Counting every stillbirth, maternal and newborn death and making them count: opportunities for the INDEPTH Network

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Acknowledgement

- Prof Joy Lawn – LSHTM and Save the Children, USA
- Kate Kerber – Save the Children, USA

Outline

1. **Background on working group**
2. Why are 3 million newborns dying each year?
3. What are the major priorities for addressing this burden?
4. What is the potential role for the INDEPTH newborn working group?

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The Maternal and Newborn WG

Goal: To provide evidence to inform policy and programs for newborn survival in low and middle income countries.

Objectives:

- Develop and implement a newborn research agenda
- Track pregnancies and their outcomes for the mother and foetus and provide actual data driven evidence

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Update on working group

- Born 2010 with 10 initial HDSS centres
- In July 2013 Ho, Ghana workshop we had **22 sites**
- About **18 sites** have sent us their maternal and newborn data for manuscripts being written
- INDEPTH guidelines require pregnancy tracking for all sites meaning all sites should be members

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No woman should die giving birth
No child conceived or born to die

280,000 die

2.6 million die

3 million die

2.9 million die

10 million deaths

3.5 million within a few days of birth

EVERY WOMAN EVERY CHILD

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Save the Children
EVERY ONE

Global progress for reducing maternal, newborn and child deaths has accelerated with the MDGs

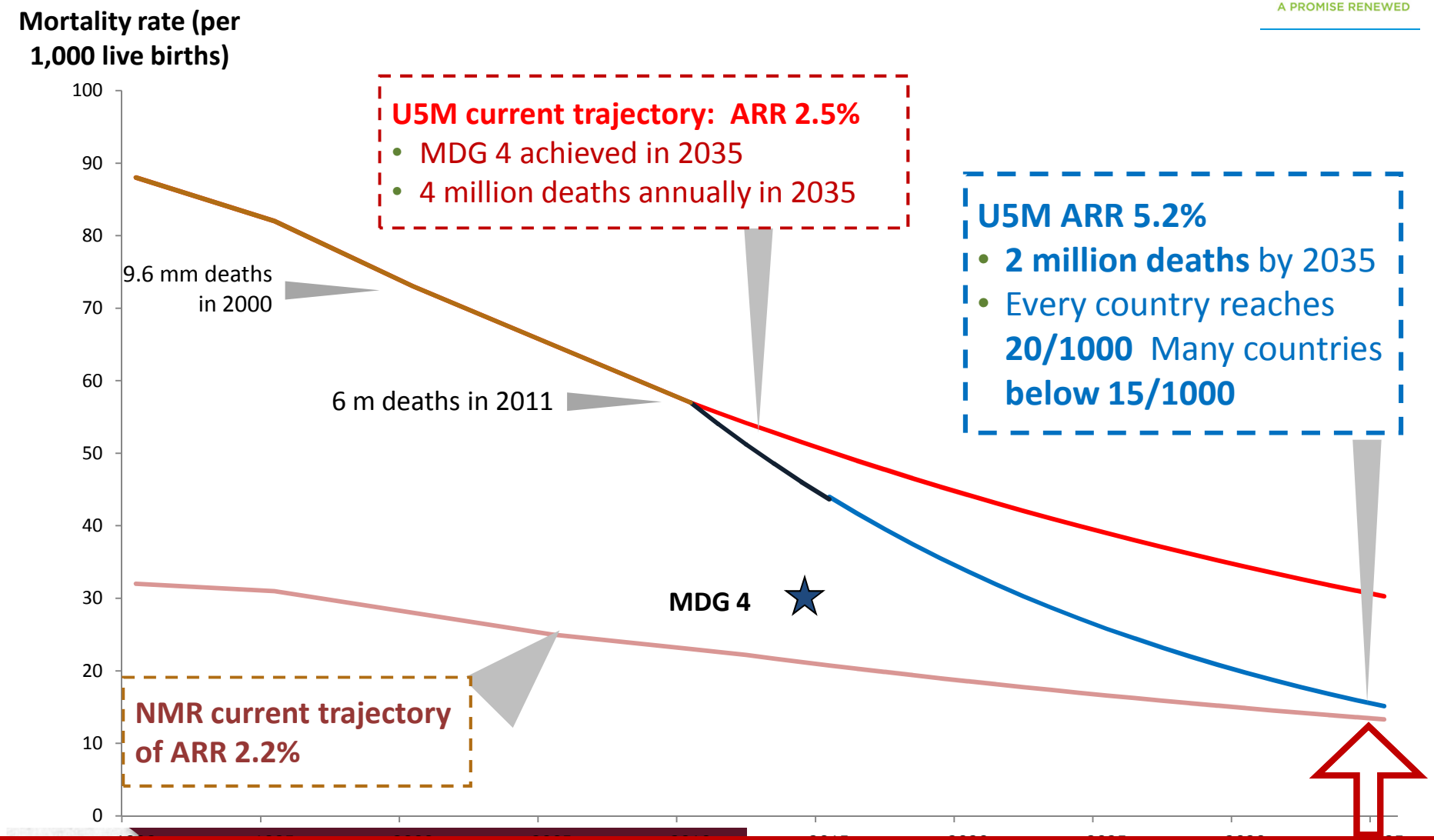
	Average rate reduction 1990-2010
Maternal mortality ratio	4.2%
Children aged 1- 59 months	2.5%
Neonatal mortality (newborn, first 4 weeks after birth)	1.8%
Stillbirths (last 3 months of pregnancy)	1.0% (1995-2009)

