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Make it the Norm

Equity through the social determinants of health

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Make it the norm: Equity through the social determinants of health

As Physicians and Paediatricians we care for patients struggling with preventable illness every day. We know that unhealthy housing, insecure and precarious work and poor mental health directly impact our patients' health and wellbeing. Too often we treat illness knowing our patients are returning to social situations that will perpetuate poor health.

Our College's purpose is to serve the health of patients, carers, communities and populations. We have a responsibility to use our collective voice to positively influence health and social policies, and bring vital improvements to the health of our nation's people. Our College can make a real difference when it focuses on issues where we can lead through our strength in diversity of specialist expertise.

We wish to challenge the current state, where unacceptable levels of child poverty and shocking housing conditions have become apparently 'normalised' in our society. Inequities in health outcomes will persist unless such stark social inequities are urgently addressed. Taking action on the social determinants of health needs a whole-of-society response led by government, and such action is overwhelmingly supported by the evidence.

Our campaign calls for policymakers to **make health equity the norm** to improve health outcomes for the most vulnerable people in our communities.

We call for immediate actions, including:

- making **Health Housing** the norm by introducing a regulation to mandate a Warrant of Fitness and Health for residential dwellings;
- making **Good Work** the norm by promoting the Living Wage to support the health and wellness of employees and their whānau; and
- making **Whānau Wellbeing** the norm by taking a child-centred approach to all legislation, policy and regulation.

As NZ President I am proud to lead our College's NZ Election Statement and our call for action. Former Prime Minister Norman Kirk said: *"People don't want much – just somewhere to live, something to do, someone to love and something to hope for."* As specialists and trainees of our College let's work together to achieve a society in which people grow, live, work and age in community conditions that promote health and wellbeing, and in which equity of health outcomes is the norm.



Dr Jonathan Christiansen FRACP
New Zealand President
The Royal Australasian College of Physicians

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Introducing our case study whānau

Our whānau can be found in any town or city in New Zealand, living in a privately rented house. The house is overcrowded: high prices for rent, redundancy and separation have meant that 12 members of an extended whānau are living together in a three bedroom house, with the teenaged children in the garage.

We spotlight six characters from this family: the stories have been developed by RACP physicians and paediatricians from the dozens of examples they see every day in clinical practice. All characters have interactions with the health system: from inpatient paediatrics, to a youth clinic, to primary care. The characters represent ages and stages across the life course, from a toddler to an older woman, and show the complexity, interaction and affect between housing, work and whānau wellbeing.



Amy, 9 years old

Amy is in the paediatrics ward with a skin infection, which has spread to her eczema. She struggles to sleep due to the eczema and symptoms of sleep apnoea, making it difficult for her to concentrate at school.



Josh, 3 years old

Josh is in the paediatrics ward with pneumonia – his third visit to the hospital this winter. He has been admitted in the past for bronchiolitis and his mother Tania reports his wheezing and coughing to their General Practitioner.



Matthew, 15 years old

Matthew is 15 and not in employment, education or training. He has been admitted to the paediatrics ward after falling from a building while drunk. He lost contact with his drug and alcohol counsellor when the youth clinic closed.



Tania, 26 years old

Tania, a mother of two, has begun to experience pain in her legs and back while undertaking her work as a cleaner. She is concerned about her weight and her family history of diabetes.



Brian, 48 years old

Brian was made redundant two years ago, and has not been able to find a job. He has chronic obstructive pulmonary disease and is experiencing symptoms of depression. He frequently self-medicates with alcohol.

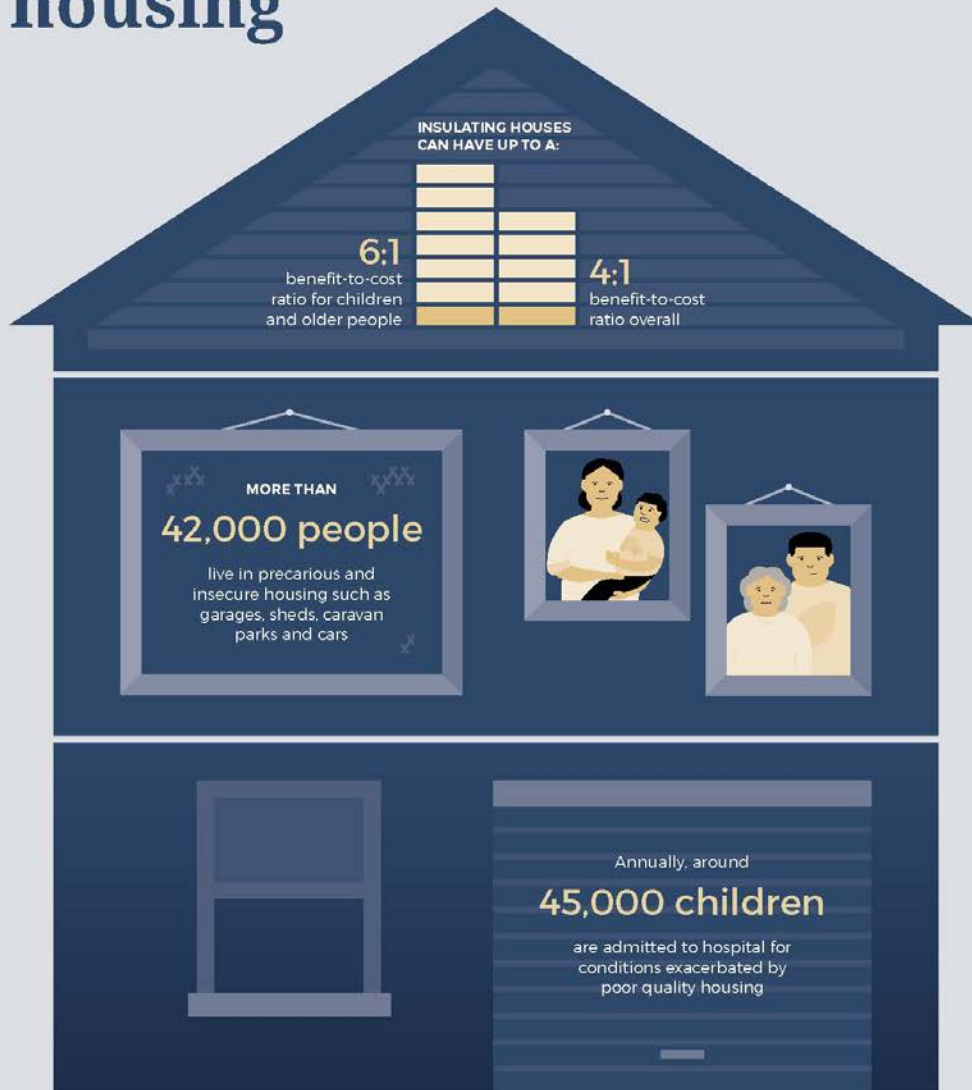


Shirley, 70 years old

Shirley's foot was amputated due to poorly controlled diabetes. She is largely bedridden, and frequently gets pressure sores.

The Royal Australasian College of Physicians' recommendations for

Healthy housing



THE RACP CALLS ON THE NEW ZEALAND GOVERNMENT TO:

- Urgently address homelessness and housing insecurity in New Zealand
- Introduce regulation to mandate a Warrant of Fitness and Health for residential dwellings
- Urgently address fuel poverty in New Zealand

#MakeItTheNorm



Make healthy housing the norm

The RACP calls on the New Zealand government to

Urgently address homelessness and housing insecurity in New Zealand

- Increase available public housing stock for low income New Zealanders
- Prioritise sustainable housing assistance for people and families living in cars, garages, outbuildings, tents, boarding houses, caravans, camping grounds and sleeping rough on the streets

Introduce regulation to mandate a Warrant of Fitness and Health for residential dwellings

- Landlords and property owners address
 - The presence of dampness and mould
 - The availability of fuel efficient heating options
 - The provision of smoke alarms
 - The presence of security locks and window stays to enable ventilation in bathrooms and kitchens

Urgently address fuel poverty in New Zealand

- Provide targeted assistance with electricity and/or gas utilities for low-income families with children under 18 hospitalised for a respiratory illness
- Improve the Warm Up New Zealand Initiative
 - Work with local authorities to improve access to insulation and energy-efficient, affordable heating options
 - Review current criteria for assessment for funded insulation
 - Extend to all of New Zealand, with a focus on high deprivation areas

Make healthy housing the norm

How housing affects our health

Housing is more than a place to shelter – the literal roof over one’s head. It is a key physical and social environment that contributes to the health and wellbeing of the individual and the whānau/family. In the developed world, most people will spend around 90 per cent of their time indoors – and a large portion of this time will be at home¹. Two key indicators of housing are the site/structure (the physical environment) and the situation (the social environment).

42,000

More than 42,000 people live in precarious and insecure housing such as garages, sheds, and cars in New Zealand.

When a housing situation is precarious or unpredictable, it is not ‘housing’ inasmuch as it is homelessness. This includes people forced to live in cars; fit several families in one small house; or live in emergency or temporary accommodation, including tents, motels, caravans or sleep outs.

People’s housing situation is a driver of adverse health outcomes, such as the spread of infectious disease and viruses due to living in crowded conditions, and greater rates of colds, viruses and respiratory illnesses when whānau live in damp and mouldy houses and can’t afford to heat their homes.

Housing in New Zealand: the physical environment

Housing stock in New Zealand is comprised predominantly of single-storey timber-clad structures, of which a majority (around two thirds) were constructed prior to the introduction of mandatory insulation in 1978². House conditions in New Zealand are variable across a range of factors considered essential to enable a warm and dry home: insulation, ventilation, heating and the presence of mould³.



“This house is so cold in winter – sometimes it feels like the sun doesn’t even come through the windows in some rooms, they are so dark and damp. It’s easier to stay in bed all day, and at least keep a bit warmer.”

Shirley (70)

Table 1: Overview of housing conditions in New Zealand: findings from the BRANZ House Condition Survey 2015/16³

Insulation
<ul style="list-style-type: none"> • While most New Zealand houses have some level of insulation in the ceiling cavity, 47 per cent of all dwellings (around 740,000 homes) have less than 120mm (the minimum thickness for insulation) and/or less than 80 per cent of insulation coverage in the roof space • 23 per cent of rental properties have less than 70mm insulation in the roof space • 6 per cent of rental properties have no insulation
Ventilation
<ul style="list-style-type: none"> • Kitchens and bathrooms produce the majority of moisture in houses – around 8 litres per day (EECA) • While nearly all main bathrooms had an openable window, only 49 per cent had an extractor fan venting to outside, and 48 per cent did not use any form of heating in the bathroom • Cooking is moisture-intensive, producing around 3 litres of water vapour daily: only 40 per cent of houses had an extractor fan moving moisture outside
Heating practices
<ul style="list-style-type: none"> • Although most households will heat the main living area during the winter, around 5 per cent do not heat any living areas • 46 per cent of households reported not heating any bedrooms during winter
Mould and damp
<ul style="list-style-type: none"> • 31 per cent of rentals felt damp (from 'a little damp' to 'damp throughout') which is nearly three times the proportion of owner-occupied houses reporting damp (11 per cent) • Almost 30 per cent of rentals had visible mould in bedrooms, compared to 18 per cent of owner-occupied houses

The RACP calls on the New Zealand government to introduce a regulation to mandate a Warrant of Fitness and Health for residential dwellings

- Landlords and property owners address
 - The presence of dampness and mould
 - The availability of fuel efficient heating options
 - The provision of smoke alarms
 - The presence of security locks and window stays to keep the home secure while allowing for ventilation

Housing: the social environment

People living as temporary residents in a permanent private dwelling – often due to a lack of access to minimally adequate housing – is a form of severe housing deprivation and homelessness which has increased in New Zealand since 2001. This has led to children, young people and adults living in cars, garages, sheds, caravans and tents as whānau struggle to find accommodation in an environment of rising costs for rental properties, greater pressure on state and public housing, and higher costs of living. Research using data from Statistics NZ and emergency housing providers shows that the number of people whose living situation was defined as “living as a temporary resident in a severely crowded, permanent private dwelling due to a lack of access to minimally adequate housing” has grown by nearly 10,000 people between 2001 and 2013⁴.

