



# TRANSLATIONAL RESEARCH GRANTS SCHEME 2020

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Health



# THE FIRST 2000 DAYS

CONCEPTION TO AGE 5

**FRAMEWORK**

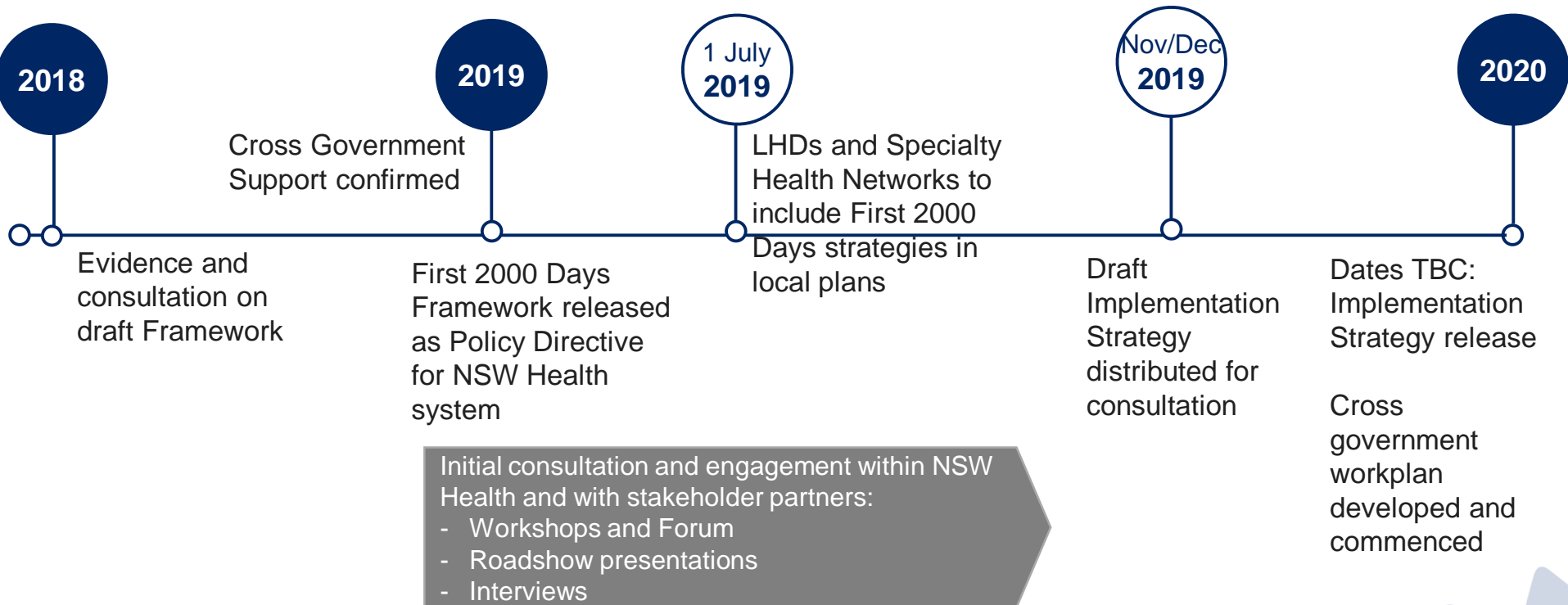
An evidence-based platform  
for the NSW Health sector which  
supports children and their families  
to have healthy and fulfilling lives

## What we will cover

- ▶ What is happening across NSW
- ▶ First 2000 Days and research
- ▶ Priorities
- ▶ When and how to consult with the Ministry team