At least 30% slower for newborn survival

Sou… y analysis of a decade of change. Health Policy and Planning. 27(Suppl. 3). … www.childinfo.org , UN MMR estimates 2012

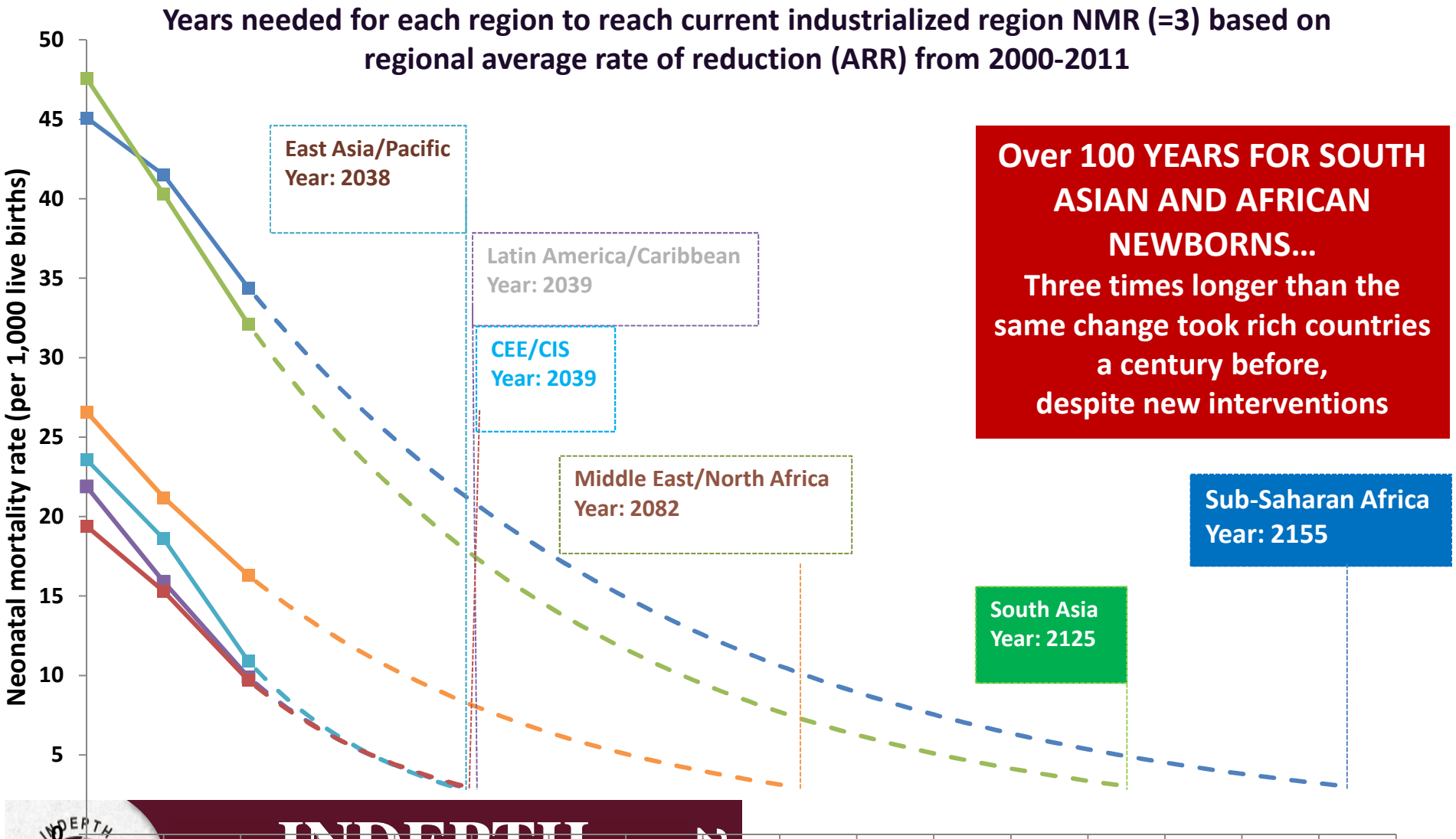
Absolute target by 2035 for *A Promise Renewed*