Rented houses are the most crowded

In terms of numerical change, the proportion of New Zealanders living in overcrowded houses has increased. Between 2001 and 2013, an additional 49,950 people reported living in crowded conditions, a change from the previous 10 years where numbers had been steadily decreasing⁵. While the proportion of New Zealanders living in crowded conditions has fallen slightly between 2006 (10.4 per cent of New Zealanders living in crowded conditions) to 10.1 per cent in 2013, analysis of household crowding data shows increasing regional disparities. Crowding increased in eight District Health Board (DHB) regions between 2006 and 2013, with the largest increases in Counties-Manukau, Waitemata, Canterbury and Auckland DHBs⁵.

Table 2: Household crowding across different DHBs compared to all of New Zealand (per cent)^{5 i ii}

District Health Board	Dwelling not owned (rented)	Dwelling owned with mortgage payments	Dwelling owned 'mortgage free'
Auckland	29.9	13.6	7.8
Counties-Manukau	34.4	17.3	7.0
Tairāwhiti	22.5	12.2	7.8
West Coast	7.6	3.7	2.2
South Canterbury	7.7	2.9	0.6
Southern	7.8	3.6	1.9
All of New Zealand	18.9	7.9	3.4

ⁱ Comparing the three DHBs with the highest levels of crowding and the three DHBs with the lowest levels of crowding to the levels for all of New Zealand

ⁱⁱ Household crowding and tenure of household by Jensen Equivalent Annual Household income quintile

“There are too many people staying at Mum and Dad’s, especially as we only have one bathroom. But what can we do? I have a bad credit history and rents are getting more and more expensive.”

Tania (26)



Many of our youngest kids live in overcrowded housing

When households are divided by age group, the highest levels of crowding are found in all age groups below 35-39 years, with the greatest levels in 0-4 years (15.4 per cent) and 20-24 years (15.3 per cent) age groups. This is noticeably above the national average of around 10 per cent⁵.

There are significant ethnic differences in household crowding, with Māori, Pasifika and Asian whānau of all ages experiencing high rates (20 per cent; 40 per cent and 18 per cent respectively) compared to 4.3 per cent of NZ European households. When all Māori, Pasifika and Asian children and young people are considered the rate increases, with highest rates of crowding experienced by the youngest children aged 0-4 years⁵.

Table 3: Māori, Pasifika and Asian household crowding: age group comparison⁵

Ethnicity	Crowding by age group: 0-19 years (%)	Crowding by age group: 0-4 years (%)
Māori	69,834 (23.1)	32,700 (25.9)
Pasifika	66,597 (42.3)	30,810 (44.5)
Asian	34,092 (19.3)	13,101 (20.3)

How does household crowding affect health?

The greater numbers of people there are residing in a dwelling, the greater the pressure exerted on physical space, kitchen and bathroom facilities. There is an extensive evidence base outlining the relationship between household crowding and negative health and social outcomes drawn from New Zealand and international research^{6 7 8 9 10}. Household crowding has a positive association with infectious disease transmission; worsening chronic health conditions; poorer educational outcomes; and poorer mental health^{8 11 12 13 14 15}.

Infectious diseases: greatest impacts on the young and old

Between 1989-93 and 2004-08, hospital admissions for infectious diseases rose significantly compared to non-infectious diseases: a relative increase of 73.6 per cent for infectious diseases, and 34.8 for non-infectious diseases⁸. Acute hospital admissions for infectious diseases were dominated

by lower respiratory tract infections (LRTI), skin and soft tissue infections (SSTI) and enteric infections, which accounted for over 50 per cent of admissions between 2004 and 2008^{8 iii}.

Children under the age of five years and older people over 70 years are hospitalised for infectious disease at greater rates than the rest of the population (more than 5 times and more than twice the control group respectively)⁸. Children under 5 years and older people over 70 years are more likely to spend a greater amount of their time at home and indoors compared with older school-age children and working adults. This makes these age groups more susceptible to infections when living conditions are a contributing factor in the transmission of disease^{1 16, 17 18}.

Case study: Household crowding and infectious disease burden

In a 2013 analysis, 55 per cent of included studies showed a statistically significant positive association between household crowding and infectious disease risk, with similar positive associations found for specific conditions: respiratory infections (51 per cent) SSTIs and enteric infections (59 per cent)¹⁴. In estimating the burden of disease attributed to household crowding, analysis shows that around 10 per cent of hospitalisations for close contact infectious diseases were estimated to be attributed to household crowding annually, and correspond to the most common infectious disease admission categories – respiratory infections and enteric infections¹⁴.



Amy's story

Amy has been admitted to the Paediatrics ward for a suspected *Staphylococcus aureus* infection (cellulitis) which has spread to her existing dermatitis. She is receiving flucloxacillin intravenously. Amy lives with her mother, her siblings, and extended whānau in a rented house. She shares a mattress in the living room with her sisters, with the children sharing blankets, pillows and sheets. Amy also shares a towel with her sisters, which increases her susceptibility to infections.

Overcrowding: impacts on mental health and wellbeing

Living in crowded housing not only increases the risk of close contact infectious disease, it has significant impacts on the mental health and wellbeing of residents of all ages: there is reduced room for children and adults to play, study, do hobbies, sleep or relax^{19 20}. While some reviews of the

ⁱⁱⁱ Lower respiratory tract infections include pneumonia and bronchitis; skin and soft tissue infections include impetigo and cellulitis; enteric infections include gastroenteritis, helicobacter pylori infection, Hepatitis A, giardia and intestinal parasites.

literature on the links between poor quality housing and mental health find the impacts to be less conclusive than those between housing quality and physical health, there is a growing evidence base outlining the negative impacts on children's mental health and wellbeing^{8 19 20 21}.

For children, growing up in crowded housing can have negative impacts on educational outcomes (lower standardised testing scores) internal behaviour issues (depression, withdrawal) and external behaviour issues (aggression), and goes some way to predict psychological health issues^{18 20}. Adults living in crowded conditions report poorer mental health, including: persistent low mood, higher stress and anxiety; lack of privacy and poorer interpersonal relationships^{21 22 23}. The negative impacts of crowded living conditions have consequences beyond the immediate living environment and are a significant determinant for individual education and employment outcomes: more research on the effects of household crowding exposure across the life course in New Zealand would contribute to the evidence base.

The RACP calls on the New Zealand government to urgently address homelessness and housing insecurity

- Increase available public housing stock for low income New Zealanders
- Prioritise housing assistance for people and families living in cars, garages, outbuildings, tents, boarding houses, caravans, camping grounds and sleeping rough on the streets

Fuel poverty: the cost of keeping warm

Houses that are cold, mouldy and damp are more costly to heat as residential dwellings are less thermally-efficient: occupants must spend more on energy to achieve a satisfactorily warm indoor environment²⁴. Being in 'fuel poverty' is defined as where a household has to spend more than 10 per cent of overall income on energy costs, but as Brenda Boardman notes, "The differentiating cause is the energy inefficiency of the home as a result of insufficient capital expenditure on improving the calibre of the home. As a consequence, the home is expensive to heat ... this emphasis on capital expenditure is what differentiates fuel poverty from poverty. Raising incomes can lift a family out of poverty, but rarely out of fuel poverty"²⁵.

Appliances can only be effective in heating indoor space when the built structure of the space supports the use of these appliances. Houses with decent insulation (either installed at time of construction or retrofitted into ceiling cavities and underfloor), double glazing in windows and doors, thermal-lined curtains and adequate ventilation (reducing moisture) are able to be heated more efficiently, reducing energy expenditure and environmental impacts^{3 26}. Further, high energy costs may limit a whānau's ability to pay for the energy it needs to use to maintain a healthy indoor environment – particularly if they are medically dependent on electricity.

Health consequences of fuel poverty

When indoor temperatures are consistently cold, occupants are more likely to experience symptoms associated with respiratory conditions such as coughing and wheezing, and have reduced circulation which increases risk of heart attack and stroke. Fuel poverty places whānau under financial strain, leading to increased stress, anxiety and poorer mental health²².



Homes with babies, children and older people should be at heated between **21°C - 24°C** during colder months for optimal health

The World Health Organization (WHO) and the Energy Efficiency and Conservation Authority (EECA) recommend indoor temperatures are optimal for health between 18 and 21 degrees Celsius. The range is higher (21 and 24 degrees Celsius) for homes with residents who are more vulnerable to developing respiratory conditions: young children, older people and people with compromised immune systems^{17 27}.

Health conditions caused or exacerbated by exposure to cold, damp and mouldy conditions include respiratory infections such as bronchiolitis and pneumonia, rheumatic fever, asthma and chronic obstructive pulmonary disease (COPD)^{10 13 22 27 28}.

For young children, older people and people with compromised immune systems, indoor temperatures below WHO recommendations increase health risks, and perpetuate health inequities:

- Temperatures lower than 16 degrees Celsius appear to impair respiratory functions
- Temperatures below 12 degrees Celsius place strain on the cardiovascular system
- Temperatures below 6 degrees Celsius risk people developing hypothermia²⁷

Case study: energy-efficient heating improves health for children with asthma

Children and adults with chronic illnesses such as asthma are more likely to have days off school or work: children with asthma were found to have an additional 2.2 days off school each winter compared to children without asthma^{28 29}. A New Zealand intervention study which installed energy-efficient heating in houses of children with asthma found an average 21 per cent reduction in days off school compared to the control group²⁹. This study also found that non-asthmatic siblings of the children with asthma in the intervention group also had reduced sick days during winter, suggesting that mechanisms to improve indoor environment has benefits for other children in the home²⁹.

“It’s our third visit to the hospital this winter – this time the doctors say it’s pneumonia again. Josh is only three, but he has been in hospital three or four times every winter since he was born – for pneumonia and bronchiolitis, and once to get some of his teeth removed.”

Tania (26) talks about her son Josh (3)



The prevalence of serious respiratory illnesses including bronchiectasis, bronchiolitis and childhood pneumonia has increased, resulting in growing numbers of hospitalisations for these illnesses between 2000 and 2015: for example, the hospitalisation rate for childhood bronchiolitis has increased by an estimated 37 hospitalisations each year and by more than half over the study period (from 3,937 in 2000 to 6,308 in 2015)²⁸.

Evaluations of studies which retro-fitted insulation in existing houses and/or provided a clean-heating energy source show significant improvements in the comfort of indoor environments through increasing temperature and reducing draughts¹³. Study participants reported improved self-rated health, less self-reported wheezing, fewer visits to general practitioners and reduced absences from school and work^{29 30 31}.



