

section one

Our times

Highlights and challenges



Our times

Introduction

The health of Queenslanders, and Australians as a whole, continues to improve and Australia was ranked twelfth among 156 countries for the happiness of its people in the 2020 World Happiness Report.³ Our social and physical environments are the foundations of our health across the lifespan. They are instrumental to the success of prevention efforts to improve the health status of Queenslanders and reduce the burden of disease, however, there is more that could be done. As our population continues to grow and age and the availability of, and access to, equitable, evidence-based and effective health interventions increases, the impetus for a focus on “*healthy places, healthy people*” becomes increasingly important.

Achieving that goal is dependent on the capability of our people, the resilience of our environments and the ability of our governments, businesses, industries, communities, individuals and public services to respond to challenges. At the same time we should remember to celebrate our achievements. In the past two years we have been tested in many ways but each time our ability to reach our aspirations has been amply demonstrated.

Selected challenges

COVID-19

On 31 December 2019, a cluster of cases of a severe pneumonia with an unknown aetiology in Wuhan City, China, was reported to the World Health Organization’s (WHO) China Country Office.⁴ On 7 January 2020, Chinese authorities identified a novel Coronavirus in clinical specimens. Cases were quickly identified outside of China and evidence of human to human transmission was established. The WHO declared a Public Health Emergency of International Concern on 30 January 2020 and the virus was named SARS-CoV-2 on 11 February. On 11 March, the WHO declared a global pandemic. Australia’s first case was identified on 25 January 2020 in Victoria in a returned traveller from Wuhan City. Queensland reported its first case on 28 January in a tourist who had arrived from Wuhan City eight days earlier.

By 30 September 2020, Queensland had recorded 1157 laboratory confirmed cases, there were 6 deaths. The corresponding national figures were 27,078 cases and 886 deaths respectively. Approximately 1,110,990 COVID-19 screening tests had been undertaken in Queensland and 7,637,400 nationally. Further analysis of the COVID-19 pandemic in Queensland is presented in the Communicable Diseases section of this report ([page 49](#)).

COVID-19’s global spread resulted in profound impacts on communities, economies and health systems internationally, including in Australia, that will likely persist for years. Restrictions were put in place to contain the spread of the virus, reduce deaths and enable our health systems to effectively function and respond. These measures have been successful in Queensland, however, the effects of the pandemic will be felt for many years. The pandemic highlighted the quality of our healthcare systems, the commitment and flexibility of our healthcare workers and the resilience of our communities. Our world-class researchers and research institutions are at the forefront of studies aimed at developing vaccines and improving the treatment of the disease.

Flood, fire and drought

Australia has always been a land of drought, fire, cyclones and flood that have both immediate and long-term impacts on our lives with direct and indirect impacts on health.



In late January and early February 2019, an active monsoon trough and slow-moving low-pressure system resulted in major flooding affecting 39 local government areas (LGAs) in North Queensland. There were 3300 homes in Townsville fully inundated with flood waters and another 8500 were flood affected. Roads and rail lines were cut to the north, south and west. Ross River Dam was damaged and sewerage facilities were substantially affected—more than 600 homes had sewerage discharged either inside the house or into the yard.⁵ Sadly, four people died—two from persons entering floodwaters and two reported events due to melioidosis—and 97 injuries were reported.⁶ The social and economic cost of the disaster was estimated to be \$5.8 billion with the health, social and community impacts comprising 41% of those costs.⁶ The event was not limited to Townsville with regions across the north and north-west of the state affected.



The 2019–20, Australian bushfire season began in June 2019 and by March 2020 an estimated 18.6 billion hectares had burned. More than 3000 homes were destroyed, more than 30 people died and tens of thousands were evacuated. Investigation of the health effects attributable to air pollution generated by the bushfires included excess deaths, hospitalisations for cardiovascular and respiratory problems and emergency department (ED) presentations for asthma

in New South Wales, Queensland, the Australian Capital Territory and Victoria.⁷ From 1 October 2019 to 10 February 2020 in Queensland, there were an estimated 47 excess deaths, 135 excess cardiovascular hospitalisations, 245 excess respiratory hospitalisations and 113 excess ED attendances for asthma. These data do not account for primary care presentations and ambulance use nor the non-medically attended physical and mental health impacts of the fires.