Under 5 mortality = 20/1000



Unless we achieve major acceleration for newborn survival, we cannot reach our goal for ending preventable child deaths by 2035

When will every newborn have the same survival chance as those in the richest countries?



Over 100 YEARS FOR SOUTH ASIAN AND AFRICAN NEWBORNS…
Three times longer than the same change took rich countries a century before, despite new interventions

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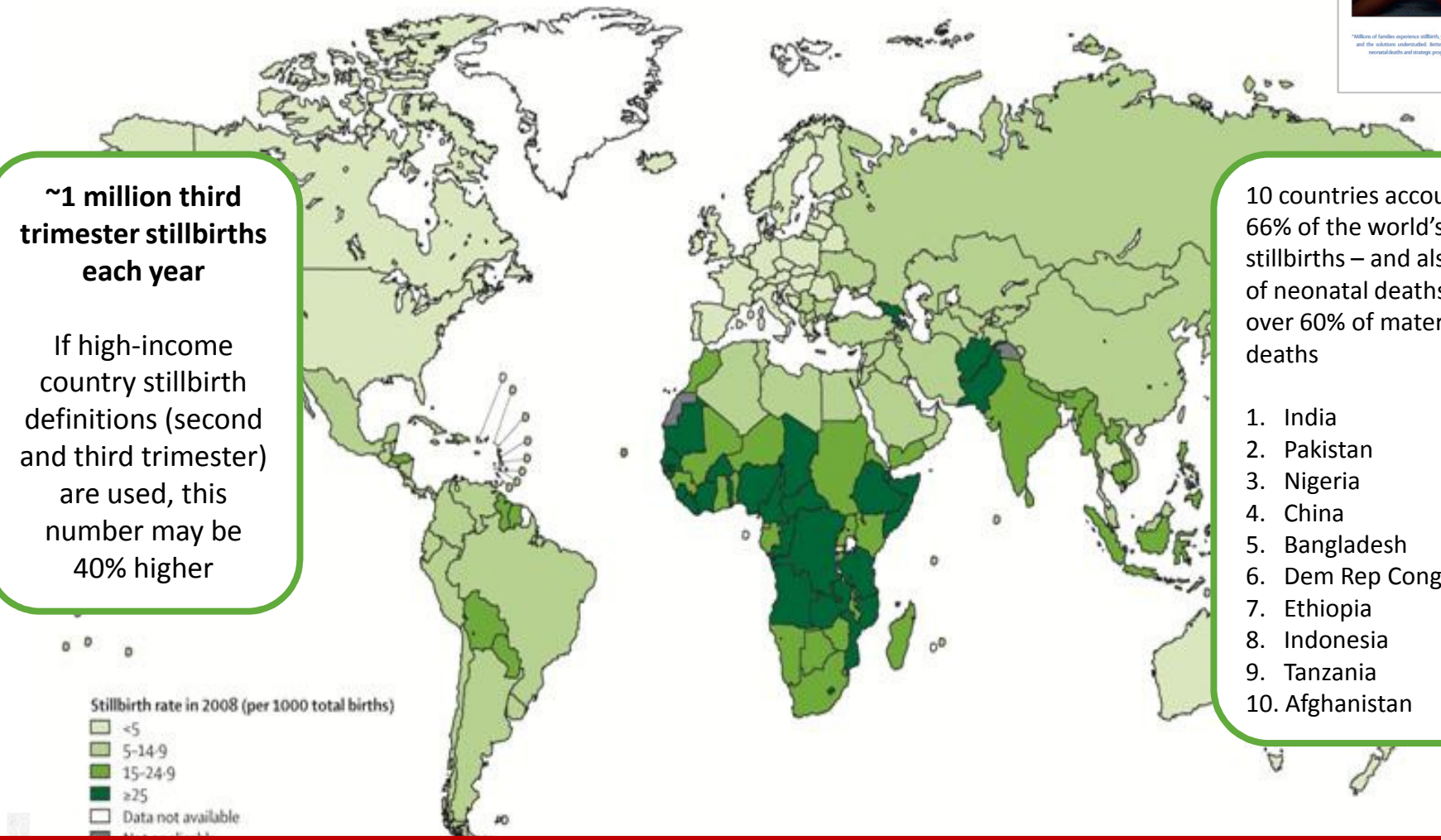
Do stillbirths count?

