

Health trends

This think piece explores health trends in NZ as we move from a health environment focused on disease and injury treatment and management, towards one of prevention and addressing the impacts of modern lifestyle risks in order to live longer and in good health. Characterised as a shift to adding 'life to years' in addition to the previous focus on adding 'years to life'.

The health trends are explored in seven sections:

1. **Primary health conditions:** Those prevalent in NZ's population
2. **Increasing morbidity:** The relationship between longevity and wellbeing outcomes
3. **Mental health challenges:** A growing issue across countries with multiple causalities
4. **Lifestyle risk factors:** A changing pattern impacted by new patterns of living
5. **Impacts of wider environment changes:** the context beyond individual control
6. **An evolving health system:** Moving from disease response to wellbeing support
7. **Health's digital revolution:** Emerging tech facilitating new wellbeing practices.

Increased life-expectancy and the desire to live well will require systems to meet the needs of an older population in addition to young people. Increased financial and resourcing pressures on our health system will bring wellbeing and the components of wellbeing, such as active recreation and sport, into sharper focus.

Active recreation and sport has the opportunity to enhance its positioning as part of a holistic approach to improved health, integrating with other wellbeing components such as nutrition.

This resource is part of a series which considers the changes and trends most likely to impact the future of the play, active recreation and sport sector and what we can do to best prepare for change.

Summary implications

Primary health conditions

- **Targeting of recreation activity** If active recreation and sport are to address long-term wellbeing issues a greater focus on the types of activity likely to address the pre-cursors to non-communicable diseases will be needed
- **Access for vulnerable groups** To what extent will current active recreation and sport approaches be accessible to socio economic barriers and a growing aged population?
- **Integrated approaches** How is active recreation and sport effectively integrated with other wellbeing measures to ensure the individual gets the maximum lifetime benefit?

Increasing morbidity

- **Recreation throughout life** Long lasting wellbeing will be based on a pattern of active recreation and sport that extends throughout life and adapts to physical capability.
- **Diversity of activities and levels** Remaining active for longer will demand more diversity of active recreation and sport that both potentially prevents degenerative conditions, but also matches the needs of sufferers.
- **Individually targeted to maximise function** One size will not fit all and a reliance on one particular activity type could lead to longer term issues.

Mental health challenges

- **Active recreation and sport as a counter** Recognition that active recreation and sport can provide mental as well as physical wellbeing is going to become increasingly important.
- **A broader focus** Understanding the components that provide mental health benefit and integrating these within the range of active recreation and sport activities will become increasingly necessary (e.g. is meditation 'active recreation'?)
- **Establish habits at young age** Increasing importance of instilling a life-long love of active recreation and sport from young age to ensure benefits are maximised and 'stick'.

Lifestyle risk factors

- **Activity vital to addressing 'sitting disease'** Active recreation and sport provide the most obvious counter to the issue of sedentary living and provides some response to emergent obesity issues.
- **Holistic approach to risk** Active recreation and sport are relatively small parts of overall risk factors that overall present a significant counter to wellbeing strategies. Increasing the linkages between wellbeing strategies (e.g. recreation and nutrition) will be increasingly important to reduce overall risk levels.
- **Sponsorships at risk** Links between sport and alcohol and unhealthy foods will face increasing opposition.

