

### Biggest killer, yet forgotten

Pneumonia is the world's leading infectious killer of children, claiming the lives of more than 800,000 children under the age of five every year, more than 2,000 every day.

It is a shocking demonstration of pervasive health inequities disproportionately affecting the most deprived and marginalised children in low- and middle income countries. It represents a violation of children's right to survival and development, as enshrined in the UN Convention on the Rights of the Child. Yet pneumonia has been largely forgotten on global and national health agendas. We can and must change this.

## It is possible to combat pneumonia

It is possible to deliver the necessary solutions to combat pneumonia to all children. It is possible through Universal Health Coverage (UHC) and equitable access to quality primary health care to prevent, diagnose and treat pneumonia. It is possible through better immunisation coverage to protect children from some of the leading causes of pneumonia. It is possible through good nutrition to help their bodies to fight off infections and respond to treatment, as well as to prevent underlying causes of pneumonia. It is possible through improved water, hygiene & sanitation, and reductions in air pollution to help address risk factors that can cause pneumonia. It is possible through ensuring access to integrated service delivery and life-saving low cost antibiotics at the community level and strengthening the availability and quality of referral level care, to combat pneumonia and save lives.

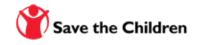
## Poverty and inequality aid and abet pneumonia deaths

Progress to address the number of children dying from pneumonia isn't fast enough or fair enough. Global/regional/ national averages mask huge inequalities in countries. It is the poorest children who are most at risk because of high rates of malnutrition, and lack of access to basic quality health services for vaccinations, and diagnosis & treatment of common childhood illnesses. As a result, the poorest children are almost twice as likely to die before their 5th birthday compared to the richest. Innovations that could save hundreds of thousands of lives each year are not reaching children with the greatest need.

### 2020 is the year to act

There are clear actions that governments and the global community can and must take to improve child survival. The progress made so far is not enough, and comprehensively addressing pneumonia is key for child survival. With the impetus provided by the recently concluded UN High-Level Meeting on UHC in September 2019, The Global Forum on Childhood Pneumonia in January 2020, the Gavi Replenishment Conference in June 2020 and the Tokyo Nutrition for Growth Summit in December 2020 should all be used as key moments for governments to make strong commitments to accelerate progress on combatting pneumonia.

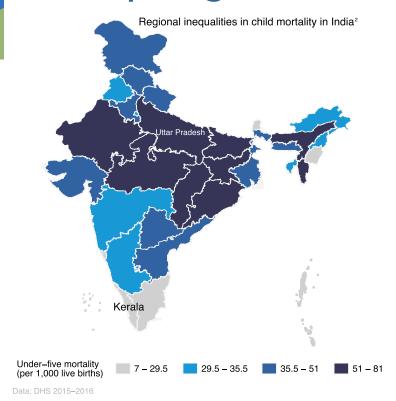
With just ten years left to deliver on the Sustainable Development Goals (SDGs) – and only five for the Integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD) targets – now is the time to act. We need concerted action to improve policies, investment, innovations, and scale up evidence-based interventions, if we are to leave no child behind and to save lives. Not only is combatting pneumonia possible, it is a must – a must for every child to be able to fulfil their right to survive and thrive.







### India spotlight



# HIGHEST RISK FACTORS FOR CHILD PNEUMONIA DEATHS IN INDIA, 2017<sup>3</sup>







## UNDER-FIVE MORTALITY<sup>2</sup>

#### **GLOBAL TARGET**

At least as low as

**25** per 1000 live births is the SDG target rate for under five mortality by 2030.

#### **INDIA STATUS**

**37** per 1000 live births, under-five mortality rate in 2018.

Inequality, poverty and lack of access to health services contributes to

**72** deaths per 1000 live births among the poorest households compared with just

**23** deaths per 1000 live births amongst the richest households in 2015-16.

In Uttar Pradesh State where the mortality rate is

**78** per 1000 live births, children are almost **12 times** more likely to die before the age of five than children in Kerala State where the mortality rate is

7 per 1000 live births in 2015-16.

## PNEUMONIA RELATED UNDER-FIVE MORTALITY

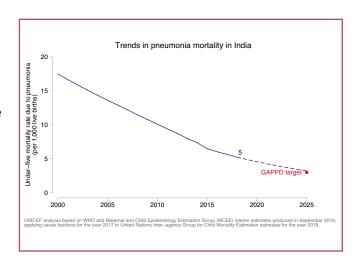
#### **GLOBAL TARGET**

**3** per 1000 live births is the target pneumonia mortality rate for under-fives by 2025, as envisaged under the Global Action Plan for Pneumonia and Diarrhoea (GAPPD).

