Measles Deaths Slide by 74%  
As Immunizations Reach 82%

BY HEIDI SPLETE
Senior Writer

Worldwide deaths from measles across all age groups dropped by 74% between 2000 and 2007, from an estimated 750,000 to 197,000 deaths annually. The most striking reduction during this time period occurred in the Eastern Mediterranean region (including Pakistan, Somalia, and the Sudan), where deaths from measles fell by 90%, from an estimated 96,000 to 10,000 deaths annually. In doing so, the region has already achieved the United Nations goal of reducing measles deaths by 90% by 2010.

The measles statistics were presented at a press conference by representatives of the Measles Initiative, a collaboration of the American Red Cross, the Centers for Disease Control and Prevention, the United Nations Foundation, UNICEF, and the World Health Organization. The data were also published in the CDC’s Morbidity and Mortality Weekly Report (MMWR 2008;57:1303-6) and the WHO’s Weekly Epidemiological Record (Wkly Epidemiol. Rec. 2008;83:441-8).

Routine childhood immunization for measles increased globally from 72% in 2000 to 82% in 2007, said Dr. Peter Strebel of the World Health Organization.

About 90% of the 197,000 deaths in 2007 occurred in children aged younger than 5 years, he said. Most of the remaining 10% occurred in children aged 5-15 years, although a small number occurred in individuals older than 15 years.

Nevertheless, the organizations and governments working to reduce deaths from measles can’t rest on their laurels, he emphasized. “Routine health services need to be expanded, but while this is being done, countries must plan and budget for periodic nationwide vaccination campaigns.”

Dr. Steve Cochi of the CDC said that the progress being made internationally “is a reminder to us in the United States that measles is still an ever-present disease … and a reminder to parents and pediatricians of the importance of continuing to vaccinate against measles to maintain [protection] for the children of the United States.”

In 2007, the United States had about 135 cases of measles, which is the highest level in the country since 1996, Dr. Cochi added.

Dr. Julie Gerberding, director of the CDC, said the success of the Measles Initiative has resulted from a combination of disease prevention and surveillance.

The key strategy of the initiative is to prevent measles by increasing routine immunization as part of childhood medical care. Based on the current data “the vast majority of children on a global scale are receiving the appropriate measles vaccine at the appropriate age,” she said.

Another 600 million children were not reached for routine vaccinations, but 3.6 million deaths were prevented between 2000 and 2007 by supplemental activities such as vaccination campaigns involving governments and local volunteers to get people to vaccination centers, she added.

The Measles Initiative’s strategy also

Continued on following page
**Flu Pandemic Planning Must Continue, Levitt Says**

Continued from previous page

G etting six cell-based influenza vaccine manufacturing plants up and running in the United States should be the first of four priorities for the next Secretary of Health and Human Services, advised Senior Writer Michele S. Sullivan.

“The highest priority of the next administration should be to expand U.S. production of cell-based technology, so that in a 6-month period, we could generate enough pandemic flu vaccine in this country to protect every American,” Secretary Leavitt said during a Webcast. “We have invested more than $1 billion in this, and now have six companies in various stages of implementing either cell-based manufacturing or expanded egg-based vaccine production. The goal is to complete these contracts by 2011.”

The importance of cell-based vaccine manufacturing can’t be overstressed, he said. GlaxoSmithKline, MedImmune Inc., Novartis, DynPort Vaccine Co., Solvay Pharmaceuticals Inc., and Sanofi Pasteur have all received federal grant money to develop vaccines. “There are not enough chickens in the world to get this done in the case of a pandemic. These contracts have to be fulfilled and the factories built.”

Second, the free international sharing of viral samples for vaccine research needs to be addressed, he said. “We need to strongly defend the sample-sharing network against short-term opportunism. For years, nations who want to hold their samples for compensation—they feel the virus is their intellectual property and insist on royalties if anyone makes a vaccine out of it.”

A January 2007 decision by Indonesian authorities to withhold all clinical specimens from suspected cases of human bird flu A (H5N1) fueled this concern. According to the World Health Organization, which manages the international sample sharing, the country rescinded this ban in March 2007. But the idea that countries could turn a profit from research samples seems to have taken root in some of the international community, according to a recent report of the European Centre for Disease Prevention and Control.