Shirley's story

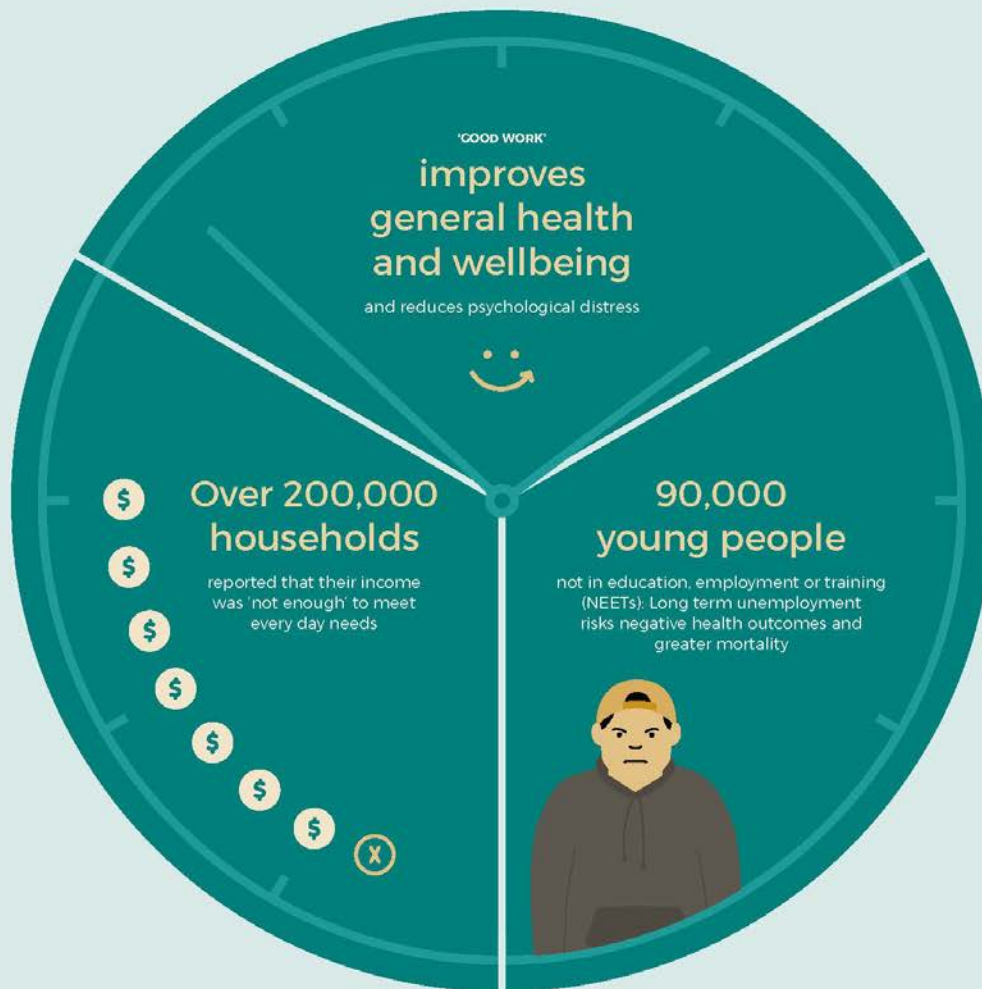
Shirley is a 70-year old female who was admitted to hospital for an acute chest infection. She was admitted to hospital the previous winter with influenza, though she stayed in hospital for some weeks due to infected pressure sores. Shirley told clinical staff she often stayed in bed to keep warm, because electricity is expensive. She does not have a great deal of mobility, having lost her left foot due to poorly-controlled diabetes.

A house that is dry and free from mould and damp is easier to heat efficiently, which lowers energy costs for whānau and reduces the impact of energy expenditure on the environment (for example, atmospheric pollution due to combustible fuels). When houses can be heated efficiently and cost effectively, more rooms of the house can be heated, which increases available living/sleeping space for people, and reduces the risk of communicable diseases and respiratory infections^{3 32}.

The RACP calls on the New Zealand government to urgently address fuel poverty in New Zealand

- Provide targeted assistance with electricity and/or gas utilities for low-income families with children under 18 hospitalised for a respiratory illness
- Improve the Warm Up New Zealand Initiative
 - Work with local authorities to improve access to insulation and energy-efficient, affordable heating options
 - Review current criteria for assessment for funded insulation
 - Extend to all of New Zealand, with a focus on high deprivation areas

Good work



THE RACP CALLS ON THE NEW ZEALAND GOVERNMENT TO:

- Promote the Living Wage
- Increase support for people who are not in work
- Recognise the workplace as a venue for influencing health care systems

#MakeItTheNorm



Make good work the norm

The RACP calls on the New Zealand government to

Promote the Living Wage

- Promote the Living Wage to employers, businesses and organisations as an evidence-informed initiative to support the health and wellness of employees and their whānau

Recognise the workplace as a venue for influencing health care systems

- Encourage employers to introduce:
 - Wellness programmes which support health and wellbeing (including mental health)
 - Access to services such as Employee Assistance Programmes (EAPs)
 - Health and safety officers for all workplaces (regardless of size) and ensure that these officers receive training
 - Cultural safety policies which support diversity in the workplace
 - Leave for survivors of domestic violence
- Develop policy to increase health literacy

Increase support for people not in work

- Support people who are not in work or training to access work and training opportunities, and find appropriate work

Make good work the norm

“Jobs are transformational. They are more than just the earnings and benefits they provide. They are also the output they generate, and part of who we are and how we interact with others in society. Jobs boost living standards, raise productivity and foster social cohesion.”

World Bank Development report, 2013³³

Work as a health determinant

Employment status can have a significant impact on people’s health – as a positive and negative determinant – creating and exacerbating health inequities. People can be in work, but the work may not be ‘good’ for them – that is, the work does not contribute to the working person’s health or wellbeing; while others may experience poorer health outcomes due to the absence of work through unemployment, illness or disability. Health inequities are affected by the nature of work because health-adverse work conditions have a strong socioeconomic gradient, and poorer workplace conditions are concentrated in populations experiencing multiple disadvantage³⁵.

Work is not limited to paid employment, and voluntary and unpaid labour (including work such as caring for children, older people or people with a disability, illness or injury) is crucial to understanding work as a determinant of health, and as ‘good work’, given the value of this work to society and sense of purpose and meaningfulness to people³⁵. In 2006, 89 per cent of New Zealanders aged 15 years and older stated they took part in some form of unpaid work³⁶.

What is good work?

The RACP calls for policies that include the worker/environment relationship to positively influence health and safety aspects of the work environment and promote workplaces as supporting good work.

Good work is engaging, fair, respectful and balances job demands, autonomy and job security. Good work accepts the importance of culture and traditional beliefs. It is characterised by safe and healthy work practices and it strikes a balance between the interests of individuals, employers and society. It requires effective change management, clear and realistic performance indicators, matches the work to the individual and uses transparent productivity metrics³⁷.

Productive employment and decent work are the main routes out of poverty for low-income people in developing and developed countries: however, this does not apply if the job is poorly remunerated, lacks appropriate conditions or is carried out in an unsafe environment^{33 35 38}. ‘Good work’ is by

definition, work that is good for you. For most people, the evidence is compelling: good work improves general health and wellbeing and reduces psychological distress^{35 38}.

Good work moves beyond the “sense of safety at work” and amelioration of harm: it fosters wellbeing, personal growth, fulfilment, autonomy and meaning^{39 40}. The Institute for Health Equity identifies the following features as characteristics of good work, noting that work ought not only to be free of health-adverse effects but it should also be beneficial to the working person, providing opportunities to improve health³⁴.

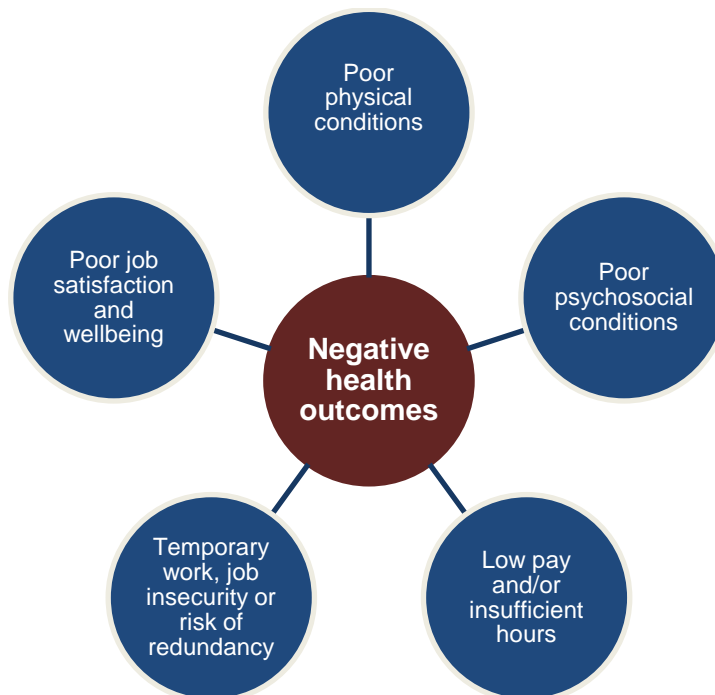
Table 4: Characteristics of good work³⁴

Free of precariousness	<ul style="list-style-type: none"> • Roles are not characterised by instability and high risk of job loss, a lack of safety measures and absence of minimum standards of employment protection
Degree of autonomy	<ul style="list-style-type: none"> • Participatory decision-making on matters such as the place and the timing of work and the tasks to be accomplished
Demands	<ul style="list-style-type: none"> • Places appropriately high demands on the working person in terms of quantity and quality • Does not overtax the working person’s resources and capabilities • Does not do harm to the working person’s physical or mental health
Opportunities	<ul style="list-style-type: none"> • Offers opportunities for skills training, learning and promotion within a life course perspective • Sustains health and work ability • Stimulates the growth of the working person’s capabilities
Harm prevention	<ul style="list-style-type: none"> • Prevents social isolation • Prevents any form of discrimination and violence
Organisational participation	<ul style="list-style-type: none"> • Enables working people to share relevant information within the organisation • Participate in organisational decision-making and collective bargaining • Guarantees procedural justice in case of conflicts
Work/life balance	<ul style="list-style-type: none"> • Aims to reconcile work and extra-work/family demands in ways that reduce the cumulative burden of multiple social roles
Equal opportunity	<ul style="list-style-type: none"> • Attempts to reintegrate people with disabilities and people with long-term illnesses into full employment wherever possible
Wellbeing	<ul style="list-style-type: none"> • Contributes to the working person’s wellbeing by meeting basic psychological needs of self-efficacy, self-esteem, sense of belonging and meaningfulness

How does work affect our health?

Work adversely impacts on a person's health in five main ways: poor physical conditions can include exposure to physical and chemical hazards, long hours and shift work; poor psychosocial conditions can include conflict, lack of autonomy or control, harassment and/or bullying; low pay and/or insufficient hours; insecure work, including temporary or casual contracts, risk of redundancy; and poor job satisfaction. A combination of some or all of these factors can affect a person's physical and mental health and wellbeing, their relationships with their whānau, friends and colleagues.

Figure 1: How work can affect health³⁴



Precarious work is not good work

Employment conditions and working conditions are identified by WHO as key contributors to inequities in work and health, and are salient factors in precarious work. Informal work, non-fixed term work, contract work, temporary work and part-time work are all forms of precarious employment⁴¹. Globalisation and economic changes have played considerable roles in changing workplace conditions, such as the casualisation of the workplace, short-term agency work, outsourcing of tasks to external agencies and the subsequent reduction in job security, which has an effect on employee psychological health and job satisfaction through increased demands, conflict and competition, and reduced collegial support⁴².

Precarious work also describes employment circumstances around major organisational restructures, downsizing or closure. These roles may be poorly remunerated, have limits on benefits or entitlements available to permanent or full-time roles, and are characterised by unsafe conditions and workplace practices⁴¹. Precarious work results in greater employment insecurity for people, and is associated with poorer physical and mental health outcomes, including increased risk of high blood

pressure, nonfatal heart attack, high body mass index, musculoskeletal complaints, and prevalence of depressive symptoms and anxiety^{43 44}.

Workplaces must support good work

Good work must be supported by good work environments: unequal relationships between physical, psychological, social and organisational job demands and available job resources may lead to reduced wellbeing and the greater risk of negative health outcomes, particularly job strain and stress⁴⁵.

Workplaces are also valuable venues for health promotion. A healthier workplace can go some way to mitigate the impacts of ageing, chronic disease and mental illness on the workforce. Health promotion in the workplace can facilitate early intervention (and in some cases, prevention) and disease management which reduces the severity of the conditions faced by individuals⁴⁶.

Workplaces can support good work and increase productivity where organisational factors are met, such as safety. Safety at work is different from health and wellbeing; it is the freedom from dangers and risks. Safety at work is connected to the conditions of the working environment: while there will be overlap with the characteristics of good work outlined in table 5 above, safe workplace policy must acknowledge the links between good work, good workplaces and productivity to improve health and wellbeing outcomes^{45 47 48}. The OECD finds that available interventions are often narrowly focused on individual workers by trying to improve resilience, stress management or coping skills, and miss interactions between individual workers, teams or groups of workers, and the work environment⁴⁵.

“When the boss said they were moving production offshore, I got a sinking feeling that didn’t go away. We got a redundancy, but it wasn’t much, and I had been with the company for a long time. Part of going on the dole is going to meetings that look at your skills and capabilities – I left school pretty much as soon as I could and went to work at the factory with the rest of the boys, so I don’t think I could do much good in an office, and there aren’t many factories here anymore.”