# Actions to date across NSW

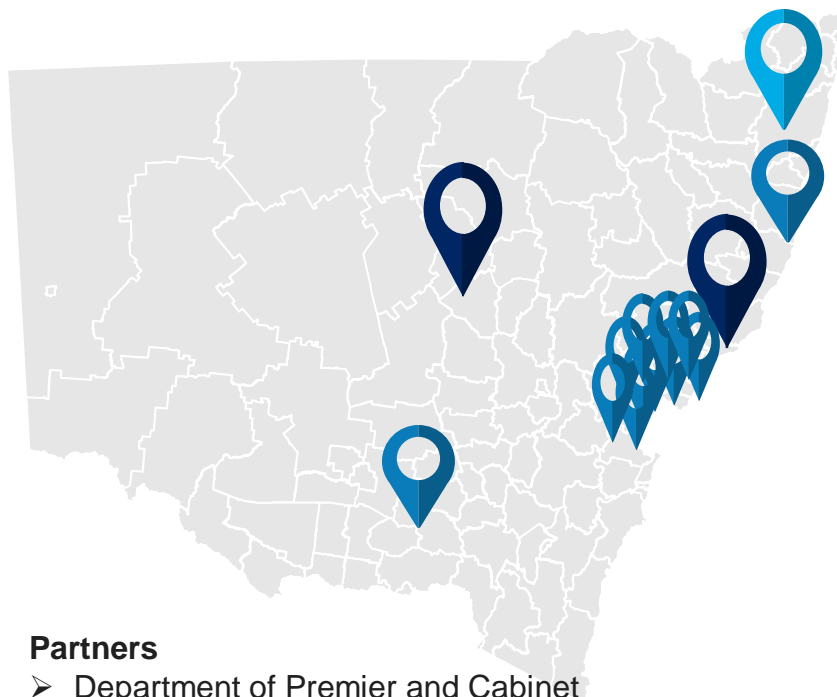


# Presentation on First 2000 Days (to December 2019)

- ▶ 55 events, and
- ▶ 4577 people by end 2019
- ▶ A number of events booked for 2020

## Health

- ▶ Districts (NSLHD, WSLHD, HNELHD, MNCLHD, SNSWLHD, MLHD, SESLHD, SWSLHD, SLHD, ILHD)
- ▶ Pillars and Speciality Networks
- ▶ Ministry of Health (Senior Executives)
- ▶ NSW Health Statewide Implementation Consultation
- ▶ Child and Youth Mental Health Advisory Group
- ▶ Faculty of Child and Adolescent Psychiatry



## Partners

- Department of Premier and Cabinet
- Treasury
- Department of Communities and Justice
- Government Architects
- National Child Health Digital Strategy
- General Public- Royal North Shore Hospital
- Karitane

# FIRST 2000 DAYS- Emerging Evidence

A - Antenatal

B – Brain

C – Childhood experience



# A – Antenatal

- ▶ Physical health – first trimester
- ▶ Psychosocial health
- ▶ Future Health

## Relevant studies include:

- ▶ The Raine Study (formerly known as the Western Australian Pregnancy Cohort Study), established in 1989, is one of the largest prospective cohort studies of pregnancy, childhood, adolescence and adulthood to be carried out anywhere in the world. For more information see <https://rainestudy.org.au/>
- ▶ Variety of studies on psychosocial health in pregnancy and impacts on child and parent in later life
- ▶ Fetal Origins of Disease (David Barker)







*“how little is known about life before birth and how that may impact on our health and our disease throughout the rest of our lives”*

Professor John Newnham AM  
2020 Senior Australian of the Year

Obstetrics specialist Professor Newnham was Founding Investigator of the Raine Study (see <https://rainestudy.org.au/>). In July 2018 he led the development of the Australian Preterm Birth Prevention Alliance, supported by NHMRC in Canberra. This alliance is the world's first national program aiming to safely reduce the rate of harmful early birth across its population. The Australian Preterm Birth Prevention Alliance are partners in the NSW based Every Week Counts Study (University of Sydney and Royal North Shore Hospital see <https://www.everyweekcounts.com.au/>)

