Newborns are perhaps the most vulnerable population the world over. Preterm or babies born too early, less than 37 weeks gestation, are particularly at risk. Currently, prematurity is the leading cause of death among children under five around the world, and a leading cause of disability and ill health later in life. Sub-Saharan Africa and south Asia account for over 80 percent of preterm births worldwide. Of the fifteen million babies born too early each year, more than one million die due to complications related to preterm birth. Low birth weight (newborns weighing less than 2,500 grams at birth), due to prematurity and/or restricted growth in utero, is also a major contributor of newborn and child deaths, as well as disability and non-communicable diseases globally.

Nearly 85 percent of preterm babies are born between 32 and 37 weeks gestation and most of these babies do not need intensive care to survive. Solutions to improve the survival and health of vulnerable preterm and low birth weight babies exist. Essential newborn care (drying, warming, immediate and exclusive breastfeeding, hygiene and cord care) as well as basic care for feeding support, infections and breathing difficulties can mean the difference between life and death for small babies. More effort is needed to identify women at risk of preterm labor and support them to give birth in a health facility that can offer extra care when needed, such as support for adequate feeding with breast milk, continuous skin to skin contact, antibiotics, and antenatal corticosteroids. To do this, it is critical that families, communities and health care workers value small babies so that they receive the life-saving care they need. To turn the tide on these preventable deaths, we need action across the spectrum of care from adolescence and preconception, pregnancy, the safe management of labor and delivery, and effective immediate and later postnatal care.

Current, local data are crucial to inform priorities and drive scale-up. This national level profile provides the most current national-level information on the status of prevention and care for preterm birth and low birth weight in Senegal. Data presented highlight a number of risk factors relevant to preterm and low birth weight in Senegal as well as the coverage of important care for women and newborns from pregnancy, labor and delivery and the postnatal period. There is also information that provides insights into the health workforce, health policies, health information and community mobilization relevant to preterm birth and low birth weight.

The information provided here can be used to understand the current situation, increase attention to preterm births in Senegal and to inform dialogue and action among stakeholders. Data can be used to identify the most important risk factors to target and gaps in care in order to identify and implement solutions for improved outcomes.

Much is already being done to prevent preterm birth and low birth weight and to improve outcomes for small babies. A safe and healthy start to life is at the heart of human capital and economic progress in every country, making care for small babies an essential investment in both the short- and long-term. As government leaders, civil society organizations, health workers, families, communities and other partners come together to enact change, we can prevent babies from being born too early and too small, and ensure that small babies get the critical life-saving care and nurturing they need.

**Senegal - National Clinical Standards for Care of Preterm Newborns at the Hospital Level**

- ACS
- Magnesium Sulfate
- Vaginal birth preference
- KMC
- CPAP for RDS
- Safe oxygen
- Surfactant
- Antibiotics for pPROM
- No antibiotics w/ intact membranes

Based on the 10 elements of care recommended by WHO for improved preterm birth outcomes.
Adolescent birth rate per 1,000 girls: 78
Birth interval <24 months: 16%
Short stature among women of childbearing age: 1%
Anemia among women of childbearing age: 54%
Obesity in women of childbearing age: 21%
Adult diabetes prevalence: 7%

31% Hypertension in women
<1% Adult HIV prevalence
1% Tobacco use amongst women
56% Households with place to wash hands, soap and water
64% Solid fuel used for indoor cooking
<1% Violence during pregnancy

RISK FACTORS FOR PRETERM BIRTH

Preterm birth rate (babies born <37 weeks): 12%
Low birth weight rate (babies born <2,500g): 19%

Babies born preterm per year: 67,000
Ratio of boys to girls born preterm: 1.18
Babies born per year <28 weeks: 2,600
Impaired preterm survivors per year: 1,300
Direct preterm child deaths per year: 3,870

REPRODUCTIVE HEALTH & CARE DURING PREGNANCY

Contraceptive prevalence rate (all methods): 28%
Met need for birth spacing: 28%
At least 1 antenatal care visit: 96%
4+ antenatal care visits: 57%
First antenatal care visit <6 months: 64%
ITN use in pregnancy: 62%
HIV+ pregnant women receiving ARVs: 53%
Pregnant women <34 weeks receiving ACS for threatened preterm labor: No Data

BIRTH & POSTNATAL CARE

Births attended by skilled attendant: 68%
Births by cesarean section: 5%
Infants weighed at birth: 60%
Newborns initiated on KMC: No Data
Early initiation of breastfeeding within 1 hour: 34%
Exclusive breastfeeding up to 6 months: 42%
PNG within 2 days (mothers): 77%
PNG within 2 days (newborns): 78%

Demographics

Total population: 15,412,000
Annual births: 542,000
Total fertility rate per woman: 4.8

Maternal deaths: Per 100,000 live births Total
315 1,800

Stillbirths: Per 1,000 live births Total
24.5 14,500

Neonatal deaths: 21 (228) 11,400
Infant deaths: 33 (422) 18,000
Under 5 deaths: 45 (56) 24,700

*Numbers in parentheses refer to mortality estimates from recent national household surveys

Preterm births and deaths

Preterm birth rate (babies born <37 weeks): 12%
Low birth weight rate (babies born <2,500g): 19%

Tobacco use amongst women: 1%
Households with place to wash hands, soap and water: <1%
Solid fuel used for indoor cooking: 64%
Violence during pregnancy: <1%