Brian (48)



Precarious work in New Zealand: Temporary work

Temporary employment (casual, contract, part time and seasonal) can be a form of precarious work, particularly when workers do not have access to the same workplace benefits as permanent employees, such as paid parental leave, flexible working hours and annual leave⁴¹. In 2016, 10 per cent of New Zealand workers were on temporary contracts (around 219,000 people)⁴⁹.

Temporary workers are more likely to be younger (15-24 years) or older (over 65 years), reflecting trends of younger people entering the workforce while either at school or in formal study, and older people working beyond retirement seeking employment which allows for flexibility of hours and commitment. Although the percentage of temporary workers has not increased as a proportion of the

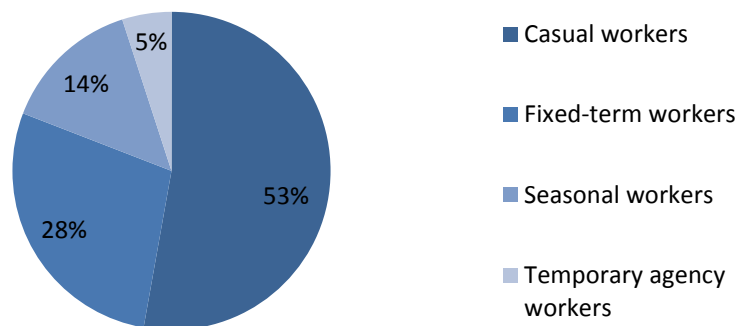
total number of employees (permanent and temporary), the numbers of temporary workers has increased by over 26,000 since 2012 – an increase of 13 per cent, compared to 11 per cent in numbers of permanent employees⁴⁹.

Māori and Pasifika are more likely to be employed on temporary contracts than workers identifying as European or Asian. The majority of Māori and Pasifika temporary workers are on casual contracts at more than 50 per cent and 53 per cent respectively⁴⁹.

Casual employees are temporary workers whose work is done in short episodes. They may be asked to work a shift of a few days, or less often, for several weeks at a time. Casual workers do not have any guarantee of regular ongoing work, have lower job security and negative long-term earning implications compared with permanent workers. These risks are consistent across all subtypes of temporary work⁴⁹.

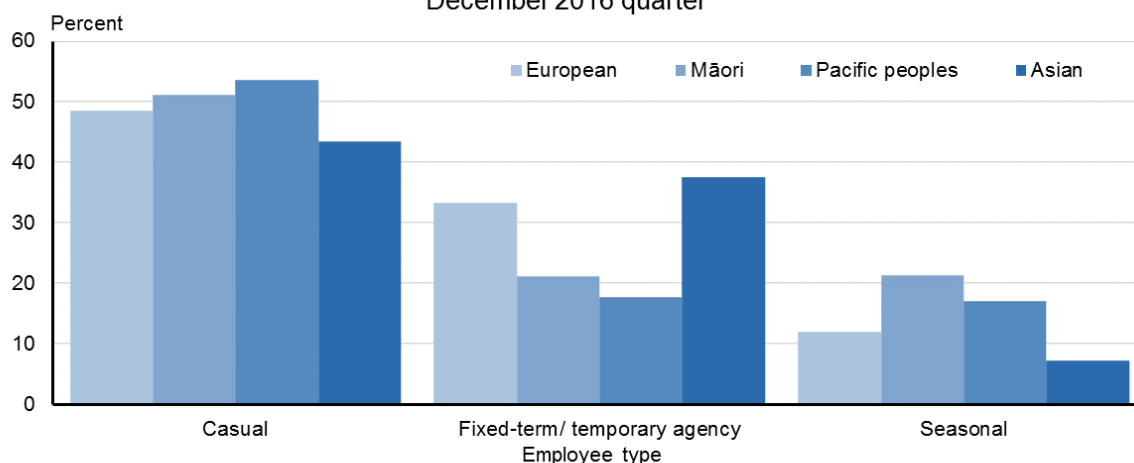
Temporary workers are exposed to greater risk through conditions than permanent employees, making temporary workers potentially more vulnerable in terms of lower job security, less connection with workplaces and colleagues, and at greater risk of exploitation. Temporary, casual, fixed term and seasonal workers need employment conditions which support their health and wellbeing⁴⁹.

Chart 1: Temporary workers in New Zealand
December 2016 quarter



Source: Stats NZ

Ethnic group of temporary employees, by employee type December 2016 quarter



Source: Stats NZ



Tania's story

Tania works as a cleaner, a job that requires a moderate level of fitness. Tania has a BMI of 34, and said that she often felt out of breath at work, and had begun to experience knee and back pain following her shift. Tania sees work as an opportunity to be more physically active, such as using stairs rather than elevators, but her increased muscular pain has meant that she has tried to minimise any additional physical exertion.

Tania's work hours are not always guaranteed, and she stated it was impossible to make plans or savings, which contributes to her stress, anxiety and feelings of insecurity. She works during the evenings, and talks about how she wishes she could spend this time with her children and family.

The RACP calls on the New Zealand government to recognise the workplace as a venue for influencing health care systems

- Encourage employers to introduce:
 - Wellness programmes which support health and wellbeing (including mental health)
 - Access to services such as Employee Assistance Programmes (EAPs)
 - Health and safety officers for all workplaces (regardless of size) and ensure that these officers receive training
 - Cultural safety policies which support diversity in the workplace
 - Leave for survivors of domestic violence
- Develop policy to increase health literacy

The Living Wage

The RACP supports the promotion of the Living Wage in New Zealand to provide people in work with an income which enables people in work to meet everyday expenses for their whānau and participate in society.

In 2014, two out of every five children living in low-income households were living with at least one adult in fulltime employment or self-employment. New Zealand has low wages (compared to similar developed countries) and the numbers of people in income and material hardship and in work is high^{50 51}.

The New Zealand Living Wage^{iv} is the hourly wage a worker needs to pay for the basic necessities of life, enabling workers and their families to live with dignity and participate as active citizens in their communities^{52 53}. In 2017, this is calculated at \$20.20 an hour - \$4.55 more than the minimum wage of \$15.75^{52 54}.

Crucially, a Living Wage enables workers and their whānau to participate within society – distinguishing the Living Wage from the ‘minimum’ wage, poverty lines and income hardship. People receiving the Living Wage can consider future and protective expenses, such as insurance policies, retirement savings schemes, as well as being able to pay for children to enjoy a school trip, and have a computer at home^{48 53}. The WHO define a ‘Healthy Living Wage’ as taking into account the real and current costs of living, based on health needs including adequate nutritious food, shelter, water and sanitation, and social participation⁴¹.

The terms ‘Living Wage’ and ‘Living Wage rate’ are used interchangeably: whānau having sufficient income to live on is a function of both the Living Wage rate and the total number of hours worked (see Appendix 1)⁵⁵.

When people in work are paid a living wage (accounting for the five factors outlined above), they are able to provide for their whānau. The Child Poverty Monitor’s 2016 Technical Report uses several measures to index severe poverty, income hardship and material deprivation to build a comprehensive depiction of child poverty in New Zealand. Children aged 0-17 years are twice as likely to experience poverty compared to those aged over 65 years. Children experiencing material hardship (a score of 7 or higher in the DEP-17 Index) were found to be more exposed to household economising behaviours, including cutting back on fresh fruit and vegetables, living in damp, cold and hard-to-heat houses, and having to wear worn clothing or shoes^{56 57}.

^{iv} It is important to note that the Living Wage rate estimates are based on a family of four with two children under 13 years, and two adults who together work 60 hours per week (one full-time, one part-time) for 52 weeks of the year.

Table 5: Restrictions experienced by children in deprived households (7+ points on DEP-17)⁵⁷

Restriction	Materially-deprived households (%)
Having to wear worn-out shoes or clothing	26
Having to share a bed	7
Reducing consumption of fresh fruit and vegetables	43
Difficult to keep house warm in winter	39
Dampness or mould is a major problem	36
Not enough income to meet basic needs	49

Children benefit when parents/caregivers are paid a Living Wage they have improved health and educational attainment⁵⁸. Co-benefits of the Living Wage for whānau include being able to pay for the basic costs of living; reduced stress; and allows for participation in social, cultural and community activities⁵⁰. The Living Wage is an evidence-informed intervention which makes a difference to the lives of workers and their whānau. It acknowledges the wider social, economic, health and wellbeing contexts and determinants of work, and has benefits for workers, employers, businesses and society.

The RACP calls on the New Zealand government to promote the Living Wage

- Promote the Living Wage to employers, businesses and organisations as an evidence-informed initiative to support the health and wellness of employees and their whānau

Health effects of economic inactivity

The RACP agrees that a multifaceted policy approach to full and fair employment is ensuring that people who are not in work, or are changing work, are helped to gain the appropriate set of skills and attributes required to participate in quality work³⁹. The RACP calls for support for people not in work or training to access work and training opportunities to build and develop their skills and knowledge to obtain appropriate work.

Long term work absence, work disability and unemployment have a negative impact on health and wellbeing and the problem is not merely one of association: on the balance of the evidence, unemployment causes, contributes to, or accentuates negative health impacts⁴⁸.

The negative health impacts of work injury or illness can be minimised through a return to work management plan, completed with involvement from the worker, their employer, and medical professionals, such as an occupational physician. New Zealanders who had had workplace injuries or illnesses were more likely to state that their recovery was assisted by returning to work when they did than their Australian counterparts (44 per cent compared to 33 per cent) and that a management plan was a significant component of their successful return to work⁵⁹.

A 2006 review of the evidence on work, health and wellbeing by Professors Waddell and Burton for the Department for Work and Pensions in the United Kingdom found strong associations between common physical and mental health conditions and unemployment. These included increased rates of cardiovascular disease, lung cancer, and susceptibility to respiratory infections. Waddell and Burton also found that unemployment was positively associated with cardiovascular disease mortality, and suicide⁴⁸.

“I got stood down at school for fighting and having drugs at school a couple of times and mum was pretty mad. I hated school anyway, so when I had to go back I started wagging a bit more and then I just stopped going. Mum stopped asking about school – she’s asleep or working late shift so we don’t talk much. Sometimes I do some labouring if my mate’s uncle can get us a job, but that hasn’t happened for a while.”

Matthew (15)



Young people not in employment education or training: risks for future outcomes

Young people who are not engaged in employment, education or training are collectively known as NEETs (Not in Employment, Education or Training).

Much of the policy focus on NEETs is due to the younger age (15 to 24 years) of this cohort, and the greater risks of poorer outcomes for employment, education, physical and mental health and wellbeing in the longer term^{60 61 62}.

NEET data is also commonly used as a measure of non-utilised labour market potential, because it incorporates some of the economically inactive (disengaged from employment and education and not actively seeking work). As the Department of Labour noted in 2009, NEETs are “missing the opportunity to develop their potential at an age that heavily influences future outcomes” and subsequently are at greater risk of becoming disadvantaged or marginalised later in life^{63 64}.

NEETs in New Zealand

The numbers of young people characterised as NEETs was 90,000 at the end of 2016⁶⁵. NEETs are split into two further age-related subgroups, 15-19 years and 20-24 years. The NEET rate for the 15-19 years group tends to be lower than the 20-24 years age group, given the numbers of young New Zealanders engaged in education (either secondary or post-secondary)⁶⁴. The NEET cohort also shows strong regional disparities, particularly for the 20-24 age group (see Appendix 2). This suggests that beyond formal and post-secondary education or training, there are fewer opportunities for work, or to train and develop work-relevant skills⁶⁵.



Matthew's story

Matthew has been stood down from school for violence and having drugs on him. He is disengaged from school and is often truant. When he began secondary school, his reading age was assessed as being at around that of a nine year-old – well below the average for his age group. A dean at Matthew's school referred him to a drug and alcohol counsellor at a local youth clinic, who he met with regularly. Matthew's mother noticed a positive change in his behaviour, and was pleased he had access to counselling. The youth clinic was unable to secure operational funding and was forced to close. While clients were able to transfer to a clinic in the next town, Matthew's counsellor would not be on staff, which caused Matthew disappointment and feelings of being let down by the health system.

