

ORIGINS

Investigating Early-life Determinants of Life Course Trajectories

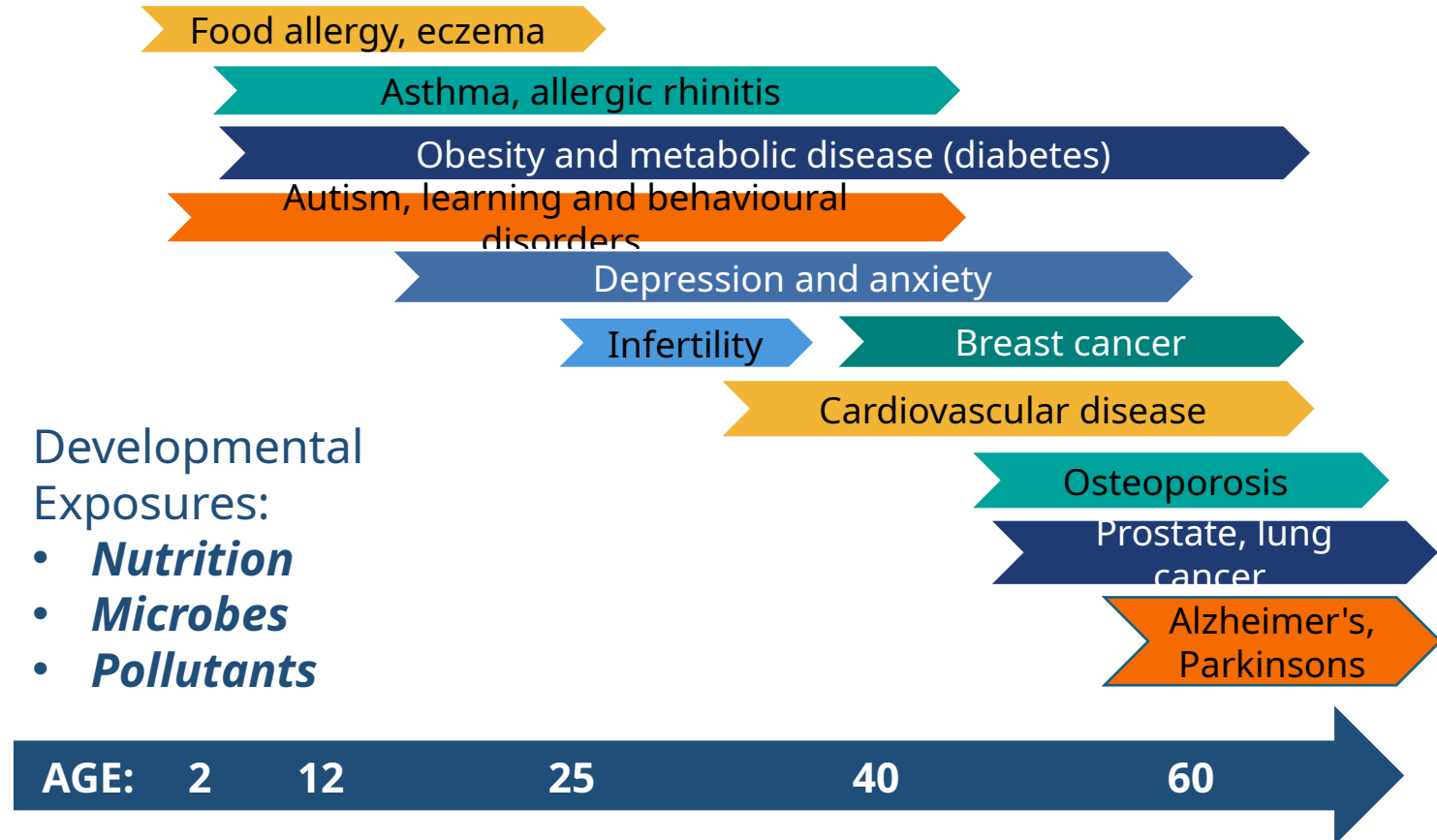
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Government of Western Australia
Department of Health



Development programming of diseases



ORIGINS: A longitudinal interventional cohort

ORIGINS is following **10,000 families** from pregnancy into early childhood to determine the **impact of the early environment** on the development of chronic disease.

VISION Lifelong flourishing for children and their families	
PURPOSE We seek to develop targeted, more effective prevention and intervention strategies that support all families to flourish* throughout life	
STRATEGIC APPROACH	
FOCUS ORIGINS will focus on the key priorities and challenges identified by our community, policy and decision makers, services providers and researchers.	IMPACT We will place our community at the centre of our efforts to deliver enhanced prevention and intervention strategies that are tailored to the needs of families and stakeholders.

The ORIGINS Biobank contains **over 430,000 biological samples** and our Databank holds **over 30 million data points** on our cohort.



10,000 mother
child dyads



2,883 1-Year
Kids Checks



2,345 3-Year
Kids Checks



1,450 5-Year
Kids Checks



1,800 referrals
for early
intervention



Allergy, Inflammation & Immunity



Mental Health & Wellbeing



Cognition & Neurodevelopment



Medical History & Conditions



Physical Development



Family & Lifestyle



Nutrition & Metabolism



Healthcare & Early Diagnosis



Physical Environment



Pregnancy & Birth

ORIGINS covers
12 research domains:

What have we discovered so far?

33% of

ORIGINS 5-year-old's have an allergy

24% of

ORIGINS 5-year-old's eat sugar cereals 2 - 4 times/week

14%

of ORIGINS 5-year-old's are overweight

4x reduction

in egg allergies in infants following earlier introduction of allergens into

15% of

ORIGINS 5-year-old's have severe anxiety

5x

reduction in allergies after infants receive exclusive colostrum in first

43% of

ORIGINS 5-year-old's have low to very low iron levels

12% of

ORIGINS 5-year-old's have inattention and/or hyperactivity

37% of

ORIGINS 5-year-old's have their own screen device

16% of

ORIGINS 5-year-old's have abnormal sleep patterns

What's next?

- **Primary School Wave: 8-Year Kids Checks commenced in June 2026**
- Other key aspects:
 - Knowledge Translation Hub
 - Linked data
 - Analysis of samples
 - Secondary school chapter

PRIMARY SCHOOL FOCUS AREAS	
Mental Health & Wellbeing • Anxiety • Peer relationships • Wellbeing	Lifestyle Behaviours • Health technology use • Promoting healthy weight, healthy eating, physical activity
Development • Cognitive: Literacy and language • Physical development	Novel Interventions New and novel interventions that reduce risk and promote protective factors

ORIGINS: A research enabling platform



ACCESS TO 10,000 PARTICIPANT COHORT	RESEARCH IS MORE COST-EFFECTIVE	ACCESS TO EXTENSIVE SAMPLES & DATA	\$52 MILLION INDIRECT FUNDING BROUGHT INTO WA	OVER 65 NESTSED SUB-PROJECTS
CONDUCT RESEARCH FASTER	LOWER COSTS & TIMELINES INCREASES CHANCES OF FUNDING	EARLIER DELIVERY OF RESEARCH BENEFITS	BIostatISTICS & COMMS SUPPORT PROVIDED	OBSERVATIONAL & INTERVENTIONAL TYPES



Email the ORIGINS team to talk about embedding your research in ORIGINS