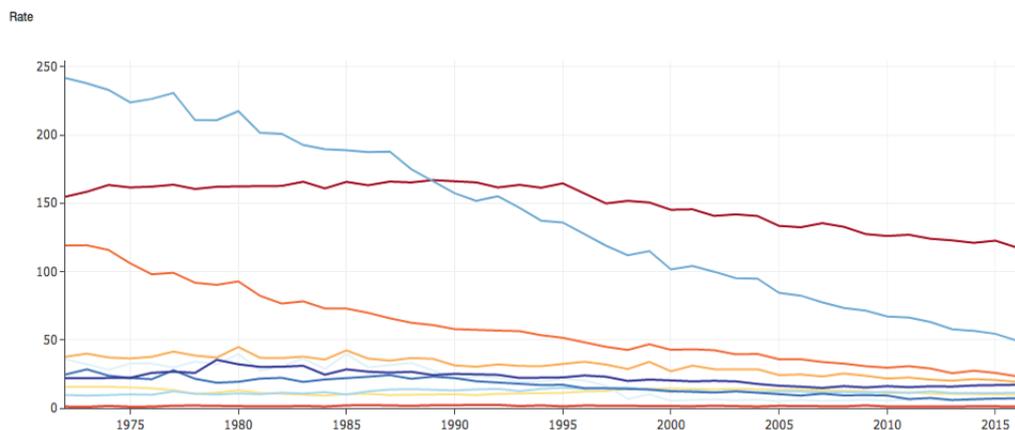
Impacts of wider environmental changes

- **Work-based recreation** Studies show even those who are highly active outside work are vulnerable if their work pattern is still primarily sedentary. It implies there may be a need to shift thinking toward a 'little-and-often' activity approach that blends active recreation more effectively into the working day.
- **Supporting tolerance** Active recreation and sport can provide an effective platform to reduce the risks associated with the 'fear of the other' and the knock-on impact for minority population health. The negative correlation between racism and health underlines the need for active recreation and sport to continue to address the issue.
- **Environments for senior connection** Active recreation and sport patterns across life may form a useful support for ongoing social connection to counter elder isolation.

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- An evolving health system**
- **Active recreation as pre-treatment** With a primary health system likely to remain under increasing pressure as demand grows and the workforce ages, ensuring population wellbeing becomes more important. In future, will individuals be pro-actively offered a range of active recreation options tailored to their specific needs ('green prescription').
 - **Integrated approaches** The linkage of active recreation and sport within a 'complementary healthcare system' will require a clear understanding of the benefits respective activity approaches can bring to the broader wellbeing of the participant.
 - **Increasing health inequalities** Pressure on public health systems and rise of human enhancement technologies (for those can that can afford them) may increase health and ability divide between those with and without means.
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- Digital revolution**
- **Recreation data interfaces** The flow of personal data associated with active recreation and individual body function is likely to form a useful complement to proactive health interventions, if privacy concerns can be effectively addressed.
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Primary health conditions

The general trend is for New Zealanders to both live longer, and in better health for a greater proportion of that extended life-span. health.govt.nz 88% of health loss is now caused by non-communicable diseases (NCDs – i.e. long term mental and physical conditions) and 8% is attributable to injuries.



Notes: Rates are per 100,000 and age-standardised to the World Health Organisation (WHO) standard world population.
Source: New Zealand Mortality Collection records 1996 - 2016 and publications in the Ministry of Health Mortality data and stats series 1948 - 1995 .

What's changing?

Cancer tops the charts

- Cancer remains NZ's single biggest cause of death, with the three most common being lung, bowel, and breast cancer. health.govt.nz
- Aging populations are more vulnerable to cancer as cancer takes advantage of waning immune systems and the accumulated DNA damage. Obesity could soon become the number one risk factor globally for cancer. hsph.harvard.edu

- Recognising this ongoing challenge, the Government opened a new independent cancer control agency on 3 December 2019 to lead a [cancer action plan 2019-2029](#).

Ischaemic Heart Disease in decline

- Ischaemic heart disease (IHD) remains the second most prevalent cause of morbidity in NZ, though its rate has been declining since the 1960s. [nzma.org.nz](#)

Chronic Obstructive Pulmonary Disease (COPD) increasing with age

- COPD is a group of progressive and life-threatening respiratory diseases without a cure. The World Health Organisation (WHO) estimates that it will become the third leading cause of death worldwide by 2030. [investigate.co.uk](#)
- In NZ there is a decreasing trend in mortality from COPD, but increasing levels of hospitalisation from the disease. As the percentage of New Zealanders over 65 grows from 12% to 22% over the next 25 years, the number of vulnerable individuals is likely to increase.
- The current Novel Coronavirus (COVID-19) is most threatening to those with respiratory conditions. As such, this and the spread of other respiratory conditions is an issue for New Zealand.