A report from the New Zealand Treasury notes that the internal dynamics of the NEET population are not included in the current measure used by Statistics New Zealand – for example, 23 per cent of the youth population between the ages of 16 and 22 will experience a short-term spell of being NEET, 25 per cent experience multiple short term spells and at least 28 per cent of young people will experience at least one spell of NEET for longer than six months⁶⁶.

The effects of repeated periods of economic inactivity (not being engaged in full or part-time employment, education or training) between the ages of 15 and 24 years is described as 'scarring': early non-participation in employment, education or training has a cumulative effect on labour market outcomes and negative effects future earning potential^{60 61}.

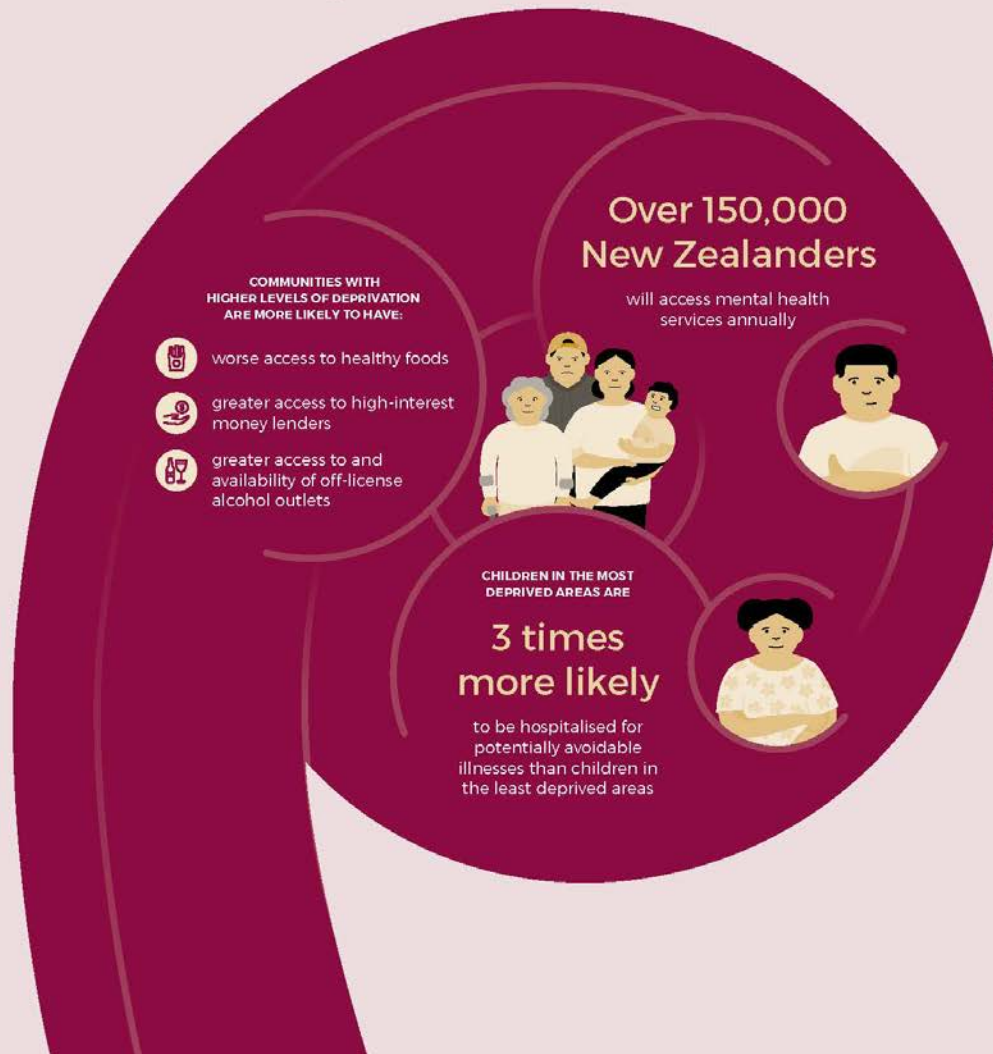
Young people within the NEET cohort are at greater risk of reduced quality of life, particularly with regard to mental health conditions such as depression, anxiety and low self-esteem^{61 62 67}. Young people who are disengaged from employment and/or education opportunities are at greater risk of self-reported feelings of hopelessness and a lack of control in their lives and futures (48 per cent) than non-NEET young people (32 per cent)⁶⁸. In New Zealand, associations have been found between NEETs and harmful use of drugs and alcohol, and the New Zealand Mental Health Survey found that young people aged 15-24 (within the NEET age range) had the greatest prevalence of hazardous drinking at 38 per cent^{69 70}.

The RACP calls on the New Zealand government to increase support for people not in work

- Support people who are not in work or training to access work and training opportunities, and find appropriate work

The Royal Australasian College of Physicians' recommendations for

Whānau wellbeing



THE RACP CALLS ON THE NEW ZEALAND GOVERNMENT TO:

- Increase support for communities to improve whānau health and wellbeing
- Take a child-centred approach to all legislation, policy and regulation
- Increase support for mental health in primary care

#MakeItTheNorm



Make whānau wellbeing the norm

The RACP calls on the New Zealand government to

Increase support for communities to improve whānau health and wellbeing

- Support local authorities and communities work to reduce:
 - “Food swamps” (environments where unhealthy foods and beverages are readily available and heavily advertised)
 - Alcohol off-licenses
 - Gambling outlets
 - Non-bank lending outlets

Increase support for mental health in primary care

- Address the systemic barriers exacerbating the physical health disparities and premature mortality experienced by people with mental health conditions and addiction
- Encourage health professionals to discuss mental health and mental wellbeing with patients as part of consultations
- Consider mental health and wellbeing as equal to physical health and wellbeing

Take a child-centred approach to all legislation, policy and regulation

- Apply a child health equity lens to the development, implementation, monitoring and assessment of legislation, policy and regulation, particularly where children and young people are indirectly affected

Make whānau wellbeing the norm

“Good health brings benefits for other aspects of people’s lives. For example, parents who have good health and mental wellbeing can support the social development, education outcomes and lifelong experiences of their children and of their wider families and whānau.”

- New Zealand Health Strategy⁷¹

Whānau wellbeing is healthy living at every age and every stage

The RACP recognises that communities with high levels of deprivation are more likely to have worse access to healthy foods, public and active transports options; and have higher concentrations of alcohol off-licenses and non-bank lending outlets. Communities and neighbourhoods which promote health and wellbeing support whānau of all ages to live healthy lives.

The New Zealand Health Strategy aims for New Zealanders to “Live Well, Stay Well and Get Well” and is founded in a life course principle approach, noting the ways that health systems and practices influence health and wellbeing, such as immunisations and primary care services. The Strategy also highlights significant health determinants outside the health system: home environments and participation in work⁷¹.

A life course approach to health and wellbeing draws on psychological, cognitive, and biological research on development processes from conception to death. Life course epidemiology explores how socially patterned exposures during childhood, adolescence, and early adult life influence adult disease risk and socioeconomic position, and may account for social inequities in adult health and mortality⁷².

When people’s health is supported, reinforced and sustained by their environment, healthy aging through the life course is more likely. This is due to the mediation of protective factors (family and community; health status; socioeconomic status), and the interplay of the individual’s exposure to risk factors (poor housing, chronic physical or mental health conditions, low educational achievement). Life course epidemiology identifies resilience and vulnerability as two key dynamic processes which contribute to an individual’s risk of positive or negative health outcomes. Resilience accumulates as people positively adapt, cope and manage through significant developmental milestones, life events and changes. A person’s vulnerability is compounded by negative adaptation to prior embodiment of extrinsic and intrinsic risk factors, such as exposure to trauma; addiction; physical and/or mental health conditions; physical and social environments^{72 73}.

Support communities to improve whānau health and wellbeing

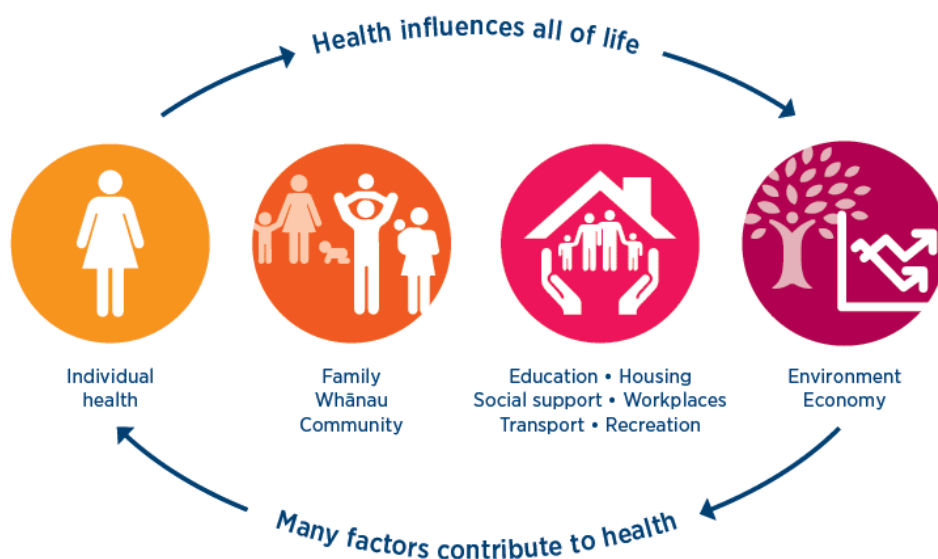
The social determinants of health are the collective conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, developmental agendas, social norms, social policies and political systems. These conditions are broad, dynamic, and are affected by a social gradient^{74 75}.

A health-promoting community enables citizens to live healthy lives and maintain healthy lifestyles. Healthy communities meet the basic needs of citizens, are committed to the quality and sustainability of the environment, have adequate levels of economic and social development, health and social equity, and facilitate social relationships that are supportive and respectful^{76 77}.

Table 6: Key domains of life in which the social determinants of health impact

Domains affected by the social determinants of health	
Fetal development	Gender
Early life and childhood development	Social security
Educational attainment	Housing
Access to health care	Food security
Literacy	Tobacco, alcohol and other drug use
Socioeconomic status	Contact with the criminal justice system
Family and relationship stability	Natural, built and physical environments

Figure 2: Factors influencing health: Ecological model⁷¹



Deprived communities have worse access to healthy food

Healthy and nutritious foods that support growth, development and health should be available and accessible to whanau. In New Zealand, poor diet has overtaken tobacco smoke as the greatest risk to health loss⁷⁸. Over two thirds of New Zealanders aged over 15 years are overweight (Body Mass Index (BMI) of more than 25) or obese (BMI over 30). A third of New Zealand children aged 2-14 years are overweight and obese, which makes them more susceptible to developing symptoms of obesity-related diseases earlier, including abnormal lipid profiles, impaired glucose tolerance, and sleep apnoea. Adults with obesity are at greater risk of developing a range of chronic, life-limiting health conditions, including metabolic syndrome, cardiovascular disease, type-2 diabetes, musculoskeletal conditions, reproductive difficulties, and several forms of cancer⁷⁹.

Research has found an association between neighbourhood deprivation and access to fast food outlets and recently, between schools in more deprived neighbourhoods and access to fast food and takeaway outlets in New Zealand^{80 81}. Internationally, neighbourhood characteristics (particularly deprivation and poverty) have been associated with increased rates of obesity, and lower rates of walkability and opportunities for active transport and physical activity^{82 83 84 v}.

"I have always been big, it runs in our family. Before I had gestational diabetes they told me I was pre-diabetic and at high risk of developing type two diabetes like Mum and Nana. I am working on getting more exercise, and I try to take the stairs in the office buildings I clean instead of the lifts. I am tired when I finish my shift around 11pm, it's just easier to get dinner from a drive-thru. And I don't want to wake up my kids by cooking - they are sleeping in the living room."

