

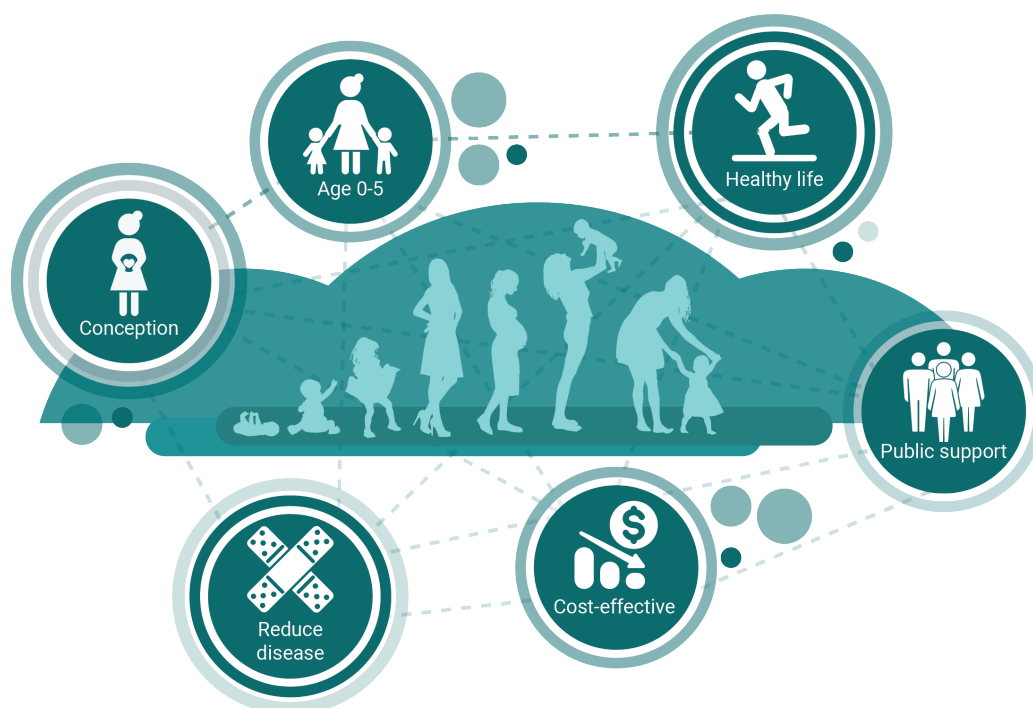


The Australian Prevention  
Partnership Centre  
Systems and solutions for better health

## POLICY BRIEF

# Why invest in prevention in the first 2000 days?

This policy brief is based on the findings of a knowledge synthesis conducted by The Australian Prevention Partnership Centre (the Prevention Centre) and member organisations of the Collaboration for Enhanced Research Impact (CERI).<sup>1</sup>



## Key messages

Our research has found that investment to support a healthy lifestyle during preconception, pregnancy, postpartum and early life is warranted. Intervening during the first 2000 days of a child's life (conception to age five):

- is more effective than at other times
- sets children up for a healthy life and reduces the risk of disease into adulthood
- provides economic benefits and is cost-effective
- reduces health inequities throughout life
- is strongly supported by the public.

The Prevention Centre is a national collaboration of researchers, policy makers and practitioners who are working together to identify new ways of understanding what works and what doesn't to prevent chronic health problems in Australia. CERI brings together the Prevention Centre with 10 related NHRMC Centres of Research Excellence, and represents at least 200 leading prevention investigators in Australia.

## Background

### There is an urgent need to prevent chronic disease

Prevention of chronic diseases and conditions such as arthritis, cancer, respiratory disease, heart disease and diabetes is a priority for all governments in Australia and internationally.

One in two Australians has a chronic condition and one in five has two or more. These conditions cause most illnesses and deaths, and nearly half (46%) of all potentially preventable hospitalisations.<sup>2</sup>

Preventable chronic diseases have a significant economic impact on Australia.<sup>3</sup> In total, the cost of chronic diseases to Australia is \$57 billion every year, and growing.<sup>4</sup> Chronic diseases threaten to overwhelm the health system unless we take action to prevent them.

### There is strong evidence to support prevention during the first 2000 days

The first 2000 days relates to the period from conception, through pregnancy, postpartum and early life up to age five years. Our research clearly shows investing in interventions that support health during this period incurs benefits for the individual, communities, the health system, the economy, and society.

This brief is based on evidence drawn from 60 peer-reviewed articles as well the content expertise of policy partners from jurisdictions across Australia. The peer-reviewed articles were drawn from research conducted by the Prevention Centre and CERI member CREs, most of which focused on nutrition and physical activity. To that end, the findings presented here represent a diverse body of research that has focused on prevention in the first 2000 days, but does not include all available evidence on the topic.

Our findings are supported by international evidence and align with global guidelines and recommendations produced by peak health and development organisations including the United Nations and World Health Organization.

## What our findings show

### Prevention in the first 2000 days is more effective than at other times

The first 2000 days of a child's life represents a critical window of opportunity to give them the best possible start in life. The early life period is a time when children's biology is most amenable to change, and parents and children are receptive to learning and establishing behaviours that support healthier living.

The first 2000 days is a foundational time for lifelong health and wellbeing and a critical opportunity for action to promote health and health equity.<sup>5</sup>

Prevention in the first 2000 days sets children up for a healthy life. Health behaviours in the first 2000 days influence the risk of disease throughout childhood, adolescence and adulthood. Instilling healthy behaviours during early childhood leads to improved health and health-related behaviours throughout life.