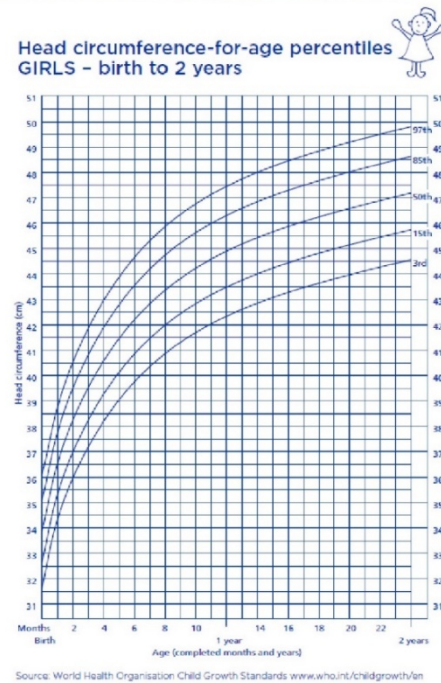
# B - Brain





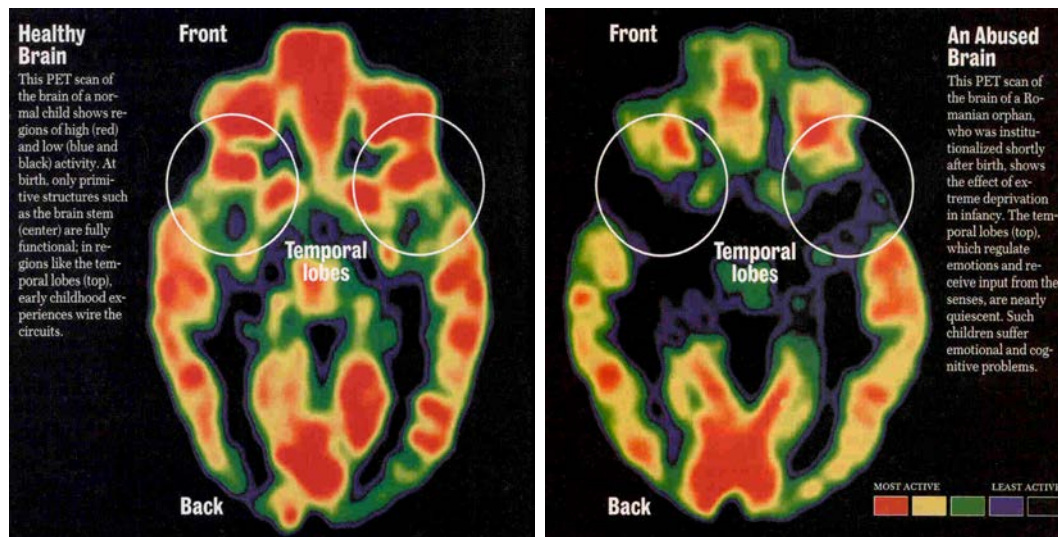
# Brain Structure - Head Circumference

## My personal health record



Source: My Personal Health Record  
NSW Health

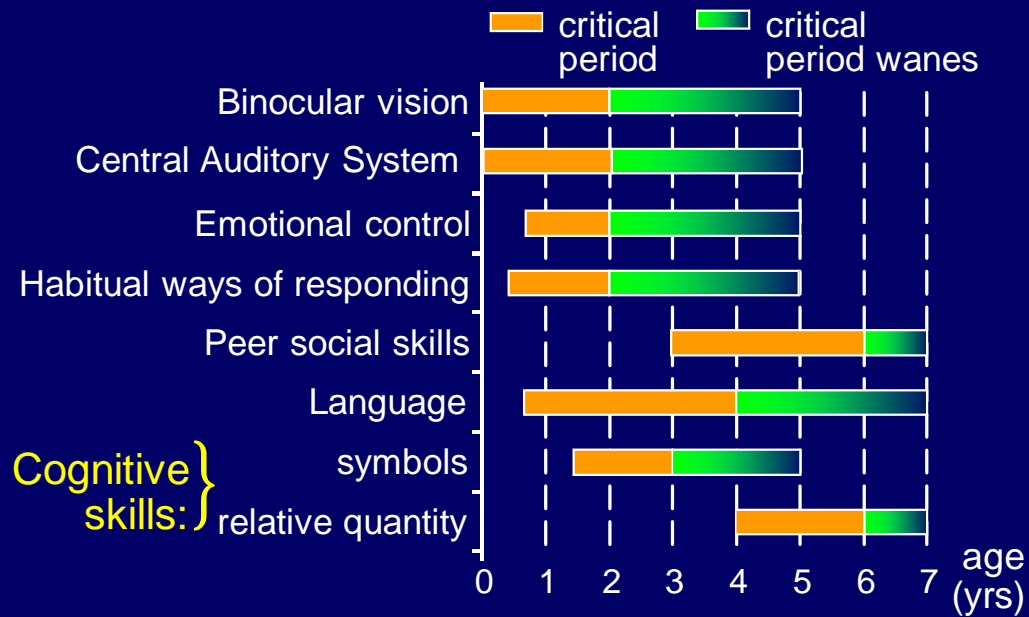
# Adversity impacts on brain development