Tania (26)



'Food swamps' are areas where healthy food and beverage options are inundated by energy dense, nutrient poor snack food options, which are in turn affected by spatio-temporal factors^{vi 83 84}. These factors, including temporal and spatial access to food options often drive consumer behaviour: for example, people working non-conventional hours are constrained by outlet operating hours, or may frequent food outlets which do not divert from their intended route between home and work. While reducing food deserts has been the focus of much policy and intervention activity, food swamps are becoming more prevalent, particularly in developed countries, and interventions should be developed to accommodate spatio-temporal factors in how people interact with food environments^{83 84 85}.

^v Due to the range of methods and measures used to determine whether or not there are associations between neighbourhood deprivation and access and availability of energy-dense, nutrient-poor foods and beverages, it is difficult to state there is an absolute association between neighbourhood deprivation, fast food and takeaway outlets and obesity rates within that community.

^{vi} A food swamp will have a small number (less than 10 per cent) of healthy food options available, as defined by the relatively healthy food access (RHFA) measure. In contrast, a food desert will have a RHFA measure of zero – there are no healthy food outlets available in the area⁸³.

Case study: Healthy Auckland Together

The Healthy Auckland Together baseline monitoring report identified a regional average of 2.5 fast food and takeaway outlets within a 10 minute walk of a school: outside of the Waitemata local board (which includes the Auckland central business district), the next three highest are Mangere-Otahuhu (average 6.5 outlets); Maungakiekie-Tamaki (average 4 outlets); and Otara-Papatoetoe (average 3.8 outlets). The report states that the regional breakdown of access to fast food versus grocers shows a gradient of increasing likelihood of excess fast food premises (a ‘food swamp’) as neighbourhood deprivation increases⁸⁸.

Health-promoting environments enable all whānau members to live active and healthy lives by making the healthy choice the easy choice. Healthy choices must also be affordable: for households experiencing deprivation, purchasing healthier food options including fruit, vegetables and meat is frequently cited as an area where households will economise and cut back^{57 89}. Policies to reduce the cost barriers to healthy food and improve food environments in New Zealand must be implemented to reduce inequities in nutrition and improve health outcomes for whānau of all ages.

The RACP calls on the New Zealand government to increase support for communities to improve whānau health and wellbeing

Increase support for communities to improve whānau health and wellbeing

- Support local authorities and communities work to reduce:
 - “Food swamps” (environments where unhealthy foods and beverages are readily available and heavily advertised)
 - Alcohol off-licenses
 - Gambling outlets
 - Non-bank lending outlets

Child equity: addressing multiple disadvantage

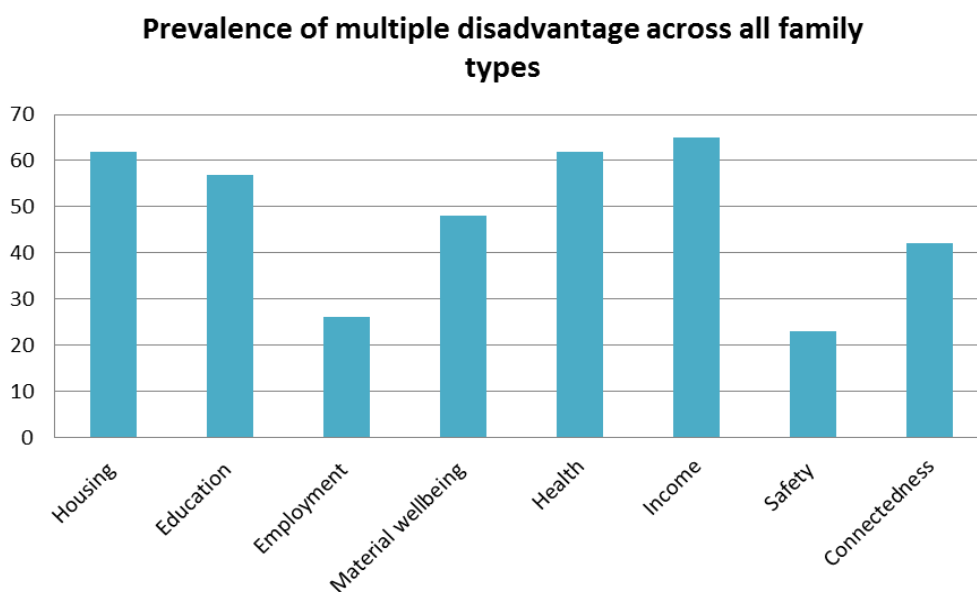
The RACP acknowledges that New Zealand's youngest citizens are some of its most vulnerable. Children are excluded from development processes and decision-making where they may be affected directly or indirectly. Applying a child equity lens to all decision-making and development will support new approaches allowing children to grow and thrive in environments that recognise their rights as citizens.

Health promoting communities consider the views, rights and interests of all population groups – including children, older people, and diversity of gender, ethnicity and ability. In New Zealand, around 25 per cent of the population is under 18 – over 1 million children⁹⁰. The voices and needs of children should be considered, and their perspectives incorporated, into the design, priorities, policy, programmes, products, and decisions that affect them. When children's needs are considered by applying a child-centred lens, systems, structures and environments support them to grow, develop and reach their potential. New Zealand is committed to this as a signatory to the United Nations Declaration on the Rights of the Child.

Whānau experience different stressors at different points in life. A whānau member may go through a period of unemployment, be made redundant or enter education or a training programme, changing overall household income. A new baby, moving house, periods of acute or chronic ill-health or changing family circumstances (separation/divorce, marriage) will all impact on the wellbeing of all whānau members, including children.

When whānau are experiencing multiple stressors for long periods of time across many areas of life (such as housing, income and health), it is critical to understand whānau wellbeing outcomes through all of these areas, and how these events may impact on the health and wellbeing of children in the future. For example, poor quality housing has impacts on health outcomes and leads to more time off school and work; and low education attainment can impact future employment and income level. Interpreting whānau wellbeing through the impacts of multiple disadvantage, and understanding its impacts and effects - including direct and indirect influences – makes resolution more likely⁷³.

Chart 3: Prevalence of multiple disadvantage across all family types⁷³



“Poverty is about household resources being too low to meet basic needs – it is about “not having enough” when assessed against a benchmark of “minimum acceptable standards”: in 2015 over 200,000 households reported they “did not have enough income” to meet everyday living expenses⁵⁶⁹². The 2017 Family and Whānau Status report shows that a sizeable minority of New Zealand whānau (18 per cent) are experiencing disadvantages in at least three of the eight life domains that structure wellbeing⁷³. While predominant domains of disadvantage differ according to whānau type there were three domains that were consistent across all whānau experiencing multiple disadvantage:^{vii}

1. Income (65 per cent of whānau reported income disadvantage)
2. Health (62 per cent of whānau reported health disadvantage)
3. Housing (62 per cent of whānau reported housing disadvantage)



Josh’s story

Joshua is a three year old male who presented with pneumonia, and has been admitted twice previously this winter with the same symptoms. Joshua has a history of pneumonia and bronchiolitis with several hospital stays each winter. His mother reports that he frequently wheezes and coughs, and follow-up between the paediatrician and Joshua’s general practitioner confirms this.

Joshua’s mother has mentioned their housing conditions have changed since she separated from her children’s father, and she is now living with her parents, grandmother, sister and brother in-law and their children. She is concerned about their housing conditions and its impact on Joshua’s health, particularly the “cold and damp feeling” and the mould growing on the walls, curtains and in cupboards.

^{vii} For example, whānau types experiencing multiple disadvantage includes a couple both aged under 50 years with no children, a sole parent with at least one child under 18 years.

Children experiencing material hardship and poverty are more at risk of experiencing symptoms of mental health conditions such as persistent low mood, hopelessness, anxiety, and feelings of worthlessness⁹¹. Furthermore, children and adolescents are acutely aware when parents are unable to meet everyday expenses, and may be subject to bullying from peers, and there is evidence that children from households with higher levels of poverty are at greater risk of being bullied^{94 95}. Addressing severe and persistent poverty during the early years of a child's life will:

- Reduce the risk of developing depression, anxiety or other mental health conditions
- Improve educational outcomes
- Improve social outcomes, including sense of connectedness and reduce bullying
- Act as a protective factor against hazardous behaviours associated with alcohol and other drugs^{93 96}.

Children and young people are at greater risk from poor health and wellbeing outcomes when they experience material hardship, multiple disadvantage, and inequity and are not prioritised in a system tasked with supporting their growth and development⁹⁷. A child equity lens is a principled approach to redressing structural inequities experienced by children and young people in New Zealand. This approach enables policymakers to consider the direct and indirect impacts of legislative and regulatory changes (often made on the parents, caregivers and whānau) and how these decisions impact children.

The RACP calls on the New Zealand government to take a child-centred approach to all legislation, policy and regulation

- Apply a child health equity lens to the development, implementation, monitoring and assessment of legislation, policy and regulation, particularly where children and young people are indirectly affected

Mental health and wellbeing

Mental wellbeing is equally important as physical wellbeing and the RACP supports equitable access to primary mental health services for New Zealanders.

Accessible primary mental health care is essential to supporting people's mental wellbeing. In New Zealand, around 1 in every 6 people is diagnosed with a common mental disorder, such as depression or anxiety, at some point in their lives⁹⁸. The New Zealand Health Survey's annual update of key results 2015/16 shows that, while the numbers of people experiencing psychological distress decreases with age (from around 8 per cent for people aged 15-44, to less than 5 per cent of people over 65 years), the total numbers of New Zealanders who had experienced psychological distress has increased overall from around 4 per cent in 2011/12 to 7 per cent in 2015/16⁹⁹.

Neuropsychiatric disorders (including mental health conditions, dementia and addiction) are the leading cause of health loss among condition groups in New Zealand, and accounts for 19 per cent of total disability-adjusted life years (DALYs), edging out cancers (17 per cent), and cardiovascular conditions including diabetes (17 per cent). Neuropsychiatric disorders are the leading cause of health loss for females in New Zealand⁷⁸.

Mental health services continue to be a topic of debate, given New Zealand's high suicide rate (particularly in young people) and increased public profile more generally^{100 101}. Each year, over 150,000 people will access mental health and addiction services, the majority of these provided through District Health Boards (DHBs). This figure is growing, up from 137,000 in 2010/11⁹⁸. For children and young people, access to timely services remains difficult in many parts of New Zealand, with reported delays in assessment and treatment^{95 102 103 104}. For rangatahi Māori (Māori between the ages of 15 and 24) who completed suicide in 2016, only around half had contact with mental health services before they died¹⁰⁵.

"The doctor took me to meet this drug and alcohol counsellor. We didn't talk about drinking or smoking pot or anything at first – he wanted to know about my family and school, what my mates were like. Sometimes I didn't go to the appointments because I was wasted, or I forgot, but when I did go I liked talking to him – I felt like he listened to me. I was real sad when he said that the youth clinic was going to close because there was no more money for it."

Matthew (15)



There are also significant inequities in physical health outcomes experienced by people using mental health and/or addiction services in New Zealand, particularly in relation to risk of premature death: People who experience serious mental illness and/or addiction issues have a two-to-threefold risk of dying early compared to the general population, and two-thirds of this greater mortality is attributed to noncommunicable diseases (cardiovascular disease and cancer)¹⁰⁶.

Alcohol is the most widely-used drug in New Zealand – 93 per cent of New Zealanders will try alcohol at some point in their lives^{107 108}. Alcohol use is causally related to more than 60 medical conditions, and accounts for 4 per cent of health loss in New Zealand, with half of health loss due to mental health conditions, such as alcohol use disorder, and the other half due to injury^{78 99 109}. People living in areas with greater deprivation are less likely to consume alcohol compared to people in more affluent areas (70 per cent versus 86 per cent), but were nearly 1 and a half times more likely to drink hazardously^{99 viii}.



Brian's story

Brian is a 48 year old male with a history of chronic obstructive pulmonary disease (COPD). He is a heavy smoker of more than 30 years. Brian was made redundant from his position as a machinist in a factory when the company decided to shift to a production facility based overseas. He has been out of fulltime employment since his redundancy (two years). His COPD symptoms have worsened since the redundancy, and he is experiencing symptoms of depression.