#### **INDIA STATUS**

**5** per 1000 live births, under five mortality rate due to pneumonia in 2018.

14% of child deaths were due to pneumonia in 2017, and it was the second biggest killer of children under-five in 2017.



Pneumonia killed more than 1,27,000 children under-five in 2018 – more than 14 children every hour.

7% is the average annual rate of reduction in pneumonia mortality between 2000–2018, and at the same rate, India is expected to reach the 2025 GAPPD target in 2026.

## Health system strengthening to deliver strong primary health care and UHC to combat pneumonia<sup>5</sup>

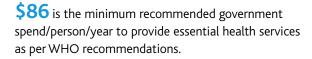
The UHC Service Coverage Index is a measure of SDG indicator 3.8.1, which is a composite of essential health services. Countries should strive towards achieving 100% coverage to ensure health care for all citizens. To progress towards UHC, coverage of quality essential health services needs to be expanded with an emphasis on reducing inequities and strengthening health care facilities, to improve the quality of primary health care services. In India, the coverage of essential health services was just 55% in 2017. In addition, the proportion of children with pneumonia symptoms who are taken for healthcare is the indicator for 'child treatment' under the UHC Service Coverage Index. In India it was 78% in 2015.

To build strong health systems, increase coverage and deliver UHC, India needs to increase domestic public health expenditure towards a target of 5% of GDP, prioritising spending at the primary health care level. It would be ideal

for India to raise revenue for health systems in an equitable way through progressive taxation and remove out-of-pocket payments to accessing health and nutrition services, such as user fees, at least for vulnerable populations and priority services. The more India continues to rely heavily on out-of-pocket payments, the harder it will be to achieve UHC. The National Health Policy, 2017, aims to address this by committing to increase government spending on health from 1.15% of GDP to 2.5% by 2025.

Strong and equitable health systems are needed to adequately prevent, diagnose and treat pneumonia, and provide children with their basic human right to good-quality healthcare. UHC – where all children and their family have access to health and nutrition services, vaccinations and the medicines they need, without facing financial hardship – represents that right in action.

## GLOBAL TARGETS ON HEALTH FINANCING



**5%** is the minimum recommended government spend on health as % of GDP as per WHO recommendations.

**57%** of government health expenditure should be on primary-level healthcare services as per WHO recommendations, as 90% of all health needs can be met at the primary health care level.

The SDG targets for large out of pocket (OOP) expenditure should not be more than

**10%** and to avert catastrophic OOP expenditure it should not be more than

25% of total household expenditure or income.



#### **INDIA STATUS**<sup>6</sup>

\$16 spent by the government on health per person in 2016.

**3%** of the government's budget spent on health in 2016.

**0.9%** of GDP spent on health by the government in 2016.

**58%** of the government's budget spent on primary health care in 2016.

**65%** of total health expenditure was out-of-pocket in 2016.

### PROTECT children by establishing good health practices from birth

Global Targets & Standards

SDG 2.2: By 2030, end all forms of malnutrition, including achieving by 2025, the internationally agreed targets on stunting and wasting in children under-five.

40% reduction in stunting (height for age) in under-five children and reduce and maintain childhood wasting (weight for age) to less than 5% as per the 2025 targets set in the 2012 World Health Assembly Resolution.



**Nutrition**<sup>®</sup>

**India Status** 

#### Wasting

21%% is the wasting rate for under-five children in 2015. Sub-national Status<sup>7</sup>

#### Wasting

24% is the wasting rate for under-five children in the poorest households in 2015.

18% is the wasting rate for under-five children in the richest households in 2015

#### **Stunting**

**38%** is the stunting rate in 2015.

To remain on track to achieve SDG 2 in 2030. India needs to reduce stunting rates to 25% by 2025.

51% is the stunting rate among under-five children in the poorest households in 2015.

22% is the stunting rate among under-five children in the richest households in 2015.

The stunting rate among children in the poorest households is 2 times higher than among children in the richest households.



50% rate of exclusive breastfeeding for the first 6 months as per the 2025 targets set in the 2012 World Health Assembly Resolution.



**India Status** 

**Sub-national Status** 

55% is the exclusive breastfeeding rate in 2015.

55% is the exclusive breastfeeding rate among babies in the poorest households in 2015. 52% is the exclusive breastfeeding rate among babies in the richest households in 2015.

