberculosis and malaria, must also be concerned with pneumonia, as it hits children in developing countries the hardest, and is the major cause of death in HIV-infected adults. For every child who dies of pneumonia in an industrialized country, more than 2000 die of the disease in the developing world [1]. If uncontained and untreated, severe pneumonia can devastate families, causing needless deaths and exacerbating the cycle of poverty.

Fortunately, pneumonia is the most solvable issue in global child health today. We know what it will take to put an end to this deadly killer: greater awareness and universal intro-

duction of vaccines in the places where they are needed the most. As scientists, we have the ability and the responsibility to use evidence to make the case for a greater investment in pneumonia prevention. Take it upon yourself to do at least one thing this November to raise this issue through your colleagues, practices or elected officials.

Transparency Declaration

Both authors declare, also on behalf of PACE, no conflict of interest with respect to World Pneumonia Day.

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