



# MINISTRY OF HEALTH

## Pneumonia can be prevented, Awareness saves Lives

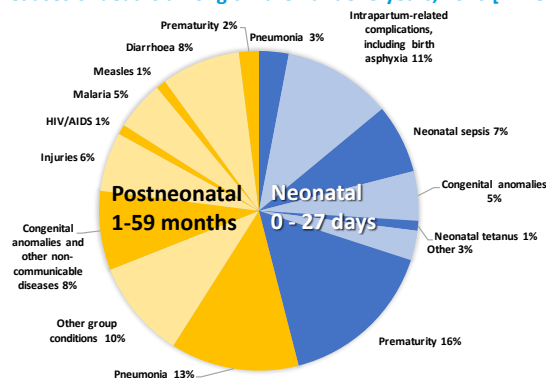
#Pneumonia affects everyone



### Key Facts

- Pneumonia is a leading cause of death in children under five years in Kenya.
- Cumulatively, 8.7 million pneumonia deaths were averted globally between 2001 and 2015 due to concerted efforts towards controlling pneumonia infections through protection, prevention and treatment intervention (UNICEF, 2016).

Causes of deaths among children under 5 years, 2016 [WHO]



Source: WHO-MCEE methods and data sources for child causes of death 2000-2016. (Global Health Estimates Technical Paper WHO/IHM/IERIGHEI.2018.1).

### What is Pneumonia?

Pneumonia is a form of acute respiratory infection that affects the lungs. The lungs are made up of small sacs called alveoli, which fill with air when a healthy person breathes. When an individual has Pneumonia the alveoli are filled with pus and fluid, which makes breathing painful and limits oxygen intake. (WHO, 2016).

### Causes

Pneumonia is caused by a number of infectious agents, including viruses, bacteria and fungi. The most common are:

- Streptococcus pneumoniae — the most common cause of bacterial pneumonia in children;
- Haemophilus influenzae type b (Hib) — the second most common cause of bacterial pneumonia;
- Respiratory syncytial virus is the most common viral cause of pneumonia;

Children infected with HIV, Pneumocystis jiroveci is one of the most common causes of pneumonia, responsible for at least one quarter of all pneumonia deaths in HIV-infected children (WHO, 2016).

### Signs and Symptoms

- Cough
- Fast breathing
- Cough with fast breathing
- Fever
- Chest in drawing
- Wheezing
- Child is unable to eat or drink
- May experience unconsciousness
- Hypothermia and convulsions

### Interventions for protection, prevention and treatment of pneumonia:

#### Protect

- Good personal and food preparation hygiene: Hand washing with soap breaks down grease and dirt that carry germs and disease causing pathogens. Evidence suggests that it is the most cost effective intervention that contributes to reduced transmission of disease causing pathogens.
- Promote Exclusive breastfeeding (EBF) during the first 6 months of life to strengthen the immune system of young infants. Breast milk gives infants all the nutrients they need for healthy development. It contains antibodies that help protect infants from common childhood diseases like pneumonia and diarrhoea. Research has shown that it can lead to a 23% reduction in pneumonia incidence.
- Promoting adequate nutrition for children - Without access to enough macronutrients like protein, fats, and carbohydrates, and micronutrients like zinc and vitamin A, children are more susceptible to pneumonia and are not strong enough to fight off the disease. A severely malnourished child is 9 times more likely to die from pneumonia than one who is well fed.

#### Prevent

- It is important that children receive all three doses of Pneumococcal Conjugate Vaccine (PCV 10) before the age of one year at 6, 10 and 14 weeks.
- Pneumococcal vaccine protects against severe forms of pneumococcal disease such as meningitis, pneumonia and bacteraemia.
- Completing the immunization schedule is one of the most effective way of preventing pneumonia.
- Addressing environmental factors such as indoor air pollution by use of affordable clean cook stoves, avoiding cigarette smoking and ensuring adequate indoor ventilation which also prevents children from falling ill with pneumonia.
- In children infected with HIV, the antibiotic cotrimoxazole is given daily to decrease the risk of contracting pneumonia.

#### Treat

- Early care seeking behavior is important. Only 67% children with pneumonia are taken to a health facility or provider for advice or treatment (KDHS, 2014). "seek care immediately when a child develops cough or difficult breathing.
- Correct diagnosis and new pneumonia guidelines recommend treatment using Amoxicillin Dispersible Tablets. Only 33% get appropriate antibiotics.

### Note for health care providers:

- Demonstrate to caregivers how to give Amoxicillin DT at home and advise to complete the dose
- Provide pre-referral treatment and timely hospitalization for severe cases of pneumonia, use the recommended injectable antibiotics and oxygen to manage severe pneumonia and counsel the caregiver on follow up care in 2 days for review, when to return immediately and home care management of a sick child.