31% Hypertension in women
<1% Adult HIV prevalence
1% Tobacco use amongst women
56% Households with place to wash hands, soap and water
64% Solid fuel used for indoor cooking
<1% Violence during pregnancy

Difficulties for preterm birth

Preterm born per year: 67,000
Ratio of boys to girls born preterm: 1.18
Babies born per year <28 weeks: 2,600
Impaired preterm survivors per year: 1,300
Direct preterm child deaths per year: 3,870

Health facility readiness

Delivery facilities with ACS in stock: 100%
Delivery facilities with space designated for KMC: 80%

Health policy

National plan for RMNCH
RMNCH plans include preterm component
Policy for kangaroo care
Policy for antenatal corticosteroids use
Policy for safe oxygen use and CPAP

Health information

Perinatal mortality audit in policy
Birthweight captured in health management information system
Gestational age captured in health management information system

Health workforce

Number of physicians, nurses and midwives per 10,000 population: 3.8
Clinical standards for preterm care at hospital level
Nursing students receive formal education in neonatal care

Community engagement

National advocacy group for parents of preterm babies
Preterm included in national RMNCH behaviour change strategy

EPI PREEMIE SCALE

www.EveryPreemie.org
DEFINITIONS AND DATA SOURCES

RISK FACTORS FOR PRETERM BIRTH

- **Adolescent birth rate**: Number of births to 1,000 adolescent girls aged 15–19. (9a)
- **Birth interval: <24 months**: Percentage of women with two live births within 24 months. (9a)
- **Female short stature**: Percentage of women age 15-49 with a body mass index expressed as the ratio of weight to the square of height in meters (kg/m^2) of more than 25 to 30 kg/m^2. (13)
- **Anemia in women of childbearing age**: Percentage of women age 15-49 with anemia (haematocrit <30% in women ages 15-49). (9a)
- **Diabetes prevalence in women**: Percentage of adult women with fasting glucose >126 mg/dl (7.0 mmol/l) or on medication for raised blood glucose. (11)
- **Hypertension in women**: Percentage of adult women with raised blood pressure (systolic blood pressure >140 mmHg or diastolic blood pressure >90 mmHg) or on antihypertensive medication. (11)
- **Adult HIV prevalence**: Percentage of adults living with HIV. (10)
- **Tobacco use amongst women**: Percentage of women age 15-49 who smoke cigarettes or a pipe or use other tobacco products. (9a)
- **Households with place to wash hands, soap and water**: Percentage of households with a place for washing hands that includes water, soap, and other cleansing agents. (9a)
- **Household solid fuel for indoor cooking**: Percentage of households using solid fuel for cooking indoors. (9a)
- **Violence against women in pregnancy**: Percentage of women age 15-49 who have ever experienced physical violence during pregnancy. (9a)

HEALTH WORKFORCE

- **Health worker density per 10,000 population**: Number of medical doctors (physicians), including generalist and specialist medical practitioners, nursing and midwifery personnel per 10,000 population. (12)
- **Clinical standards for preterm care at hospital level**: Number of 10 key clinical elements of preterm care (cerebrovascular toxicity, tocolysis, magnesium sulphate, antibiotics for preterm premature rupture of membranes, no antibiotics with intact membranes, vaginal birth preference, kangaroo mother care, continuous positive airway pressure for respiratory distress, surface care, surfactant) included in national clinical standards or guidelines. (13)
- **Nursing students receive formal education in neonatal care**: Yes: Diploma or certificate program available for nurses in neonatal care / No: No formal additional certification. (13)

HEALTH POLICY

- **National plan for RMNCH**: Yes: Coded plan or plans to scale up maternal, newborn and child health interventions available at the national level. (Partial: Coded plan available but not for all components. / No: No coded implementation plan for maternal, newborn and child health available.) (14)
- **RMNCH plans include preterm components**: Yes: RMNCH strategy includes mention of any critical elements of preterm care. / No: No mention of any critical elements of preterm care. (13)
- **Policy for KMC**: National policy recommends Kangaroo Mother Care for low birth weight newborns. / No: National policy does not recommend Kangaroo Mother Care for low birth weight newborns. (13)
- **Policy for safe oxygen use and CPAP**: Yes: National policy specifies safe oxygen use when continuous positive airway pressure is administered. / No: National policy does not specify safe oxygen use. (13)

HEALTH INFORMATION

- **Perinatal mortality audit in policy**: National policy adopting health workers to review perinatal deaths occurring in health facilities. Yes: national policy in place / No: No national policy. (13)
- **Birthweight captured in health management information system**: Place to capture birthweight on facility registers, or in annual health sector reports, where forms or registers were not available. (13)
- **Gestational age captured in health management information system**: Place to capture gestational age in newborns, on facility registers, or in annual health sector reports, where forms or registers were not available. (13)

COMMUNITY ENGAGEMENT

- **National advocacy group for parents of preterm babies**: Yes: Existence of at least one support group for parents and family members affected by preterm birth. / No: No group information available. (13)
- **Preterm included in national RMNCH behaviour change strategy**: Yes: Messages regarding preterm birth are included in national strategy. No: Behaviour change strategy does not include preterm birth messages. (13)

DATA SOURCES:
13. Data from Every Preemie-Scale country stakeholder interviews and document review, 2015, 2017 and 2019