Source: The Founders' Network [www.founders.net](http://www.founders.net)



## Sensitive Periods for Early Development



Source: The Founders' Network [www.founders.net](http://www.founders.net)



## CHEMISTRY

# C – Childhood experience



# Adverse Childhood Experiences

Traumatic events that can have negative, lasting effects on health and wellbeing



Infographic sourced from Leeds Trinity University  
<http://www.leedstrinity.ac.uk/blogs/Adverse-Childhood-Experiences-too-High>

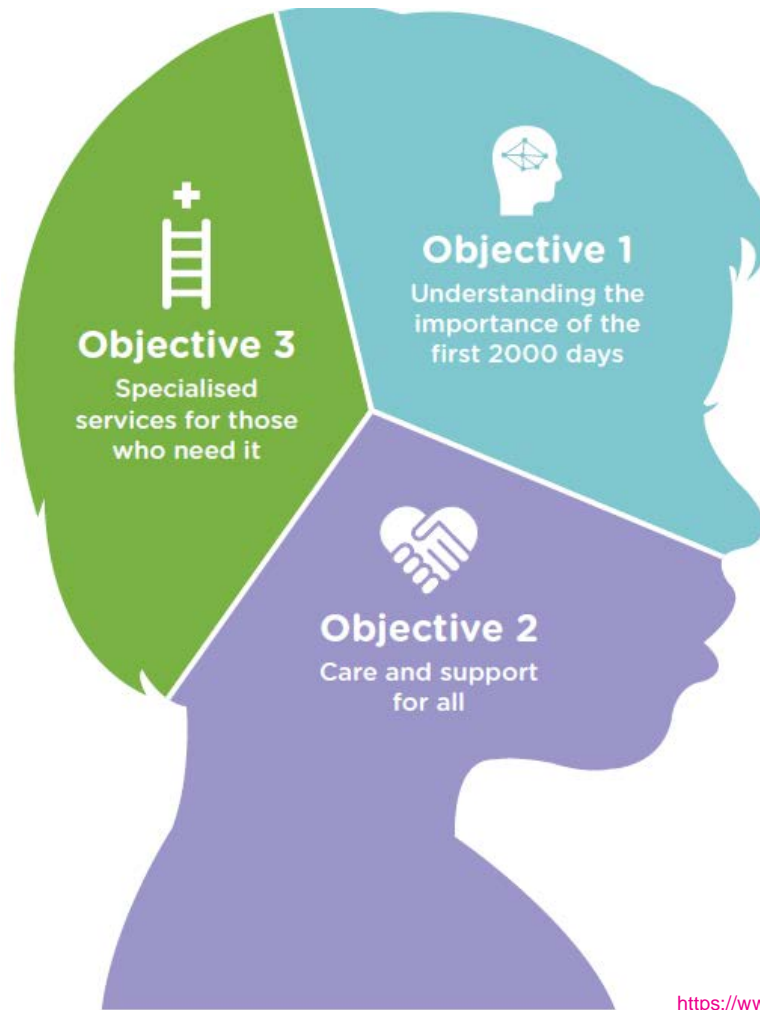
People with 6+ ACEs can die

## 20 yrs

earlier than those who have none



1/8 of the population have more than 4 ACEs



[https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2019\\_008.pdf](https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2019_008.pdf)



