• Globally, preterm birth is the leading cause of death for all children under age 5
• 15 million babies are born preterm each year; many survivors suffer serious short- and long-term health problems
• Costs related to preterm birth exceed $26 billion per year in the U.S. alone; global costs remain unknown

What is preterm birth and what are the risks?

Preterm birth, or prematurity, is defined by the World Health Organization as the onset of labor before 37 completed weeks of pregnancy (full term is 40 completed weeks). Because they have not been able to fully grow and develop, many babies who survive preterm birth are at increased risk for infections, cerebral palsy, brain injury, and respiratory, vision, hearing, learning and development problems.

How big is our challenge?

Globally, each year an estimated 15 million babies are born prematurely, and complications of preterm birth outrank all other causes as the world’s number one killer of young children. Of the 6.3 million deaths of children under the age of five in 2013, complications from preterm births accounted for nearly 1.1 million deaths. In addition, few low- and middle-income countries collect reliable data on preterm birth, and this lack of accurate information hampers visibility, effective policies and research.

What causes preterm birth?

In most cases, we don’t know what causes a premature birth. There are some known genetic and environmental factors, but preterm birth is complex and can result from multiple factors:

<table>
<thead>
<tr>
<th>Known Causes &amp; Pathways</th>
<th>Typical Gestational Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrauterine infection</td>
<td>Early preterm birth (24-32 weeks)</td>
</tr>
<tr>
<td>Genital infection</td>
<td></td>
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<tr>
<td>Systematic infection</td>
<td></td>
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<tr>
<td>Excessive bleeding</td>
<td>Early or late preterm birth</td>
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<tr>
<td>Early placental separation</td>
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<td>Autoimmune syndromes</td>
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<tr>
<td>Stress</td>
<td>Late preterm birth (32-36 weeks)</td>
</tr>
<tr>
<td>Multiple fetuses (such as twins)</td>
<td>Late preterm birth</td>
</tr>
<tr>
<td>Excess amniotic fluid</td>
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</tbody>
</table>
How can we prevent preterm birth and improve survival?

GAPPS authored a global report that identified only two evidence-based interventions to prevent preterm birth in low-resource settings: smoking cessation and progesterone, which when given to mothers whose previous baby was born prematurely has been shown to be effective in preventing a second preterm birth. Even if these solutions were scaled up globally, they would only reduce the prematurity rate by about 4%. We urgently need more research to identify new and effective preventive measures.

Also in the report, GAPPS outlined 11 effective interventions to improve the care and survival of preterm newborns. These include:

- Prophylactic steroids in preterm labor
- Antibiotics for preterm labor after a woman’s water breaks early
- Delayed umbilical cord clamping
- Vitamin K supplements at delivery
- Community management of neonatal infections and pneumonia (where facility referral is unavailable)
- Resuscitation with room air
- Hospital-based kangaroo mother care
- Early breastfeeding
- Keeping the baby warm to prevent hypothermia
- Surfactant therapy for respiratory distress syndrome
- Application of continued distending pressure to the lungs for respiratory distress syndrome

What can we do now?

1. Scale-up existing evidence-based solutions and discontinue ineffective ones
2. Improve standardized data and specimen collection to identify causes and solutions
3. Invest in research to understand the biological process of pregnancy and childbirth
4. Identify and implement more evidence-based, low-cost interventions
5. Achieve goals in the Global Action Agenda (GAA)

How can I help?

Visit the Advocacy section of the GAPPS website (www.gapps.org) and learn more about how you can increase awareness and influence policy around preterm birth.

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