Country variation in stillbirth rates

~1 million third trimester stillbirths each year

If high-income country stillbirth definitions (second and third trimester) are used, this number may be 40% higher



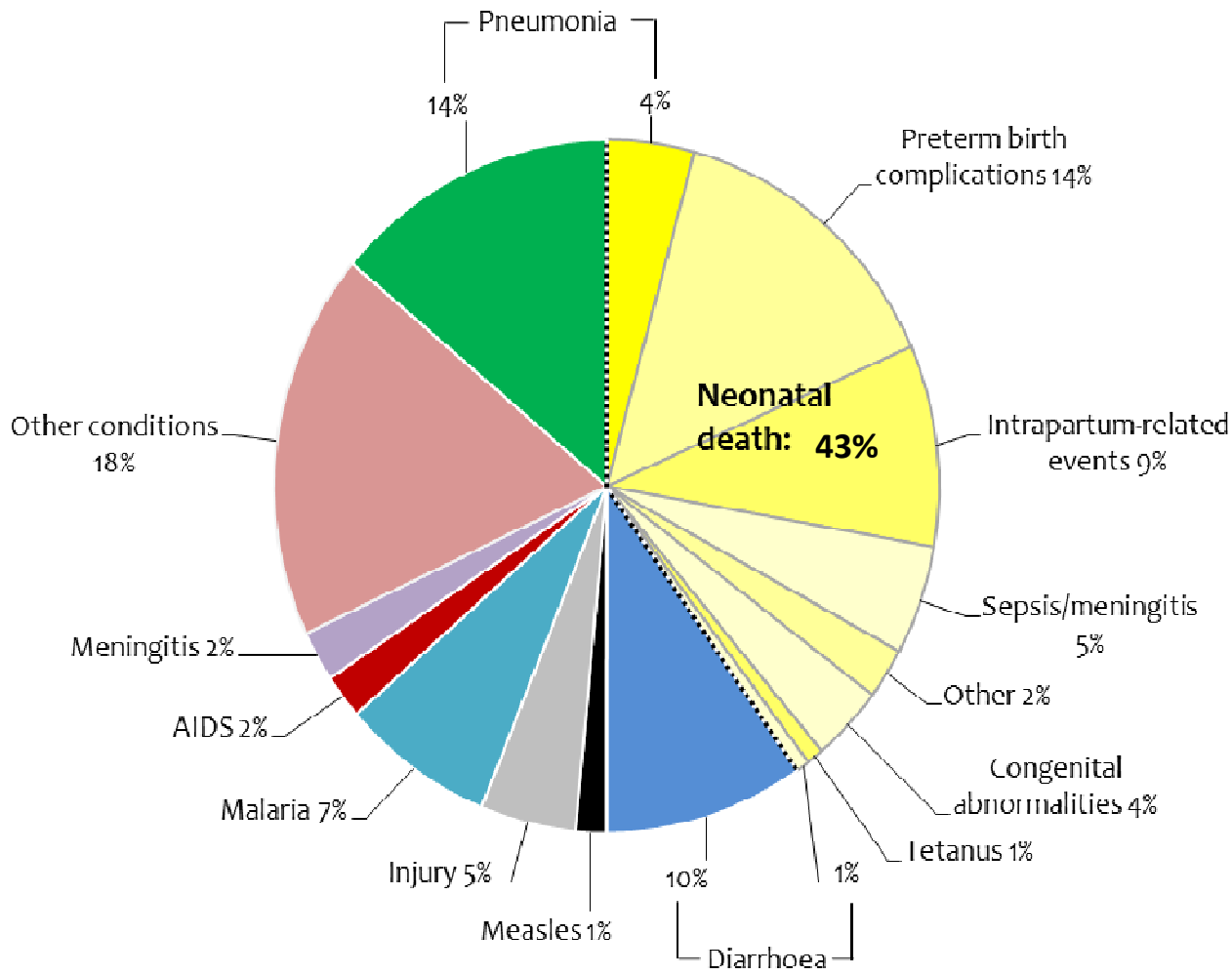
10 countries account for 66% of the world's stillbirths – and also 66% of neonatal deaths and over 60% of maternal deaths

1. India
2. Pakistan
3. Nigeria
4. China
5. Bangladesh
6. Dem Rep Congo
7. Ethiopia
8. Indonesia
9. Tanzania
10. Afghanistan

98% of stillbirths occur in low-income and middle-income countries – more than two thirds are in rural families.

