

Preterm birth: what you need to know

Immediate care for a single newborn with a birth weight of less than 750 grams typically costs the health system

\$216,000

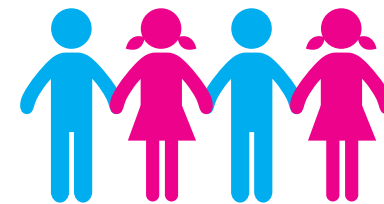
and in the range 1.5kg – 2kg, around \$59,000.



Results from the first year of the WA Preterm Birth Prevention Initiative have revealed an

8%
reduction

(196 fewer cases from 2015-2013) in the rate of preterm birth across WA.



Preterm birth is the **leading cause of death and disability**

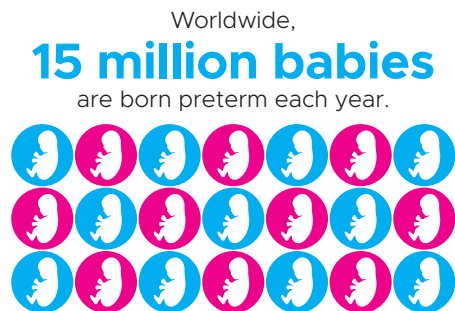
in children up to five years of age in the developed world.

Preterm birth:

Defined as birth before 37 and after 20 completed weeks of pregnancy.



TRIMESTER I TRIMESTER II TRIMESTER III BIRTH



Key terms to know

Developmental delay: When a child is behind or less developed mentally or physically than what is normal for their age.

Gestation: The period of development in the uterus from conception until birth.

Neonatal intensive care unit (NICU): A specialised intensive care unit to care

for preterm and seriously ill newborns.

Neonatology: The subspecialty of paediatrics that consists of the medical care of newborn infants; especially ill or preterm newborns.

Obstetrics: The branch of medicine that deals with the care of women during pregnancy, childbirth and the

recuperative period following delivery.

Preterm birth: Defined as birth before 37 and after 20 completed weeks of pregnancy.

Cervix: A cylinder-shaped neck of tissue that connects the vagina and uterus. A shortened cervix in mid-pregnancy is strongly associated with preterm birth.

Progesterone: A female hormone that is produced in the ovaries and prepares the lining of the uterus for pregnancy. A key intervention for preventing preterm birth.

Steroids: Medication given to women in preterm labour and babies who have difficulty breathing to help with lung function.

Celebrating the success of WA's own Preterm Birth Prevention Initiative

The Western Australian Preterm Birth Prevention Initiative was launched in 2014 with the single goal of safely lowering the rate of early birth in our state.

This is the world's first such program to be applied across an entire population.

Outcomes after the first full year of implementation are now available and have been published in the American Journal of Obstetrics and Gynaecology, which is the leading scientific journal in this field.

During 2015, the rate of preterm birth in single pregnancies in WA fell by 7.6 per

cent and the rate was lower than in any of the preceding six years.

At King Edward Memorial Hospital (KEMH) – which is the state's only tertiary-level referral centre for pregnancy and newborn care – the rate fell by 20 per cent.

Importantly, the reduction extended down to the early gestational ages and included babies in the 28 to 31-week age group, in addition to those closer to term age.

In 2015, approximately 200 babies that would have been born preterm were

delivered at full-term age. About 45 of these babies would have been born in the very early age groups.

These results were further bolstered in May 2017 when the American Journal of Obstetrics and Gynaecology recognised it as a 'Report of Major Impact'.

This designation recognises the Initiative's potential for immediate impact among the clinical and scientific community; effectively delivering a proven roadmap for other regions worldwide to effect large-scale positive change.

Despite the success of the Initiative to

date, we need to make sure the benefits are maintained and expanded.

Research is required to learn if all parts of the state, and all its population groups, have benefited. We also need more research to discover the origins of the many cases of preterm labour that modern medicine has yet to understand.

The success of this program is now attracting national and international interest.

Applying this initiative, which was designed specifically for WA, to other populations is now one of our challenges.