Brian's respiratory physician noticed Brian's persistent low mood over several clinic appointments and commented on it in follow-up notes sent to his GP. When meeting with Brian, the GP suggested counselling, offering a referral. The GP also mentioned Brian could consider antidepressant medication. Brian's GP asked him about his alcohol intake, and Brian stated he drank most days to self-medicate. He frequently will drink alone as a way to pass the time and get out of the house.

The RACP calls on the New Zealand government to increase support for mental health in primary care

- Address the systemic barriers exacerbating the physical health disparities and premature mortality experienced by people with mental health conditions and addiction
- Encourage health professionals to discuss mental health and mental wellbeing with patients as part of consultations
- Consider mental health and wellbeing as equal to physical health and wellbeing

^{viii} 'Hazardous drinking' refers to an established alcohol drinking pattern that carries a risk of harming the drinker's physical or mental health, or having harmful social effects on the drinker or others. It is defined by a score of 8 points or higher on the Alcohol Use Disorders Identification Test (AUDIT)

Health equity for all

The RACP recognises health as multidimensional, encompassing more than just the treatment of illness and disease.

Health equity can be promoted through strategies such as Health in All Policies, which considers the wider determinants of health such as housing and living environments, working conditions, and social environments in which people grow, develop and age. New Zealand has made a commitment to the 17 Sustainable Development Goals (SDGs), a set of targets designed to shape a global response to ending poverty, protect the planet and ensure prosperity for all. The SDGs include a call to *ensure healthy lives and promote wellbeing for all at all ages*¹¹⁰. Actions to address the social determinants of health at the micro-, meso-, and macro-levels will make a real difference to New Zealand achieving equity for people, their whānau and their communities.

Where people live, how they spend their time, and who they live with and support shapes people's health. Health equity is achieved when the conditions in which people grow, live, work and age support health and wellbeing. Systems, structures, policies and programmes may be organised and designed to enable health and wellbeing, but this is only possible when people do not experience barriers to access which in turn are the result of compounded systemic injustice which is, simply put, unfair. The evidence overwhelmingly supports action on the social determinants of health through a whole-of-society response: central and local government, communities, non-government organisations and industry can work together to support health and wellbeing for all members of our society.

Appendices

Appendix 1: Living Wage rate

The actual standard of living achieved by whānau where people in work are paid the living wage hinges on the interplay of five factors. When people in work are paid a living wage (accounting for the five factors outlined above), they are able to provide for their whānau.

1. The gross hourly rate
2. The numbers of hours worked
3. The taxes payable, including the effects of GST
4. The value of tax credits for children
5. The social wage of tax-funded health, education and housing assistance⁵⁵

Appendix 2: New Zealand youth not in education, employment or training (NEET)

New Zealand NEET rate (15 – 19 years and 20 - 24 years) (per cent) Annual rate to December for years 2013 – 2016¹¹¹

Region	2013		2014		2015		2016	
	15 - 19	20 - 24	15 - 19	20 - 24	15 - 19	20 - 24	15 - 19	20 - 24
Age group (years)								
Northland	11.9	36	11.5	24.8	10.3	28.5	12.2	28.8
Auckland	6.4	12.5	7	13.7	5.8	13.4	7.8	13.3
Waikato	11.4	16.7	10	18.5	8.1	18.4	10	18.3
Bay of Plenty	9	29.7	7.1	20.8	9.5	24	6.7	21.8
Gisborne/Hawke's Bay	12.2	27.6	13.5	22.9	11.5	27	10.3	25.6
Taranaki	6.4	20.7	6.3	19.6	9.9	20.3	8.8	21.4
Manawatu-Whanganui	10	22.2	10	22.9	9	16.2	6.3	15.2
Wellington	11.4	13.4	6.1	14.2	6.9	14.7	9.2	15.2
Tasman/Nelson/Malborough/West Coast	7.7	15.2	8.3	12.4	7.9	15.3	7.9	22.8
Canterbury	6.7	11.5	6.4	10.1	7.3	10	6.6	11.1
Otago	5.9	11.1	5.6	7.7	4.1	9.5	6.4	14.7
Southland	6.6	16	10.9	17.1	7.7	20.8	9	17.5
Total all New Zealand	8.3	15.5	7.8	14.9	7.3	15.1	8.1	15.5

References

1. Howden-Chapman P. Housing standards: a glossary of housing and health. *J Epidemiol Community Health* [Internet]. 2004 [cited 2017 July 11]; 58:162-68. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732704/>.
2. Statistics New Zealand. 2013 QuickStats about housing [Internet]. 2014 [cited 2017 July 11]; Wellington: Statistics New Zealand. Available from <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-housing/types-occupied-dwellings.aspx>.
3. White V, Jones M, Cowan V, Chun S. BRANZ 2015 house condition survey: comparison of house condition by tenure. [Internet]. 2017; [cited 2017 July 11] Wellington: Building Research Association New Zealand. Available from https://www.branz.co.nz/cms_display.php?st=1&sn=18&pg=17270.
4. Amore K. Severe housing deprivation in Aotearoa/New Zealand: 2001-2013. [Internet] 2016; [cited 2017 July 10] Wellington: He Kainga Oranga/Housing & Health Research Programme, University of Otago. Available from <http://www.healthyhousing.org.nz/research/current-research/measuring-homelessness/>.
5. Ministry of Health. Analysis of household crowding based on 2013 census data. [Internet]. 2014; [cited 2017 July 10] Wellington: Ministry of Health. Available from <http://www.health.govt.nz/publication/analysis-household-crowding-based-census-2013-data>.
6. Amore K. Housing affordability and deprivation. *PHA Lens: Focusing on Public Health*. [Internet]. 2017;2(1):10 [cited 2017 July 10]. Public Health Association, Wellington. Available from <https://app.box.com/s/cjik0sbalrwf10nlp5sixttso3p6psov>.
7. Baker, MG. Household crowding an avoidable health risk. *Build* [Internet]. 2007;98:36–37. [cited 2017 July 10] Available from <http://www.buildmagazine.org.nz/issues/show/build-98>.
8. Baker MG, Telfar-Barnard L, Kvalsvig A, Verrall A, Zhang J, Keall M et al. Increasing incidence of serious infectious diseases and inequalities in New Zealand: a national epidemiological study. [Internet]. *Lancet* 2012; [cited 2017 July 10] 379:1112-19. Available from [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(11\)61780-7/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61780-7/fulltext).
9. Howden-Chapman P, Issacs N, Crane J, Chapman R. Housing and health: the relationship between research and policy. [Internet]. *Environ Health Research* 1996 [cited 2017 July 11] 6(3):173-185. Available from <http://www.tandfonline.com/doi/abs/10.1080/09603129609356888?journalCode=cije20>.
10. Powell-Hoyland V, Homer C, Cronin de Chavez A, Tod AM, Nelson P, Stocks AJ. Cold snaps – children’s health in a cold, damp home: influencing policy and practice. [Internet]. *People Place and Policy* 2016; [cite 2017 July 11] 10(1):57-76. Available from <https://extra.shu.ac.uk/ppp-online/cold-snaps-childrens-health-in-a-cold-damp-home-influencing-policy-and-practice/>.
11. Baker MG, McDonald A, Zhang J, Howden-Chapman P. Household crowding in New Zealand: a systematic review and burden of disease estimate. [Internet]. 2013; [cited 2017 July 11] Wellington: He Kainga Oranga/Housing and Health Research Programme, University of Otago. Available from <http://www.healthyhousing.org.nz/publications/>.

12. Goodyear RK, Fabian A, Hay J. Finding the crowding index that works best for New Zealand. Statistics New Zealand Working Paper 11-04. [Internet]. 2011; [cited 2017 July 11] Wellington: Statistics New Zealand. Available from <http://www.stats.govt.nz/methods/research-papers/working-papers-original/finding-crowding-index-11-04.aspx>.
13. Grimes A, Denne T, Howden-Chapman P, Arnold R, Telfar-Barnard L, Preval N et al. Cost Benefit Analysis of the Warm Up New Zealand: Heat Smart Programme. [Internet]. 2012; [cited 2017 July 13] Wellington: Motu Research. Available from <https://motu.nz/our-work/urban-and-regional/housing/cost-benefit-analysis-of-the-warm-up-new-zealand-heat-smart-programme/>
14. Baker MG, McDonald A, Zhang J, Howden-Chapman P. Household crowding in New Zealand: a systematic review and burden of disease estimate. [Internet]. 2013; [cited 2017 July 10] Wellington: He Kainga Oranga/Housing and Health Research Programme, University of Otago. Available from <http://www.healthyhousing.org.nz/publications/>.
15. Williamson DA, Lim A, Thomas MG, Baker MG, Roberts SA, Fraser JD et al. Incidence, trends and demographics of Staphylococcus aureus infections in Auckland, New Zealand, 2001–2011. [Internet] BMC Infectious Diseases 2013; [cited 2017 July 12] 13:569. Available from <https://bmcinfectdis.biomedcentral.com/articles/10.1186/1471-2334-13-569>.
16. Strachan DP, Sanders CH. Damp housing and childhood asthma; respiratory effects of indoor air temperature and relative humidity. J Epidemiol Community Health [Internet] 1989; [cited 2017 July 12] 43:7-14. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1052784/>.
17. World Health Organization European Centre for Environment and Health. Environmental burden of disease associated with inadequate housing: methods for quantifying health impacts of selected housing risks in the WHO European region. [Internet]. 2011; [cited 2017 July 12]. Denmark: WHO Regional Office for Europe. Available from <http://www.euro.who.int/en/health-topics/environment-and-health/Housing-and-health/publications/2011/environmental-burden-of-disease-associated-with-inadequate-housing.-summary-report>.
18. Evans GW, Saltzman H, Cooperman JL. Housing quality and children's socioemotional health. Environment and Behaviour. [Internet]. 2001; [cited 2017 July 10] 33:389-99. Available from <http://journals.sagepub.com/doi/abs/10.1177/00139160121973043>.
19. Baker MG. Crowded houses – a significant health issue. PHA Lens: Focusing on Public Health. [Internet] 2016; [cited 2017 July 9]. 2(1):8-9. Public Health Association, Wellington. Available from <https://app.box.com/s/cjik0sbalrwf10nip5sixttso3p6psov>.
20. Office of the Deputy Prime Minister. The impact of overcrowding on health and education: a review of the evidence and literature. [Internet] 2004; [cited 2017 July 12] London: Office of the Deputy Prime Minister. Available from <http://dera.ioe.ac.uk/5073/>.
21. Solari CD, Mare RD. Household crowding effects on children's wellbeing. Soc Sci Res [Internet] 2012; [cited 2017 July 12] 41(2):464-72. Available from <http://www.sciencedirect.com/science/article/pii/S0049089X11001694>.
22. Marmot Review Team. The health impacts of cold homes and fuel poverty. [Internet]. 2011; [cited 2017 July 12] London: Friends of the Earth England, Wales and Northern Ireland. Available from <http://www.instituteofhealthequity.org/resources-reports/the-health-impacts-of-cold-homes-and-fuel-poverty>