### Pneumonia Key Facts

1. 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. In Kenya, pneumonia accounts for 15% of all child deaths, and was the second biggest killer of children under-five in Kenya in 2017. Pneumonia



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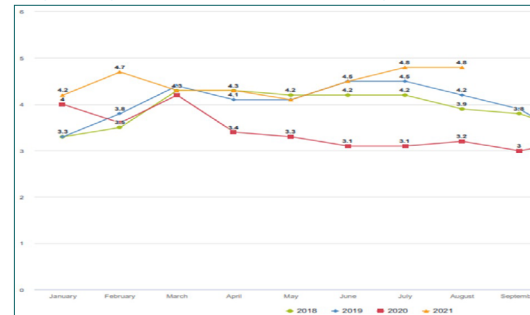
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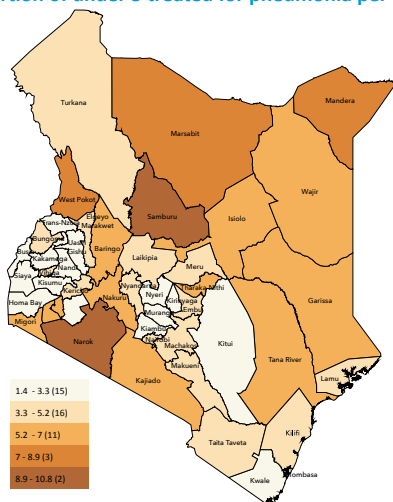
- killed almost 9,000 children under-five in 2018 – this is approximately more than 1 child every hour. Despite these alarming numbers, pneumonia has been largely overlooked on global and national health agendas. Pneumonia deaths are falling but more slowly than other major causes of child mortality. If we do not accelerate our efforts to tackle childhood pneumonia, nearly 9 million children will die unnecessarily from the disease between 2020 and 2030.
- Cumulatively, 8.7 million pneumonia deaths were averted globally between 2001 and 2015 due to concerted efforts towards controlling pneumonia infections through protection, prevention and treatment interventions (UNICEF, 2016).
  - While Kenya has made significant progress in reducing under-five children's deaths since 1990, it is estimated that in 2018, 60,000 children under-five died in Kenya. The leading causes of child morbidity and mortality are familiar and are pneumonia (15%), diarrhoea (11%), malaria (4%), HIV (4%), and other non-communicable diseases (26%). Alarmingly, 75% of these deaths occurring during the first year of a child's life and 48% during the neonatal period (1st month). Death of children after the neonatal period remains high in Kenya with pneumonia as a leading cause of death at 15% in 2018.
  - Unfortunately, care seeking for acute respiratory infection is still low at 67%, with most of the caregivers seeking care when it's too late to save the sick child.
  - Universal Health Coverage (UHC): Improving coverage for child health services is a priority for the Government of Kenya as reflected in its Vision 2030. The Sustainable Development Goals (SDG) target rate for under five deaths is 25 per 1000 live births by 2030. This is why the government of Kenya is keen to half the child mortality rate through UHC by strengthening Primary Health Care system.
  - The new pneumonia guidelines recommend treatment using High Dose Amoxicillin Dispersible Tablets (Integrated Management of Newborn and Childhood Illness, 2018).

- Vaccines are a crucial preventative measure for children against pneumonia. In Kenya, the uptake of the recommended three doses of pentavalent vaccine among children is 90%, while the uptake of pneumococcal vaccine is 85% (KDHS, 2014). births, Nyanza region has the highest under-5 mortality rate at 82/1,000 live births followed by Nairobi at 72/1,000 live births (KDHS, 2014).
- In 2020, Kenya signed the Declaration to End Pneumonia deaths in children under 5 years.
- The Covid-19 pandemic saw a major shift in service delivery. Stringent infection prevention measures were instituted into health facilities and communities. This included social distancing, hand washing and wearing of face masks. The KHIS data showed a marked decline in the number of children treated for pneumonia in health facilities for the period between March and September 2020. However, In 2021, the Pneumonia trends among children under 5 have been steadily increasing as shown by data from KHIS.

Kenya - Proportion of under 5 treated for pneumonia (MC).



Proportion of under 5 treated for pneumonia per county.



- Pneumonia can be prevented by simple, proven solutions Every breath counts, Innovate to end child pneumonia.



Exclusive breastfeeding.



Vaccination.



Recommended antibiotics.



Hand washing.



Good nutrition.



Adequate indoor ventilation.

### Call to Action

- The government and development partners have put a lot of investments in what needs to be done in research to strengthen evidence based implementation in addressing access to health services, treatment barriers and quality assurance in health care delivery. This is aligned to SDG 17 on strategic partnerships for the goals (MOH Plan).
- Despite the great achievement in the reduction in child mortality, there is need for renewed commitment by the government and partners to invest in child health in order to roll out protection, prevention and treatment interventions for pneumonia and other major killers of children.
- In line with the UHC agenda, The Ministry of Health (MOH) is making a call to all counties to commit resources toward strengthening child health services at county level through targeted training, equipping facilities with lifesaving commodities including Amoxicillin DT, Pulse Oximeters and oxygen, scaling up awareness through community strategy and improving overall Primary Health Care system.