Diabetes becoming more prevalent

- Twenty-five percent of New Zealanders are estimated to have prediabetes, and approx. 6% of the total population has diabetes. Most prevalent in older age groups, and two to three and a half times higher in adults aged 25–39 years of Māori and Pacific ethnicity. [bpac.org.nz](#)

Obesity a rising precursor for morbidity

- NZ has the third highest adult obesity rate in the OECD, and our rates continue to increase. [health.govt.nz](#)
- UNICEF's 2019 State of the World's Children 2019 found 39% of NZ children to be overweight or obese. [OECD Report](#)
- Childhood obesity is associated with a higher chance of premature death and disability in adulthood. [who.int](#)
- US National Cancer Institute studies found that if every adult reduced their body-mass-index by 1%, there would be about 100,000 fewer cancer cases. [kucancercenter.org](#)

Increasing morbidity

While we are living longer, but only 70–80% of the years of life gained over the past quarter century have been lived in good health. We're more adept at preventing early death than at improving morbidity. Greater focus on non-fatal disabling conditions will enable people to live longer in full health. health.govt.nz

What's changing?

Dementia as an inevitable factor of old age?

- Number of people living with dementia expected to rise as population ages and life expectancy increases. alzheimersresearchuk.org
- WHO estimates globally 50M people suffer from dementia with the number projected to reach 82M in 2030 and 152M in 2050. eurekalert.org
- Is dementia an inevitable consequence of aging? Emerging evidence suggests intervention strategies could help preserve cognitive function till late life. ncbi.nlm.nih.gov
- Considerable incentives to break linkage. Australian authorities estimate dementia care costs will rise from \$15 billion in 2018 to more than \$36.8 billion by 2056. dementia.org.au

The impact of age on bone health

- Otago researchers estimate knee osteoarthritis costs could rise from \$199M in 2013 to \$370M by 2038 due to aging & increasing obesity. Reducing obesity seen as critical. otago.ac.nz
- Globally the trend is similar with the worldwide incidence of hip fracture in 2050 projected to increase by 310% for men and 240% for women, compared to 1990. iofbonehealth.org
- Risk factors for developing fragility fractures: physical inactivity, sedentary lifestyle, impaired neuromuscular function, smoking and high alcohol intake. iofbonehealth.org
- Aging sport participants may be at greater risk of developing arthritis and other musculoskeletal problems. versusarthritis.org

Mental health challenges

Statistics for mental health disorders are both challenging and heading in the wrong direction. NZ Health Survey 2018/19 found 8.2% of NZ adults had experienced psychological distress in the past four weeks with around 620,000 (15.7%) diagnosed with depression at some stage in their lives. ([Min Health survey](#))

What's changing?

Overall indicators continue to deteriorate

- The WHO estimates that unipolar depressive disorders will be “the leading cause of the global burden of disease” by 2030. medicalnewstoday.com
- Broader understanding of mental health issues on the workforce is starting to be seen with the WHO noting that, “stress is the health epidemic of the 21st century.” workdesign.com

- NZ's experience was found by a recent inquiry to be mirroring the 'rising tide of mental distress and addiction' seen in similar economies. [mentalhealth.inquiry.govt.nz](https://www.mentalhealth.govt.nz)

Youth mental health of particular concern

- Ministry of Health figures indicate a growing number of young New Zealanders battling psychological distress, defined as having "high or very high probability of anxiety or depressive disorder". [Min Health survey](#)
- Again, the New Zealand figures reflect global patterns. [sciencedaily.com](https://www.sciencedaily.com)
- A review into the efficacy of post-secondary recreation programmes developed to support students' mental health found those emphasising meditation, Tai Chi, yoga, exercise, and animal therapy may reduce perceived stress, anxiety, depression and negative mood. [tandfonline.com](https://www.tandfonline.com)