## PREVENT pneumonia in children by addressing underlying causes

Global Targets & Standards **SDG 3.2:** End preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce under-5 mortality to at least as low as **25** per 1,000 live births by 2030.

90% national and at least 80% district or equivalent administrative unit coverage for vaccination by 2020 as per the Global Vaccine Action Plan (GVAP)



**DTP3** (Diphtheria-tetanus-pertussis), **Hib3** (Haemophilus influenzae type B) and **PCV3** (Pneumococcal Conjugate) vaccines included in the national immunisation programme.

Immunisation<sup>10</sup>

India Status

**89%** DTP3 vaccine coverage among 1-year-olds in 2018.

89% Hib3 vaccine coverage among 1-year-olds in 2018.

6% PCV3 coverage among 1-year-olds in 2019.

**Sub-national Status** 

Pentavalent vaccine (Penta3) coverage among 1-year-olds in 2019

**77%** in the State of Rajasthan,

97% in the State of Kerala.

PCV3 coverage among 1-year-olds in 2019

26% in the State of Rajasthan,

**58%** in Madhya Pradesh.

**Sub-national Status** 

PCV3 is yet to be rolled out in most other States.

Global Targets & Standards

Water, sanitation

and hygiene"

**SDG 6.1:** Achieve universal and equitable access to safe and affordable drinking water for all by 2030.

**SDG 6.2:** Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women, girls and those in vulnerable situations by 2030.



India Status

**93%** People using basic drinking water services in 2017.

vater 91% services

91% rural & 96% urban people using basic drinking water services in 2017.

**60%** People using basic sanitation services in 2017.

**53%** rural & **72%** urban people using basic sanitation services in 2017.

60% People with basic hand washing facilities at home in 2017.

49% rural & 80% urban people with basic hand washing facilities at home in 2017.

**26%** People practicing open defecation in 2017.

**36%** rural & **5%** urban people practicing open defecation in 2017.

Global Targets & Standards **SDG 7:** 100% access to affordable, reliable, sustainable and modern energy for all by 2030.

**SDG 3.9:** Substantially reduce the number of deaths and illnesses from hazardous chemicals; air, water and soil pollution and contamination by 2030.

10 Micro grams per cubic metre of air ( $\mu$ g/m3) should be the mean annual exposure to Fine Particulate Matter (PM<sub>2.5</sub>) as per WHO Air Quality Guidelines.



India Status

**45%** people with primary reliance on clean fuels and technologies in 2015.

**Sub-national Status** 

People with primary reliance on clean fuels and technologies in 2015 20% in Odisha, 23% in Chhattisgarh and 98% in Delhi.

Air Pollution<sup>12</sup>

91 micro grams per cubic metre of air (μg/m³) is the mean annual exposure to PM<sub>2.5</sub> pollution in urban settings in 2017.

**124, 101 & 32** micro grams per cubic metre of air ( $\mu g/m^2$ ) is the mean annual exposure to  $PM_{2.5}$  pollution in the cities of Agra, Delhi and Chennai respectively in 2017.

### **DIAGNOSE & TREAT children who become ill** with pneumonia

**Global Targets** & Standards

SDG 3.12: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.

44.5 per 10,000 people is the minimum number of skilled health workers required to deliver quality health services as per WHO recommendations. The estimated shortage of health workers is 18 million by 2030.

**India Status** 

**Sub-national Status** 

**8** doctors per 10,000 people &

Data not available

**10** nurses and midwives per 10,000 people in 2017.

9.39.978 Accredited Social Health Activists (ASHAs) Data not available in 2017.

NO – India does not have a National Task-Shifting Policy. NO – the 29 States and 7 Union Territories do not have

task-shifting Policies.

NO – There is no national policy which mandates ASHAs YES – ASHAs have been mandated to disperse Amoxycillin DT to dispense Amoxycillin Dispersible Tablets (DT) 250 mg, but 'The National Pneumonia Guidelines' which will be launched in November 2019, will do so.

250 mg in Himachal Pradesh and Uttar Pradesh States by State level Pneumonia Control Policies. No other States have done this yet.

Global Targets & Standards

Health workers

ICCM (Universal Integrated Community Case Management) to prioritise the most deprived and marginalised, removing financial and non-financial barriers to access.



**India Status** 

**Sub-national Status** 

CCM<sup>1</sup>

YES – India has an Integrated Management of Newborn and Childhood Illnesses (IMNCI) Strategy, 2003.

YES – the 29 States and 7 Union Territories follow the IMNCI Strategy.