# Australian research tells us what shapes thinking

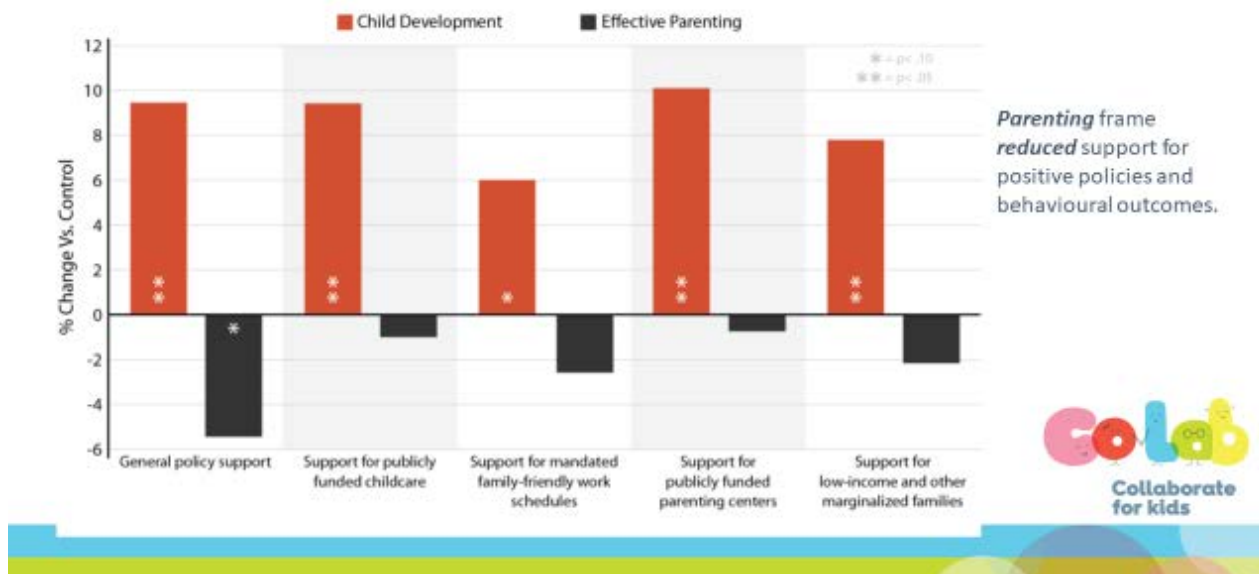
FrameWorks Institute collaborated with The [Centre for Community Child Health at the Royal Children's Hospital Melbourne](#) to uncover the widely shared patterns of thinking that shape how Australians reason about early childhood development – and to identify effective ways of translating the science in order to inform thinking about policy and practice.

## Map the Gaps - Core story findings

***Dominant patterns of thinking*** in the Australian public:

- ▶ Children's worlds are ***idealised and distinct*** from the world of adults
- ▶ People assume that spoken ***words are necessary*** for cognitive and emotional development
- ▶ ***Brain development*** remains a challenge for the public to understand
- ▶ People have ***conflicted understanding*** of how development works
- ▶ People do not think about ***child mental health*** in deep or productive ways
- ▶ ***Play*** is assumed to be ***children's natural state***, and to be child-led

## Reframing Parenting Research



Slides used with permission from Professor Donna Cross, Head, Health Promotion and Education, Telethon Kids Institute Director, CoLab – Early Childhood Development and Learning with support from the Minderoo Foundation.

