State of the World's Vaccines and Immunization: Unprecedented Progress

- Increased immunization coverage, along with clean water and better sanitization, is a key reason why today, for the first time in documented history, the number of children dying each year has fallen below 10 million.

- Vaccines against tuberculosis, diphtheria, tetanus, pertussis, polio, measles, hepatitis B, and Hib disease are preventing 2.5 million deaths each year. For measles alone, since 2000, expanded use of vaccines has prompted measles-related deaths to drop from an estimated 750,000 to 197,000 a year. By the 2020s, through immunization, polio can be eradicated and measles eliminated in all countries.

- The reversal of the downward trend in immunization rates has been in great part due to the efforts of the GAVI Alliance—a vaccine-financing partnership that includes the World Health Organization (WHO), UNICEF, the World Bank and the Bill & Melinda Gates Foundation. Since 2000, the Alliance has dramatically increased the introduction of new and underused vaccines that have reached more than 200 million children in developing countries.

- The first decade of the 21st century has been the most productive in the history of vaccine development. New life-saving vaccines have been developed for meningococcal meningitis, rotavirus diarrheal disease, avian influenza caused by the H5N1 virus, pneumococcal disease, and cervical cancer caused by human papillomavirus (HPV).

- There are also a large number of candidate vaccines in the late stages of research and development (R&D)—more than 80, according to recent unpublished data. Furthermore, about 30 of these candidates aim to protect against diseases for which no vaccines are currently available.

- WHO has estimated that if all the vaccines now available against childhood diseases were widely adopted, and if countries could raise vaccine coverage to a global average of 90 percent, by 2015, an additional two million deaths a year could be prevented among children under five years old.

- There has been a surge in vaccine manufacturing capacity in the developing world. Only 14 percent of the vaccines required to meet global vaccine demand are provided by suppliers in industrialized countries (though multinational pharmaceutical companies still account for most of the vaccine revenue). The remaining 86% is met by suppliers based in emerging market economies, which are providing a large volume of low-cost vaccines, primarily for use in their own or in other low- and middle-income countries—a market that represents 84 percent of the world's population.

- There is an array of new financial resources supporting vaccines and immunizations for poor countries. These include: the GAVI Alliance, which has received US$ 3.8 billion in cash and pledges from public and private donors; the International Finance Facility for Immunization (IFFIm), a multilateral development institution that uses donor commitments to issue bonds on international capital markets that raise money for GAVI programs; and the Advance Market Commitment (AMC), in which donor countries offer manufacturers a financial incentive to develop vaccines for the developing world.