CALL TO ACTION

Pneumonia control is achievable, and essential, if the world is to deliver on its promise to “ensure healthy lives and promote well-being for all at all ages” (SDG3). Ushering in a new era of pneumonia control will require major changes in the way governments, companies, United Nations (UN) and multilateral agencies, non-government organizations, universities, and all stakeholders committed to achieving the sustainable development health goals work together. But what must countries do to end preventable pneumonia deaths by 2030?

Five critical changes are required:

1. CONTROL

National governments with the highest burdens of pneumonia should commit to developing pneumonia control strategies by 2020. These strategies should set annual national pneumonia mortality reduction targets and outline a plan for how to achieve these targets by 2030. The plans would set target coverage rates for the major prevention, diagnosis, and treatment services and also target reduction rates for the major risk factors associated with pneumonia deaths. Pneumonia control strategies would be part of overall national health plans and linked to any existing child survival, vaccination, nutrition, air pollution, quality healthcare, and anti-microbial resistance efforts.

What does success look like? All 20 high-burden pneumonia countries have launched pneumonia control strategies by 2020 and are publishing progress annually.

2. SUPPORT

National governments should at least fully cover the costs of the pneumonia-fighting vaccines, diagnosis, and treatment services for the most vulnerable populations of children and the elderly as part of universal health coverage (UHC). Where domestic UHC efforts cannot fully cover the cost of protecting vulnerable populations, external financing initiatives should support national efforts, including by targeting the most vulnerable populations.

What does success look like? All of the high-burden countries that have UHC by 2030 provide full protection for pneumonia prevention, diagnosis, and treatment services for vulnerable populations, and at least 10% of international development assistance for health is allocated to pneumonia-related activities by 2025.

3. INNOVATE

National governments, donor governments, and non-government actors should increase investments in pneumonia R&D, targeting breakthroughs in the areas where cost-effective new technologies could prevent the most pneumonia deaths, including rapid diagnostic tests, pulse oximetry and oxygen delivery, malnutrition, air pollution, and pre-term birth. Organizations that aim to foster innovation in pneumonia, including the Pneumonia Innovations Network (PIN), should be supported and expanded as part of the overall effort to accelerate the pace of technological development.

What does success look like? 20% of infectious disease R&D is allocated to pneumonia-related activities by 2025, with the majority targeted to vulnerable children and the elderly in the high-burden countries.

4. PARTNER

Governments and non-government actors should work together to achieve pneumonia control as part of overall national efforts to achieve the sustainable development health goals. National governments should mobilize coalitions from the public and private sectors to drive progress on pneumonia control within their own borders, and the international health and development community should coordinate transnational efforts. These efforts should ensure that pneumonia control efforts are integrated with the larger infectious disease, child survival, health innovation, and health system strengthening agendas at national and global levels.

What does success look like? Every high-burden country has a network of government and non-government actors working to achieve pneumonia control as part of larger national efforts to achieve the sustainable development health goals.

5. CHAMPION

Pneumonia has been called “a global cause without champions”, which “barely registers on the radar of global health priorities” (Save the Children). New champions at the local, national, and international levels must emerge, especially from governments, business, and civil society in the high-burden countries. Regular pneumonia summits, led by these new champions, should bring together the prevention, diagnosis, and treatment communities to shine a bright light onto progress (or lack of) to the ambitious goal of ending preventable pneumonia deaths by 2030, to share learnings from the various national pneumonia control efforts underway, and to discuss the latest R&D findings and breakthrough innovations.

What does success look like? The inaugural International Pneumonia Summit is held in 2019 with strong representation from the high-burden countries, donor governments, UN and multilateral agencies, business, and civil society.
1. Pneumonia is the leading infectious disease killer in the world by a wide margin
- In 2017, an estimated 2.6 million people died from pneumonia, according to the Global Burden of Disease (GBD)
- The next leading infectious disease killer was diarrhea, which caused an estimated 1.6 million deaths

2. Pneumonia deaths follow a “U-shaped” curve across the lifecycle, with deaths concentrated among the very young and the very old
- 75% of pneumonia deaths are among children under 5 years (809,000) and adults over 70 years (1.1 million)
- 75% (608,000) of child pneumonia deaths occur in the first year of life

3. Most pneumonia deaths are in a small group of diverse low, middle, and high income countries
- Two-thirds of pneumonia deaths are in 20 countries, including (in order of deaths), India, Nigeria, China, Japan, the USA, Brazil, the Philippines, Pakistan, the Democratic Republic of Congo, Ethiopia, Indonesia, Bangladesh, UK, Thailand, Russia, Tanzania, Argentina, South Africa, Germany, and Kenya.