Prevention targeted in preconception and the first 2000 days not only minimises health risks to children in early life, but provides lifelong benefits.

### Preconception

Promoting health during preconception produces favourable maternal and infant health outcomes. Because not all pregnancies are planned, it is important to reach all people of reproductive age to reduce risk factors for ill health including overweight and obesity, poor nutrition, insufficient physical activity, alcohol and drug use, and smoking.<sup>6</sup>

### Pregnancy

A healthy pregnancy can reduce the risk of short- and long-term health problems for mother and child. Healthy weight gain during pregnancy, ensuring optimal nutrition, regular physical activity, and avoiding tobacco, alcohol and other drugs are important preventive health measures during pregnancy.

## Early childhood

During early childhood, supporting children's health behaviours is important to prevent future chronic diseases. These include good nutrition (breastfeeding for at least the first six months, followed by appropriate introduction of complementary foods), regular physical activity, and healthy sleep routines. Addressing these health behaviours early is key to achieving effective and sustained chronic disease prevention.

## Settings and supportive environments

The settings where children learn, such as school and childcare, provide an important platform for the delivery of prevention interventions.<sup>7</sup> The policies and practices within these settings can support engagement with healthy behaviours, for instance by providing and promoting healthy food and drinks, and creating opportunities for regular physical activity.

## Prevention in the first 2000 days offers economic benefits

Investments made to protect and promote health in the first 2000 days yield benefits that can last a child's entire lifetime.<sup>8</sup> These investments have extensive population level benefits, such as the potential to reduce morbidity, mortality and economic and social costs.<sup>9,10,11</sup>

Obesity in early childhood is associated with higher healthcare costs. Our research shows children with obesity aged two to four years incur 1.6 times the healthcare costs of healthy weight children.<sup>12</sup> Children with obesity are more than twice as likely to be hospitalised; the annual direct costs to the Australian healthcare system are estimated to be around A\$17 million (valued in 2016 AUD dollars).<sup>13</sup>

Other costs of ill health in the first 2000 days include school absenteeism, leading to parental work absenteeism. We found the estimated national cost for children with obesity aged six to 13 years was approximately A\$64 million (US\$43 million) through lost productivity of caregivers, highlighting the importance of early prevention to avoid economic costs in later childhood.<sup>14</sup>

Economic modelling identifies the potential for significant long-term health benefits and healthcare cost-savings from effective and sustainable obesity prevention interventions in preschool aged children. Given that these health benefits and healthcare cost-savings arise from the prevention of chronic diseases that usually present much later in life (for example, heart disease, stroke, type 2 diabetes), healthy weight needs to be achieved and maintained over relatively long periods of time. This highlights the importance of adopting a life-course approach to prevention, starting from an early age.<sup>15</sup>

## There is a range of effective preventive health interventions in the first 2000 days

Our research demonstrates evidence of effective interventions at each stage of the first 2000 days, from preconception, to pregnancy, the postpartum period and throughout early childhood.<sup>16,17,18</sup>

A comprehensive approach to prevention requires a range of individual and population-based interventions that support healthy behaviours among individuals, promote and support health in settings (including education, workplace and healthcare settings), and create healthy and supportive environments. This echoes international evidence from the Nurturing Care Framework<sup>19</sup> and the Report of the Commission on Ending Childhood Obesity.<sup>20</sup>

## Acting in the first 2000 days reduces health inequities throughout life

Socioeconomic differences in children's health emerge in early life and are difficult to remedy once established. These differences are the result of the conditions in which people are born, grow, live and work, underpinned by the distribution of power, wealth and resources across society. These differences are unfair and are largely avoidable.<sup>21</sup>

Early life is a critical time in which to address health inequities. We need action to address underlying structural determinants of health with social and economic policies that improve basic conditions for a healthy life including income, social support, opportunities for education, housing, and access to health care.<sup>21</sup>

## Prevention to protect children's health is strongly supported by the public

There is evidence of strong public support for prevention policies, particularly those that protect children's health. Policies with high levels of support include restricting unhealthy food and drink advertising, local planning laws to reduce the density of fast-food density outlets, investments in improved walking and cycling infrastructure, and implementation of prevention interventions in early childhood education and care settings.<sup>23</sup>

These policies align with focus areas of the National Preventive Health Strategy, including improving access to and consumption of a healthy diet, and improving physical activity, as well as the Strategy's aim to ensure all children have the best start in life.

## Conclusion – what next?

Our research shows prevention in the first 2000 days requires a comprehensive approach that combines individual and population-based interventions to support healthy behaviours among individuals, promote and support health in settings (including education, workplace and healthcare settings), and create healthy and supportive environments.

This knowledge synthesis – along the wider evidence – suggests that both universal and targeted approaches to prevention are needed,<sup>24</sup> along with ongoing monitoring and surveillance of health risk factors and outcomes across the population.

The evidence clearly demonstrates the importance of acting early. Implementation and scale-up of effective interventions requires collaboration between researchers, policy makers, practitioners and consumers, and a careful balance of program fidelity and tailoring to local need.



Visit the Prevention Centre website for the full report and other resources relating to the first 2000 days, [preventioncentre.org.au](https://preventioncentre.org.au)

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## Interested in finding out more?

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