# In the last trimester the brain is developing fast

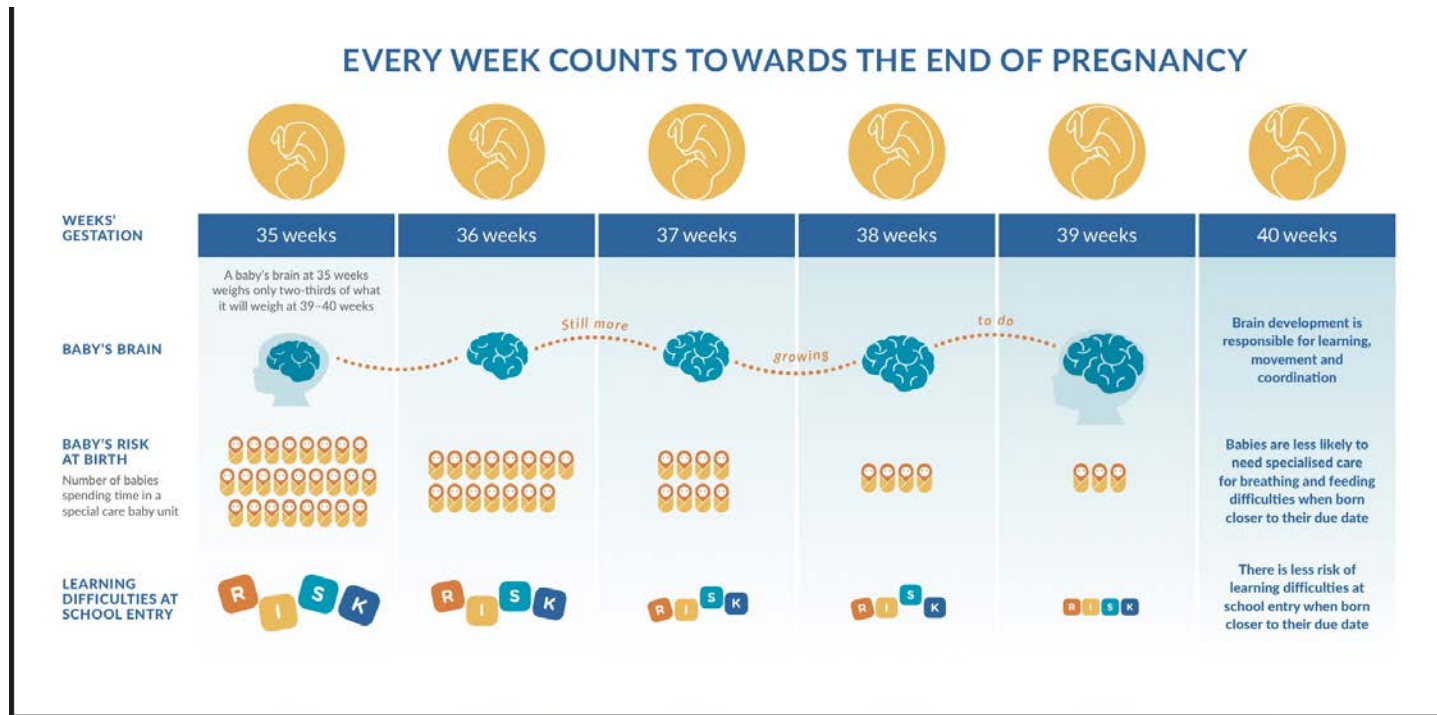
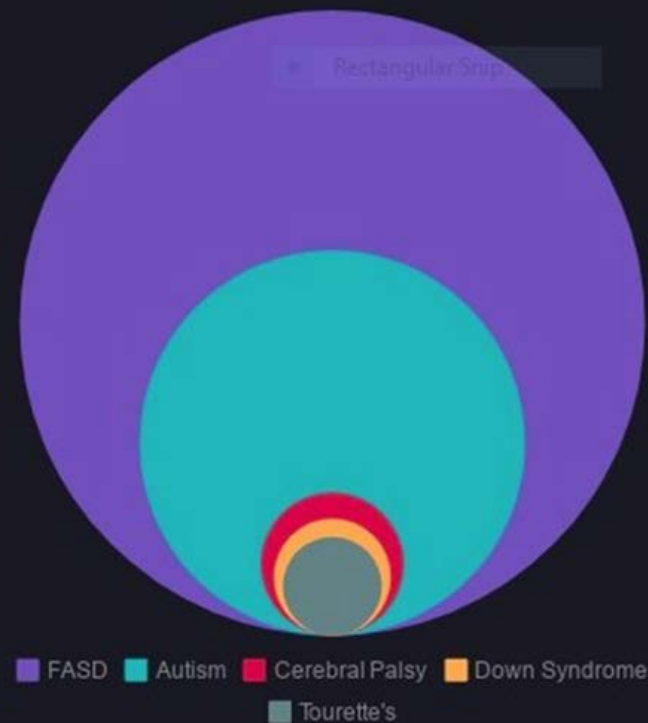


Image used with permission from Professor Jonathan Morris and Every Week Counts. The project is a partnership between the University of Sydney and the Northern Sydney Local Health District, and acknowledges funding from [Sydney Health Partners](#) and the NSW Health Translational Research Grant Scheme.