The impact of mental health is increasingly costly

- Every country in the world is seeing a rise in mental health disorders. Estimated cost to the global economy of \$16 trillion between 2010 and 2030 if not checked. [reuters.com](https://www.reuters.com)
- The first ever Global Ministerial Mental Health Summit last year noted that mental health is now the leading cause of lost economic output, with an estimated cost of nearly \$2.5 trillion annually, expected to increase to \$6 trillion by 2030. [happiful.com](https://www.happiful.com)
- About 4.7% of New Zealanders are estimated to have severe mental health needs. www.asms.org.nz
- The Government Inquiry into Mental Health and Addiction was received in November 2018 with 40 recommendations. [He Ara Oranga : Report of the Government Inquiry into Mental Health and Addiction](#)

Lifestyle risk factors

Potentially, over one-third of all health loss is preventable, suggesting the opportunity to achieve health gains by reducing risk factors remains strong. [health.govt.nz](https://www.health.govt.nz)

What's changing?

Alcohol

- New Zealanders are drinking much less than 20 years ago, counter to global trends, but 30% of Kiwis are still binge-drinking regularly. [Min Health survey](#)
- The Ministry of Health estimates the older age are now among some of the heaviest drinkers in the world. [Min Health survey](#)

Smoking

- Smoking declining over past 40 years, driven by rising costs of tobacco, less young adults taking up smoking, increase in alternatives and stop-smoking programmes. [stats.govt.nz](https://www.stats.govt.nz)
- Severe lung diseases among people who vape has raised significant questions about the safety of vaping. [health.harvard.edu](https://www.health.harvard.edu)

- Smoking doubles the risk of dementia. Quitting smoking could therefore prove to be one of the easiest ways to prevent dementia. publichealthmatters.blog.gov.uk

Inactivity

- Insufficient physical activity has been identified by the WHO as the fourth leading risk factor for global mortality. [uitp.org](https://www.uitp.org)
- The WHO also found in a recent survey that more than 80% of adolescents worldwide are not active enough, putting their health at risk by sitting focused on a screen.
- There is no single answer that explains why activity levels are so low, but we have engineered physical activity out of our everyday lives through reliance on cars and devices.
- Implications for lifetime health are most pronounced for the low activity young, but the WHO also highlights concern with sedentary office environments. [personneltoday.com](https://www.personneltoday.com)

Nutrition

- The quantity and quality of food are key contributors to poor health. The strongest nutrition risk factors for poor health are salt content, saturated fat, added sugars and highly processed foods.
- Based on a review of New Zealanders' food choices, researchers have concluded that high rates of obesity are 'inevitable'. The study looked at the composition of more than 13,000 packaged foods, food labelling, marketing and prices, foods sold in schools, hospitals and sport centres. They found NZ's very high rates of obesity come from the "unhealthy state of food environments." [Eating and Activity Guidelines](#)



8

Number of unhealthy food ads played on TV during child peak viewing times (6-9pm)



96%

Of schools use unhealthy foods for fundraising



1 in 10

Sponsors for popular children's sports were food or beverage companies



9

Average number of ads for unhealthy foods found within a square kilometre of a school



36%

Of the cost of New Zealand diets is spent on unhealthy food and drinks



1 in 4

Promotions in supermarket flyers are for junk foods and drinks



2.4

Number of convenience stores and takeaway outlets within 500m of urban schools

SOURCE: HOW HEALTHY ARE NEW ZEALAND FOOD ENVIRONMENTS? UNIVERSITY OF AUCKLAND.

- Specific food items receiving greater scrutiny as impact of morbidities increasingly felt – e.g. nitrites in processed meats linked to bowel cancer. [independent.co.uk](https://www.independent.co.uk)
- Oxford study concluded adopting global dietary guidelines could avoid 5.1M deaths per year by 2050. Greater benefits could come from vegetarian & vegan diets. oxfordmartin.ox.ac.uk
- The rise of ‘meatless’ foods could be seen as support for this trend, though nutritionists potentially see challenges ahead. health.harvard.edu

Impacts of wider environment changes

Beyond individuals’ lifestyles the wider context has clear linkages to wellbeing, from the physical environment, workplace, through societal attitudes to the changing climate at the macro level. cph.co.nz

What’s changing?