Neonatal cause of death

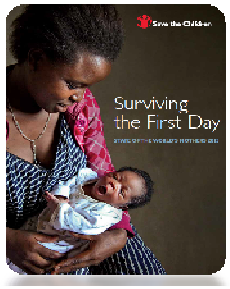
We now know the causes and timing



3 main killers of newborns are known and addressable :

1. Preterm birth complications
2. Intrapartum-related
3. Severe infections

One-third of newborn deaths take place on the day of birth



Source :CHERG and WHO, Liu et al. 2012. Global, regional, and national causes of child mortality in 2000-2010.The Lancet. DOI:10.1016/S0140-60560-1.

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Newborn survival solutions:

3 x 2 +1

1. Preterm complications

1. Prevention of complications: Management of preterm labour and ACS

2. Management: KMC, preterm care

2. Severe infections: pneumonia/sepsis/meningitis/tetanus

1. Prevention: tetanus toxoid immunization, clean delivery, cord care including chlorhexidine, handwashing, breastfeeding, hygiene promotion

2. Management: antibiotics, supportive care

3. Intrapartum-related complications

1. Prevention: Quality obstetric care and labour monitoring

2. Management: Stimulation/resuscitation if not breathing at birth

+1 Essential newborn care

- Hygiene, warmth, immediate/exclusive breastfeeding
- Demand gaps at household level
- Supply gaps at health facility level

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Data gaps for stillbirths and maternal and newborn deaths

Data collection gap

- Most deaths are uncounted, up to half occur at home
- Globally 75% of child death data comes from Demographic & Health Survey data – unreliable for stillbirth rates

Data consistency gap

- Definition confusion
- Multiple cause of death classification systems
- Lack of consistency in attributing cause of death
- Rate and cause estimates not routinely being done

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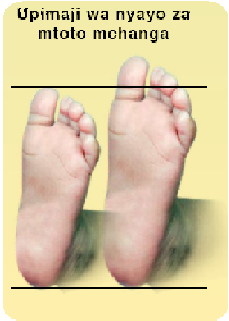
DESCRIPTION DISCOVERY DEVELOPMENT DELIVERY

Pregnancy surveillance



- Early registration
- Gestational age: SGA and preterm birth
- SB and neonatal death misclassification
- Intrapartum SB and early NND

Cause of death

- Standard verbal autopsy tools and hierarchies
- Underlying factors: social autopsy

Coverage of care and household behaviours

Role for INDEPTH sites to feed in to global estimates, help understand determinants, test and improve tools, collection systems, encourage local use of data for planning and action

DESCRIPTION DISCOVERY DEVELOPMENT DELIVERY

DEVELOPMENT & DELIVERY RESEARCH – testing known interventions and packages

- Home visit package for newborn care (Iganga-Mayuge, Kintampo, ICCDRB)
- mHealth – verbal autopsy and linked facility mortality audit
- Costing interventions and service delivery

DISCOVERY – basic science

- Preterm birth prevention?

Ready-to-go business case required for how INDEPTH sites can help fill these gaps

Some of our next steps

- **Standardise** analysis plan across sites and **reanalyse** existing newborn data (Friday and Saturday this week)
- **Submit** publication on multi-site findings as well as individual site write-ups
- **Present** results
  - Several in and outside the country and INDEPTH Network fora
- **Engage** with the global newborn health community
- Find funding

Summary

- An estimated **280000 maternal deaths, 3 million newborn deaths and 2.6 million stillbirths** occur each year. We have <u>more</u> data now, but INDEPTH can help make it <u>better</u>.

- **Clear role for INDEPTH –** particularly in description and delivery research
- **We invite sites and donors** to come on board so we inform the world and develop solutions

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Acknowledgement

- We thank the **Gates funded Saving Newborn Lives Program** and **INDEPTH Network** (which has funded us twice)and **MRC South Africa** which is funding a post conference meeting 1st and 2nd November 2013
- Makerere University Iganga-Mayuge HDSS

Which coordinates the Newborn Working Group

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Thank you!