4. Despite recent gains, many countries are still struggling to reduce pneumonia deaths among children, while deaths among adults are actually rising
- Child pneumonia deaths are not falling fast enough in many high-burden countries, especially across Sub-Saharan Africa
- Adult pneumonia deaths are rising in 10 of the 20 high-burden countries due to increases among the elderly

5. Progress in reducing pneumonia deaths has not kept pace with other leading infectious diseases and will prohibit many countries from achieving the sustainable development health goals by 2030
- Between 1990 and 2017, pneumonia deaths fell by 25%, compared to 88% for tuberculosis, 86% for measles, 47% for HIV/AIDS (since the peak of the epidemic in 2003), 46% for whooping cough, 41% for typhoid, 39% for diarrhea, and 38% for meningitis
- Slow progress in reducing pneumonia deaths will make it very difficult for many countries to achieve the child survival (SDG 3.2), communicable disease (SDG 3.3), and access to vaccines and medicines (SDG 3.8) goals

6. Investment in pneumonia is low and inadequate relative to disease burden
- Between 2007 and 2016, pneumonia attracted 6% ($US5.7 billion) of the $US52 billion of international development assistance that was allocated to HIV/AIDS, malaria, and pneumonia, despite causing more deaths than HIV-AIDS and malaria combined, according to an analysis by Development Initiatives
- Between 2000 and 2015, pneumonia attracted 3% ($US3 billion) of infectious disease R&D, according to an analysis by the Research Investments in Global Health study (ResIn), despite causing 25% of all infectious disease deaths

7. Specific pneumonia control strategies are needed to accelerate pneumonia mortality declines in high-burden countries
- Pneumonia control strategies should rapidly increase coverage of the pneumonia-fighting vaccines (Hib, PCV, and measles), and ensure access to proper diagnosis (pulse oximetry) and treatment (recommended antibiotics, oxygen, and therapeutic foods)
- Specific strategies are also needed to reduce the major risk factors for pneumonia death (child wasting, air pollution, and preterm birth, and smoking and alcohol use)

8. Leadership for pneumonia control strategies rests with the government agencies responsible for health in the high-burden countries
- Universal health coverage (UHC) is a major opportunity for countries to fully protect their most vulnerable populations from the threat of pneumonia by fully covering the cost of prevention, diagnosis, and treatment
- Some countries will continue to require international development assistance to achieve pneumonia control and increases in the historically low levels of development assistance should help countries to better align their domestic health spending with national disease burdens

9. Global actors should lead R&D efforts focused on breakthrough technologies that can dramatically improve the cost-effectiveness of pneumonia prevention, diagnosis, and treatment
- Promising new tools include the emerging RSV vaccines, and a rapid diagnostic test for pneumonia, which would remove a major obstacle to effective pneumonia treatment, rational antibiotic use, and continued antibiotic effectiveness
- Increases in the R&D spending allocated to pneumonia will be required alongside efforts to strengthen collaboration among innovation actors

10. Powerful champions are needed at local, national, and international levels to put pneumonia control high on the agendas of governments and the international health and development community.
- It is especially important that Gavi the Vaccine Alliance, the Global Fund to Fight AIDS, Tuberculosis, and Malaria, the Global Financing Facility, UNAIDS, UNDP, UNFPA, UNICEF, UNEI, UN Women, the World Bank, WHO, and The World Food Programme contribute to the fight against pneumonia

The stakes are high. If pneumonia continues to be the “missing piece” in the infectious disease agenda, millions will still be dying in 2030 and many countries will have failed to achieve the health goals. But with a focused effort to fully protect the most vulnerable populations from pneumonia with the most cost-effective tools, countries can take one big step closer to ending child deaths and the epidemic of communicable diseases, and to fulfilling the grand promise of the sustainable development goals - universal access to healthcare and ensuring healthy lives for all, at all ages.

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