In 2019–20, large areas of Australia were drought declared. By January 2020 there were 180 LGAs in Australia deemed eligible for the Australian Government's Drought Communities Programme.⁸ In Queensland, drought declared LGAs comprised 67.4% of the state's land size, with a further 28 Individual Droughted Properties in 11 other LGAs as of 1 March 2020.⁹ Evaluating the social and economic wellbeing, and consequent health status, of drought-affected communities is complex. Effects vary by region, age and sex between farmers and non-farmers.¹⁰ Data suggest that the largest impacts are economic, however, there are important negative impacts on physical and mental health, social cohesion and the availability of key community services.¹¹

Selected highlights

A Chief Aboriginal and Torres Strait Islander Health Officer for Queensland



In October 2019, Ms Haylene Grogan commenced her role as Queensland's first Chief Aboriginal and Torres Strait Islander Health Officer. A proud Kuku Yalanji and Tagalaka woman, Ms Grogan leads the Aboriginal and Torres Strait Islander Health Division in Queensland Health. This Division aims to improve health equity and outcomes for Aboriginal and Torres Strait Islander people in Queensland. She comes with experience across the public sector in Aboriginal and Torres Strait Islander policy reforms relating to economic prosperity, procurement, planning, land, cultural heritage and languages.

Finding solutions to our problems

In 2019, a new health agency, Health and Wellbeing Queensland (HWQld), aimed at tackling obesity and helping people make positive lifestyle choices, was established. HWQld is bringing together the community, the private sector and all levels of government to drive collaboration and change. Its focus is on "making healthy happen" through population level prevention approaches. Several key initiatives programs have been launched that address diet, physical activity and building capacity and capability in making healthy choices.

Approximately 38% of Queenslanders live in regional and remote parts of the state and these regions are critical drivers of the Queensland economy via agriculture, mining and tourism.¹² However, there are ongoing disparities in the health status of regional and remote populations compared to their urban contemporaries.¹³ In November 2019, the Health Minister announced a new Office for Rural and Remote Health. The Office will drive rural and remote health planning, ensure improved access, patient quality and safety, workforce planning and reporting on health outcomes. A key focus of the new agency is to develop a sustainable health workforce and support new service models for rural and remote Queensland.

Queensland continued to produce world class health and medical research aimed at improving our health and our health services.¹⁴ More than 300 new research projects with a start date of 2019 were recorded in the Queensland Health database of research activity. Two initiatives include:

- Queensland researchers are at the forefront of efforts to develop a COVID-19 vaccine. An international team at The University of Queensland is partnering with industry stakeholders to fast track the development of a candidate vaccine with support from the Queensland Government and the Coalition for Epidemic Preparedness Innovations. A different candidate vaccine is being investigated by teams at Griffith University, while at the Queensland University of Technology researchers are investigating new technologies for vaccine development based on the use of plants rather than animal cell models.¹⁵
- The Centre for Child and Adolescent Brain Cancer Research (CCABCR) in Brisbane is Australia's first research centre focusing solely on paediatric brain cancer, treatment and survivorship.¹⁶ Brain cancer claims the life of one Australian child every nine days—more than any other disease—and survival rates have changed little over the past 30 years. The CCABCR brings together research leaders from across Queensland's major hospitals and health and technology research institutes.

Our people helping our people

The challenges Queenslanders faced in 2019 and 2020 made it clear how Queenslanders rise to these challenges to support their communities every day. Individuals, community groups and charitable organisations:

- provided relief to drought-stricken farmers in the form of food baskets, water and livestock feed
- raised money for, and helped with, the recovery efforts during and after the fires and floods
- signed up to the Care Army to help protect vulnerable Queenslanders who were isolated by the pandemic
- started an international trend by dancing in their driveways to show support for healthcare workers
- took part in the great global COVID-19 teddy bear hunt to entertain children during lockdowns.



In August 2019, the Queensland Children’s Hospital clown doctors celebrated 20 years of bringing joy to sick children, their families and health care providers at the hospital. Dr Kerfuffle, Dr O’Dear, Dr Wobble, Dr 2 Shoes, Dr Bubbly and Dr Nincompoop are supported through funding from The Humour Foundation. They spend four days a week at the hospital providing much needed relief and humour through their routines that mimic hospital life.

Summary

Health and disease are complex—specific health conditions cannot be viewed in isolation as they are the result of multiple interactions. Further, as our social and physical environments change over our lifespan, these interactions become more complex, as do the responses by our health systems and services. For example, the evidence for the links between factors that cause heightened or prolonged inflammatory responses in our bodies and the development of chronic disease is growing (Figure 1).¹⁷ Those with chronic disease are at higher risk of new infections and inadequate immune responses to environmental insults and injury—the higher COVID-19 infection and mortality rates in those with pre-existing chronic diseases is a clear example.^{18,19}

Throughout this report we present our people’s health through sections that address a healthy start to life, chronic and communicable diseases, cancer, injury, mental health, oral health and perceptions of overall health. We then outline how health services are used and their associated costs. Finally, we focus on the key risk and protective factors that determine disease burden with an emphasis on factors that are modifiable in order to improve health.

Figure 1: *Inflammation and health*¹⁷