Physical environment

- Increased urbanisation has resulted in environmental factors which may discourage participation in physical activity such as high-density traffic, pollution and lack of parks.
- This aligns to study findings that greater access to recreational facilities, opportunities to exercise and time spent outside resulted in higher activity levels in children and adolescents. biomedcentral

Work undermining employee health

- With continuing disruption of the work environment, only 13% of the global workforce is positively engaged in their work, despite efforts to reduce redundancies, increase automation and advance human services. forbes.com
- A UK study indicates middle-aged adults who feel stressed, powerless or overworked on the job may be more likely to develop mental health problems. reuters.com
- UK mental health charity study revealed 48% of respondents have experienced a mental health problem in their current job. mind.org.uk
- Even those secure in their roles are suffering from the effects of the workplace, related to the amount of time a person sits during the day. uhn.ca

Discrimination and Exclusion

- Discrimination has a direct influence on health and high levels of sexism have been found to fuel poor mental health among women. medicalxpress.com
- Racism among non-European groups remains an issue in NZ and its potential effects on health may contribute to ethnic health inequities. ncbi.nlm.nih.gov

Elderly isolation

- Research has linked social isolation and loneliness to higher risks for a variety of physical and mental conditions, and even death. nia.nih.gov
- Awareness of this issue is leading to exploration of new living patterns with companionship seen as a key reason some US seniors are turning to shared housing. mercurynews.com

The changing climate's health impact

- The WHO has identified a number of emergent issues associated with changing climate conditions. Extreme high air temperatures contribute directly to deaths. who.int
- Ministry for Environment suggests direct impacts of climate change extremes are likely to be relatively small, though trends may already be impacting the health of New Zealanders. mfe.govt.nz
- The Royal Society's assessment of climate impacts on health suggests significant mental health and well-being consequences. royalsociety.org.nz

An evolving health system

What's changing?

Intensifying pressure on existing health services

- The global demands of long-term if not life-long treatment for chronic conditions are placing unsustainable pressure on an overloaded health workforce. who.int
- Acute admissions in NZ's hospitals are increasing at more than twice the rate of population growth. rnz.co.nz
- NZ faces an increasing doctor shortage as figures indicate nearly half the country's GPs are planning to retire within the next 10 years. tvnz.co.nz
- The US is facing similar pressures on its health workforce and is exploring alternate health care delivery options. aamc.org

Rethinking the health service model

- NZ's response to the pressure on the primary care workforce is driving new innovations. noted.co.nz
- Commentators are envisaging a complementary preventative health system to provide health, wellbeing and happiness needs in support of the current medical system. berl.co.nz
- The reactive healthcare model where the individual gets sick, visits the doctor, then takes medication is looking increasingly dated. idealogue.co.nz

Health's digital revolution

Health authorities will be looking to drive responsibility to the individual – better self-care, including physical health, diet and mental wellbeing. Technology will be a critical enabler of this.

What's changing?

MedTech driven system innovation

- The medical technology (MedTech) field is growing rapidly with the e-health market set to triple in the next five years. mailchi.mp
- 36% of global consumers already research health issues and healthcare products online. There's also great appetite for digital appointments. thejournalofmhealth.com
- Robotics and automation could also prove invaluable in augmenting traditional healthcare advisors, especially for the more vulnerable groups. nzherald.co.nz
- As consumer behaviour and preferences change, the digital health landscape is able to adapt quickly to provide tools and platforms. nature.com

Increasing data exploitation

- Artificial intelligence (AI) could be deployed to analyse lifestyle risk factors and thereby prevent subsequent degenerative diseases. eurekalert.org
- PwC analysed the potential benefits from AI applications in Europe's healthcare system and found it could save hundreds of billions of dollars over the next 10 years. pwc.nl
- Internet of Things' (IoT) technologies enables real-time patient monitoring of heart rate, glucose levels, breathing rate, and many other data points. techrepublic.com
- AI and machine learning could transform early diagnosis, automation of tasks, development of new medicines, and precision surgery. But privacy and security issues remain a big concern for patients. thejournalofmhealth.com