FASD is recognized as one of the leading known causes of developmental disability in the western world. Compared with other common disabilities, FASD is at least: 2.5x more common than Autism Spectrum Disorder. 19x more common than Cerebral Palsy. 28x more common than Down Syndrome and 40x more common than Tourette's Syndrome.



# RESEARCH PRIORITIES

First 2000 Days of life

# Effective communication of knowledge to inform decisions

- ▶ Build on the Frameworks and Colabs/Telethon Institute work
- ▶ Find effective ways of communicating key First 2000 Days messages to:
  - ▶ parents,
  - ▶ carers
  - ▶ Communities
  - ▶ service providers
  - ▶ decision makers





## Better universal service delivery

- ▶ Effective delivery of continuity models of care (and continuity of carer models) for families in maternity, and early childhood.
- ▶ Effective transition of care from maternity care to child and family health care
- ▶ Integrated models of Maternity, Child and Family Health Care (including better collaboration with general practice)
- ▶ Best strategies to engage families in preventive health care and the schedule of child development checks
- ▶ Father and co-parent inclusive practice
- ▶ Delivery of care that improves breastfeeding initiation and duration



# Better delivery of care to target issues and communities

- ▶ FASD Prevention
- ▶ Smoking cessation/reduction in pregnancy and parenthood
- ▶ Effective models of care that meet the needs of populations vulnerable to poorer outcomes for their children and families, eg:
  - ▶ Aboriginal families
  - ▶ Culturally and linguistically diverse communities
  - ▶ Parents living with mental health, alcohol and drug issues
  - ▶ Refugee families
  - ▶ Young parents with low support



# When and how to involve our team:

## Stage 1 EOIs:

- ▶ Send your First 2000 Days related EOI with your support request clearly articulated to [MOH-HSPB@health.nsw.gov.au](mailto:MOH-HSPB@health.nsw.gov.au) as early as you can, and no later than **27 March 2020**
- ▶ We will provide you with a response before your proposals are due to the TRGS coordinator in your LHD on 9 April 2020.

## Stage 2 Full applications

- ▶ Provide us with a draft of your application by 31 August if you will be seeking partner sign off. Send it to [MOH-HSPB@health.nsw.gov.au](mailto:MOH-HSPB@health.nsw.gov.au).
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# Questions?

## First 2000 Days resources, research and further information:

- [NSW Health First 2000 Days Framework](#) (NSW Health Policy Directive) which is the guide for our health system for this work
- Nadine Burke Harris [TED Talk](#): 15 minute summary of the ACE research
- Colab [Bright Tomorrows Start Today](#) work. The Colab partnership with Telethon Institute also has resources and links, including one to the Raine Study see <https://colab.telethonkids.org.au>. Also check out their Brain development video <https://colab.telethonkids.org.au/resources/brain-development/> and their new report on the economics of early childhood intervention released last week <https://colab.telethonkids.org.au/areas-of-research-focus/how-aus-can-invest-in-children-and-return-more/>
- The research and other work on communications done by Frameworks Institute in partnership with the Centre for Community Child Health, Royal Children's Hospital Melbourne is here: <https://www.frameworksinstitute.org/australia-reframing-early-development.html>
- An Australian summary of evidence for the First 1000 Days is here: <https://www.rch.org.au/uploadedFiles/Main/Content/ccchdev/CCCH-The-First-Thousand-Days-An-Evidence-Paper-September-2017.pdf>
- The Harvard Center on the Developing Child, which has some fantastic research communicated through short videos, animations, and infographics: <https://developingchild.harvard.edu/science/>