The May 2008 report noted that “to date, no other countries have publicly made moves like those of Indonesia, although some others have been considering their positions. Other countries not traditionally concerned have been supporting the Indonesian position; the debate has become politicized internationally and attitudes have hardened.” (See: http://ecdc.europa.eu/pdf/ECDC_influenza_briefing.pdf.)

The international community must take a strong stand against these tactics, Secretary Leavitt said. “Meeting their demands would result in the downfall of our very important sharing strategy. The system would fail and subject the entire world to more danger.”

Third, the new administration will also need to concentrate on countermeasure distribution. “We have an important stockpiling system [of medications and equipment] and we can get massive amounts of supplies anywhere in the U.S. within 2 hours. But getting the pills into the people is our Achilles’ heel and it needs work. Not every state is prepared to handle this, and this failure is potentially catastrophic.”

Ultimately, distribution will be a state and local issue. “Public health is a local responsibility because localities are better at accomplishing this mission than the federal government is. Before leaving this administration, I want to release a state-by-state evaluation so people can know if their officials are meeting the standards we need to achieve.”

Tough economic times, Medicaid growth, and a new culture of disaster dependence might interfere with local commitments to pandemic planning, however. “We have to resist the tendency for local and state governments to use budget limitations to upwardly allocate disaster preparedness. Public health is one of a number of important functions being crowded off the budget table by the unconstrained growth of Medicaid eating up state budgets.”

Also, he said, “A cultural change that began with Hurricane Katrina has begun to drive a federalization of public health. But I want to tell you, the state or community that fails to prepare, with the expectation that the federal government will come to the rescue at the last moment, will be tragically disappointed.”

Finally, HHS must keep pandemic preparedness on national and local agendas. “The media buzz about bird flu has died down, but the virus has not,” he said. Publicity is a tightrope act, in that “when we discuss it in advance, we come off as alarmist, but if we don’t discuss it until it starts, then none of our preparations will be adequate. We need to speak of this in a way that stimulates discussion, not panic.”

---

**Broader Vaccination Window May Boost Visits**

Involves identifying outbreaks quickly so that an immunization campaign can focus on the area of the outbreak and prevent the spread of disease.

In addition, the program provides vitamin A supplements and other care to prevent deaths from measles in those children who become ill, Dr. Gerberding said. “The success of the last few years indicates that when we apply these strategies, we save lives.”

But about 540 children die from measles worldwide each day, she added. The goal of the Measles Initiative is to reduce measles deaths by 90% worldwide by 2010, compared with 2000.

“We have to refocus our efforts in countries where the immunization rates are low,” Dr. Gerberding said.

The Southeast Asia region (as defined by the WHO) is “the hot spot for measles transmission,” she said. According to WHO, about 130,000 of the estimated 136,000 measles deaths in that region occurred in India, when about 8.5 million children did not receive a measles vaccine through routine immunization services. Of the estimated 136,000 deaths from measles in the region in 2007, about 130,000 occurred in India, according to the WHO.

The Measles Initiative was launched in 2001 with the goal of reducing deaths from measles worldwide. In addition to the five health organizations, the initiative is supported by funding from other business and charitable partners including the Bill and Melinda Gates Foundation, the Kessler Family Foundation, and Merck & Co.

---

**Estimated Number of Children With at Least One Provider Visit (in millions)**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Population size</th>
<th>Vaccination window</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;12 months</td>
<td>3.9</td>
<td>2.1</td>
</tr>
<tr>
<td>12-23 months</td>
<td>4.1</td>
<td>1.6</td>
</tr>
<tr>
<td>2-4 years</td>
<td>12.3</td>
<td>2.2</td>
</tr>
<tr>
<td>5-8 years</td>
<td>15.6</td>
<td>1.7</td>
</tr>
<tr>
<td>9-18 years</td>
<td>41.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Overall</td>
<td>77.6</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Note: Based on 2004-2005 data from the Medical Expenditure Panel Survey. Source: Dr. Judelsohn