NO – Amoxycillin 250 mg DT is not, but 250 mg capsule NO – ASHAs in the 29 States and 7 Union Territories do not and Syrup 250 mg/5ml are on the National List of Essential dispense Amoxycillin DT 250 mg. Medicines 2015.

Global Targets & Standards

Oxygen levels in children should be monitored by trained CHWs (community health workers) who can refer them in time to primary and secondary health facilities which have oxygen supply.



**Sub-national Status** 

Oxygen<sup>15</sup>

NO – ASHAs are not mandated to use pulse oximeters.

NO – None of the 29 States and 7 Union Territories are yet to mandate ASHAs to use pulse oximeters.

YES – district level primary health care centres should have medical oxygen as per the F-IMNCI guidelines 2009.

YES – In all 29 States and 7 Union Territories, district level primary and secondary health care centres should have medical oxygen, but many do not due to supply issues.

Global Targets & Standards

90% pneumonia care seeking behaviour by 2030 as per Every Breath Counts' call to governments to set an official national target. All children with pneumonia should be taken to, or referred to, a health facility at the earliest, either by a parent or community health worker.



**India Status** 

**Sub-national Status** 

Care seeking **behaviour**<sup>16</sup>

Children under-five with pneumonia symptoms taken to a health facility in 2015

**78%** children with pneumonia symptoms were taken to a health facility in 2015.

69% from the poorest and 90% from the richest households

46% in Manipur and 92% in Punjab in 2015.

## Fighting for Breath: The Global Forum on Childhood Pneumonia, January 2020

Pneumonia is the world's deadliest infectious killer of children and the ultimate disease of poverty.

Each year 800,000 of the world's poorest and most vulnerable children die from the disease – more than 2000 every day. The overwhelming majority of these deaths are preventable. Yet fatalities are declining slowly – far too slowly for the world to deliver on the Sustainable Development Goal pledge to 'end preventable child deaths by 2030'. Changing this picture will require more than a reaffirmation of the SDG promise. The children whose lives are at stake need a bold agenda backed by urgent action.

On 29-31 January 2020 in Barcelona, Spain, over 300 participants – including ministers and senior planners from high-burden countries, major development donors, UN and multilateral agencies, non-government organisations, corporate and philanthropic leaders and the pneumonia research community – will come together to as part of an effort to build that agenda and galvanise national and international action.

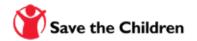
stoppneumonia.org/latest/global-forum/

### A Global Call to Action on Childhood Pneumonia

- 1. Develop pneumonia control strategies as part of wider plans for universal health coverage and commit to reducing child pneumonia deaths to fewer than three per 1,000 live births, the target set by the Integrated Global Action Plan Pneumonia and Diarrhoea (GAPPD).
- 2. Strengthen quality primary health care and action on pneumonia as part of national multi-sectoral plans and through integrated strategies (including nutrition, water, sanitation and hygiene, and air pollution), including at community level, focusing on the most deprived and marginalised children.
- 3. Increase domestic government investment in health and nutrition (to at least 5% of GDP on health) and ensure that increased spending improves access to child health and nutrition services, including by removing user fees, addressing non-financial barriers to accessing care, and prioritising primary health services.
- Improve health governance by ensuring
   accountability, transparency and inclusiveness in planning,
   budgeting and expenditure monitoring, including for
   pneumonia control strategies.
- 5. Accelerate vaccination coverage by supporting Gavi's 2020 replenishment and ensuring the investment drives more equitable vaccination coverage and improves vaccine affordability.

- 6. Enhance overseas development
  assistance by increasing allocations to child
  health services and advancing the achievement of
  universal health coverage (aligned with national
  priorities and plans), including through pledges as
  part of Gavi replenishment and Nutrition for Growth.
- 7. Engage the private sector to improve access to affordable, quality vaccines, diagnostic tools, new antibiotics, medicines and medical oxygen, especially for the most deprived and marginalised children.
- 8. Measure and report progress in achieving universal health coverage to build stronger health systems which deliver quality primary health care and reduce child deaths, including from pneumonia, as well as against SDG child survival and GAPPD targets.
- Prioritise research, development and innovation to improve access to the most affordable and cost-effective pneumonia prevention, diagnosis, referral and treatment technologies and services.
- 10. Champion multi-sectoral partnerships

  between the child health and nutrition communities and the broader infection control, clean air, water, sanitation and hygiene, and development financing communities.







### The partnership to combat pneumonia

Save the Children, UNICEF and Every Breath Counts Coalition are working in partnership to fight one of the greatest – and gravest – health challenges facing children around the world – childhood pneumonia. The partnership will galvanise support to put pneumonia on the global health agenda; stimulate national action; and mobilise the donor community to ensure that we achieve the SDG goal on child survival and the Global Action Plan for Pneumonia and Diarrhoea (GAPPD) target of three child pneumonia deaths per 1,000 live births by 2030.

#### **References:**

- Biggest killer: UNICEF analysis based on WHO and Maternal and Child Epidemiology Estimation Group interim estimates produced in September 2019, applying cause fractions for the year 2017 to United Nations Inter-Agency Group for Child Mortality Estimation estimates for the year 2018; Convention on the Rights of the Child
- 2. Under-Five Mortality: United Nations Inter-Agency Group for Child Mortality Estimation (IGME) (2019); Save the Children's Child Inequality Tracker; National Family Health Survey-4 (NFHS-4) 2015-16 Mortality rates are calculated for the 10-year-period preceding the DHS survey; Disclaimer on Map: This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or area or the delimitation of any frontiers. The final status of Jammu and Kashmir has not yet been agreed upon by the Parties.
- 3. Risk Factors for Pneumonia: The Institute for Health Metrics and Evaluation (IHME) Global Burden of Disease 2017
- 4. Pneumonia Related Under-Five Mortality: UNICEF analysis based on WHO Maternal and Child Epidemiology Estimation Group (MCEE) interim estimates produced in September 2019, applying cause fractions for the year 2017 to United Nations Inter-agency Group for Child Mortality Estimation estimates for the year 2018; WHO Global Health Observatory Causes of Child Death 2017
- 5. Health Systems Strengthening: WHO/World Bank UHC Coverage Index; National Family Health Survey-4 (NFHS-4) 2015-16; National Health Policy, 2017, Government of India
- 6. Health Financing: WHO Global Health Expenditure database
- Sub-national Status: GRID, Save the Children's Child Inequality Tracker; Poorest (richest) refers to poorest (richest) 20% of households as defined by
  most recent household survey.
- 8. Nutrition: 2025 target calculated based on WHO methodology; National Family Health Survey-4 (NFHS-4) 2015-16
- Breastfeeding: National Family Health Survey-4 (NFHS-4) 2015-16
- 10. Immunisation: WHO/UNICEF estimates of national immunization coverage (WUENIC); HMIS Coverage data as of 20th September 2019
- 11. WASH: WHO/UNICEF JMP (2019) Progress on household drinking water, sanitation and hygiene 2000-2017
- 12. Air Pollution: National Family Health Survey-4 (NFHS-4) 2015-16; World Development Indicators (based on Brauer, M. et al. 2017), World Bank; ENVIS Centre on Control of Pollution Water, Air and Noise, sponsored by Ministry of Environment and Forests, Govt of India; National Ambient Air Quality Monitoring NAAQMS, Central Pollution Control Board India, Ministry of Environment & Forests, 2011-2012
- 13. Health Workers: WHO Global Health Observatory Global Health Workforce Statistics; Update on ASHA Programme, Jan 2019, National Health Mission, Govt. of India; IMNCI training module for workers, Govt. of India, 2003; The National Pneumonia Guidelines 2019, Govt. of India
- 14. ICCM: Integrated Management of Newborn and Childhood Illnesses (IMNCI) Strategy 2003; IMNCI training module for workers, Govt. of India, 2003; National List of Essential Medicine (NLEM) 2015
- 15. Oxygen: Operational Guidelines for Facility Based Integrated Management of Neonatal and Childhood Illness (F-IMNCI), Ministry of Health and Family Welfare Government of India, 2009; Home Based care for Young Child (HBYC)-Operational guidelines, April 2018; Assessment of Quality of care for children in District hospitals in India, Government of India, 2014W
- 16. Care Seeking Behaviour: National Family Health Survey-4 (NFHS-4) 2015-16

Photo credit: Save the Children Rekha, 30, lives in Sanjay Camp, Dakshinpuri, India, along with her husband and children Perna, 11, Abishiek, 10 and Rishabh, 1.5

3rd edition, November 2019

Save the Children

1 St John's Lane London EC1M 4AR UK www.savethechildren.org.uk United Nations Children's Fund (UNICEF)

3 UN Plaza New York NY 10017, USA www.unicef.org Every Breath Counts Coalition hosted by Save the Children
1 St. John's Lane

London EC1M 4AR, UK stoppneumonia.org