23. Evans GW, Lepore SJ, Shejwal BR, MN Palsane. Chronic residential crowding and children's wellbeing: an ecological perspective. *Child Dev.* [Internet] 1998; [cited 2017 July 11] 69(6):1514-23. Available from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.1998.tb06174.x/abstract;jsessionid=974F87C2107ABF750C961F250EF11661.f02t02>.
24. Howden-Chapman P, Viggers H, Chapman R, O'Sullivan K, Telfar-Barnard L, Lloyd B. Tackling cold housing and fuel poverty in New Zealand: a review of policies, research and health impacts. *Energy Policy* [Internet] 2011; [cited 2017 July 11]. Available from https://www.researchgate.net/publication/251560838_Tackling_cold_housing_and_fuel_poverty_in_New_Zealand_A_review_of_policies_research_and_health_impacts
25. Boardman B. Fixing fuel poverty: challenges and solutions. [Internet] 2013; [cited 2017 July 12] London: Routledge. Available from <https://books.google.co.nz/books?id=OLHqMimoqJAC&dq=Fixing+fuel+poverty:+challenges+and+solutions&lr=>
26. Energy Efficiency and Conservation Authority [Internet]. Wellington: Energy Efficiency and Conservation Authority. Keeping your home warm and dry: three essentials for a healthy home. [cited 2017 July 13] Available from <https://www.energywise.govt.nz/at-home/3-essentials/>.
27. Mendell M, Mirer M, Cheung K, Douwes J, Torben S, Bønløkke J et al. Health affect associated with dampness and mould. In *World Health Organization Guidelines for Indoor Air Quality: Dampness and mould.* [Internet]. 2009; [cited 2017 July 9] Geneva, Switzerland: World Health Organization. Available from <http://www.who.int/indoorair/publications/7989289041683/en/>
28. Telfar-Barnard L, Zhang J. The impact of respiratory disease in New Zealand 2016 update. [Internet]. 2016; [cited 2017 July 12] Wellington: The Asthma Foundation. Available from <https://www.asthmafoundation.org.nz/research/the-impact-of-respiratory-disease-in-new-zealand-2016-update>
29. Free S, Howden-Chapman P, Pierse N, Viggers H. More effective home heating reduces school absences for children with asthma. *J Epidemiol Community Health.* [Internet]. 2010; [cited 2017 July 10] 64:379-86. Available from <http://jech.bmj.com/cgi/lookup?view=long&pmid=19776423>
30. Shortt N, Rugkasa J. "The walls were so damp and cold": fuel poverty and ill health in Northern Ireland: results from an intervention. *Health and Place.* [Internet] 2007; [cited 2017 July 13] 13:99-110. Available from <http://www.sciencedirect.com/science/article/pii/S1353829205000821?via%3Dihub>.
31. Green G, Gilbertson J. Warm front, better health: Health impact evaluation of the Warm Front Scheme. *Soc Sci Med* [Internet] 2006; [cited 2017 July 14] 63(4):946-56. Available from <http://www.sciencedirect.com/science/article/pii/S0277953606001122?via%3Dihub>
32. Ministry of Health. Warmer, drier homes. [Internet] updated 2017 June 23 [cited 2017 July 18]. Available from <http://www.health.govt.nz/your-health/healthy-living/warmer-drier-homes>
33. World Bank. World Bank Development report 2013: Jobs. [Internet]. 2013; [cited 2017 July 17] Washington: World Bank. Available from http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/EXTN_WDR2013/0,,contentMDK:23044836~pagePK:8258258~piPK:8258412~theSitePK:8258025,0.html

34. Institute of Health Equity and Public Health England. Local action on health inequalities: Promoting good jobs to reduce health inequalities. [Internet] 2015; [cited 2017 July 14] London: Institute for Health Equity. Available from: <https://www.gov.uk/government/publications/local-action-on-health-inequalities-promoting-good-quality-jobs>
35. Royal Australasian College of Physicians Australasian Faculty of Occupational and Environmental Medicine. What is good work? Position statement. [Internet] 2013; [cited 2017 July 14] Sydney: Royal Australasian College of Physicians. Available from <https://www.racp.edu.au/docs/default-source/resources/afoem-pos-what-is-good-work-2013.pdf>
36. Statistics New Zealand. QuickStats about unpaid work. [Internet]. 2006; [cited 2017 July 16]. Wellington: Statistics New Zealand. Available from <http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/quickstats-about-a-subject/unpaid-work.aspx>
37. Royal Australasian College of Physicians Australasian Faculty of Occupational and Environmental Medicine. Realising the health benefits of good work. Consensus statement. [Internet] 2013; updated 2017 [cited 2017 August 7]. Available from <https://www.racp.edu.au/advocacy/division-faculty-and-chapter-priorities/faculty-of-occupational-environmental-medicine/health-benefits-of-good-work>
38. Taylor M, Marsh G, Nicol D, Broadbent P. Good Work: Taylor Review of Modern Working Practices.[Internet] 2017; [cited 2017 August 7]. London: Department for Business, Energy and Industrial Strategy. Available from <https://www.gov.uk/government/publications/good-work-the-taylor-review-of-modern-working-practices>
39. Quigley R and Baines J. The social value of having a job. [Internet] Ministry for Primary Industries Working Paper No. 2014/24. 2014; [cited 2017 July 14]. Wellington: Ministry for Primary Industries. Available from <http://www.mpi.govt.nz/document-vault/5266>
40. Constable S, Coats D, Bevan S Mahdon M. Good jobs. [Internet]. 2009; [cited 2017 July 16] London: The Work Foundation. Available from www.hse.gov.uk/research/rrpdf/rr713.pdf.
41. World Health Organization. Closing the gap in a generation: Health equity through action on the social determinants of health. [Internet]. 2008; [cited 2017 July 10] Geneva, Switzerland: World Health Organization. Available from http://www.who.int/social_determinants/thecommission/finalreport/en/
42. Idris, MA, Dollard, MF and Winefield, AH. The effect of globalisation on employee psychological health and job satisfaction in Malaysian workplaces. [Internet] Journal of Occupational Health. 2011; [cited 2017 July 17] Vol 53: 447-454. Available from https://www.jstage.jst.go.jp/article/joh/53/6/53_11-0035-FS/article
43. D'Souza RM, Strazdins L, Lim LLY, Broom DH, Rodgers B. Work and health in a contemporary society: Demands, control and insecurity. J Epidemiol Community Health [Internet] 2003; [cited 2017 July 15] 57:849-54. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732324/>
44. Benarch J, Vives A, Amable M, Vanroelen C, Tarafa G, Muntaner C. Precarious employment: Understanding an emerging social determinant of health. [Internet]. Ann Rev Public Health 2014; [cited 2017 July 16] 35:229-53. http://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-032013-182500?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed.

45. Arends I, Prinz C, Amba F. Job quality, health and at-work productivity. OECD Social, Employment and Migration Working Papers No. 195. [Internet] 2017; [cited 2017 July 17] Paris: OECD Publishing. Available from http://www.oecd-ilibrary.org/employment/job-quality-health-and-at-work-productivity_43ff6bdc-en?crawler=true.
46. Royal Australasian College of Physicians Australasian Faculty of Occupational and Environmental Medicine. Improving workforce health and workplace productivity: a virtuous circle. Position statement. [Internet] 2013; [cited 2017 July 18]. Sydney: Royal Australasian College of Physicians. Available from <https://www.racp.edu.au/docs/default-source/advocacy-library/improving-workforce-health-and-workplace-productivity.pdf>.
47. OECD. Fit mind, fit job: from evidence to practice in mental health and work. Mental Health and Work. [Internet] 2015; [cited 2017 July 17] Paris: OECD Publishing. http://www.oecd-ilibrary.org/employment/fit-mind-fit-job/summary/english_a6fa5b90-en.
48. Waddell G, Burton A. Is work good for your health and wellbeing? [Internet] 2006; [cited 2017 July 17]. London: The Stationery Office. Available from <https://www.gov.uk/government/publications/is-work-good-for-your-health-and-well-being>.
49. Statistics New Zealand. Employment relationships: permanent and temporary workers: December 2016 quarter. [Internet] 2016; [cited 2017 July 14] Available from http://www.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/employment-relationships.aspx.
50. Brown E, Newman A, Blair S. The difference a living wage makes. Paper to the Population Health Congress. [Internet] 2014; [cited 2017 July 18]. Available from https://d3n8a8pro7vhm.cloudfront.net/nzlivingwage/pages/129/attachments/original/1434872267/The_Difference_a_Living_Wage_Makes_09.10.14-2.docx?1434872267
51. Perry B. The material wellbeing of New Zealand households: trends and relatives using non-income measures, with international comparisons. [internet] 2014; [cited 2017 July 18] Wellington: Ministry of Social Development. Available from <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/living-standards/index.html>
52. Living Wage Aotearoa. What is the Living Wage? [Internet]. Not dated; [cited 2017 July 13] Available from http://www.livingwage.org.nz/what_is_the_living_wage.
53. King P, Waldegrave C. Report of an investigation into defining a living wage for New Zealand. [Internet] 2012; [cited 2017 July 18] Wellington: Family Centre Social Policy Research Unit. Available from https://d3n8a8pro7vhm.cloudfront.net/nzlivingwage/pages/129/attachments/original/1434872250/Living_Wage_Investigation_Report.pdf?1434872250.
54. Employment New Zealand. Current minimum wage rates. [Internet] 2017; [cited 2017 July 13]. Available from <https://www.employment.govt.nz/hours-and-wages/pay/minimum-wage/minimum-wage-rates>.
55. St John S, So Y. Children and the living wage. [Internet] 2017; [cited 2017 July 13] Auckland: Child Poverty Action Group. Available from <http://www.cpag.org.nz/assets/170227%20CPAG%20Children%20and%20the%20living%20wage.pdf>
56. Simpson J, Duncanson M, Oben G, Wicken A, Gallagher S. Child poverty monitor technical report (National Report). [Internet]. 2016; [cited 2017 July 10] New Zealand Child and Youth Epidemiology Service. Available from www.nzchildren.co.nz

57. Perry B. The material wellbeing of New Zealand households: trends and relatives using non-income measures, with international comparisons. [Internet] 2016; [cited 2017 July 16] Wellington: Ministry of Social Development. Available from <https://www.msdc.govt.nz/about-msd-and-our-work/publications-resources/monitoring/living-standards/index.html>
58. Bhatia R, Katz M. Estimation of health benefits from a local living wage ordinance. *Am J Public Health*. [Internet] 2001; [cited 2017 July 13] 91(9):1398-1402. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446793/>
59. Social Research Centre. Safe Work Australia: Return to Work Survey Summary Report (Australia and New Zealand) [Internet]. 2017 [cited 2017 August 7] Melbourne; Social Research Centre. Available from <https://www.safeworkaustralia.gov.au/collection/return-work-survey-2016-australia-and-new-zealand>
60. Mroz TA, Savage TH. The long term effects of youth unemployment. *J Human Resources*. [Internet] 2006; [cited 2017 July 20] (2):259-293. Available from <http://jhr.uwpress.org/content/XLI/2/259.short>
61. Maloney T. Isolating the scarring effects associated with economic inactivity of youth in New Zealand: Evidence from the Christchurch Health and Development Study. Report to the Labour Market Policy Group, New Zealand Department of Labour. [Internet] 2004; [cited 2017 July 19] Auckland: New Zealand Department of Labour. Available from <http://thehub.superu.govt.nz/project/isolating-scarring-effects-associated-economic-inactivity-youth-new-zealand-evidence>
62. Pasheco G, Dye J. Estimating the cost of youth disengagement in New Zealand. Department of Economics Working Paper Series, Faculty of Business and Law. [Internet] 2013; [cited 2017 July 20] Auckland: AUT University. Available from www.aut.ac.nz/_data/assets/pdf_file/0006/373335/Economics-WP-2013-04.pdf
63. Department of Labour. Youth in the labour market. National Monitoring Series. 2009; Wellington: Department of Labour. Cited by Pasheco G. The cost of poor transitions for youth. [Internet]. 2012; [cited 2017 July 16] Auckland: New Zealand Work Research Institute. Available from https://www.aut.ac.nz/_data/assets/pdf_file/0019/.../final_report_Nov2012.pdf
64. Pasheco G. The cost of poor transitions for youth. [Internet] 2012; [cited 2017 July 16] Auckland: New Zealand Work Research Institute. Available from https://www.aut.ac.nz/_data/assets/pdf_file/0019/.../final_report_Nov2012.pdf
65. Statistics New Zealand. Labour market statistics. [Internet]. 2017; [cited 2017 July 18]. Statistics New Zealand. Available from http://www.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/LabourMarketStatistics_HOTPDdec16qtr/Commentary.aspx
66. Samoilenko A, Carter K. Economic outcomes of youth not in education, employment or training (NEET). New Zealand Treasury Working Paper 15/01. [Internet]. 2015; [cited 2017 July 18] Wellington: New Zealand Treasury. Available from www.treasury.govt.nz/publications/research-policy/wp/2015/15-01.
67. Goldsmith AH, Veum JR, Darity W. The impact of labour force history on self-esteem and its component parts, anxiety, depression and alienation. *J Economic Psychology*. [Internet] 1996; [cited 2017 July 16] 17:183-220. Available from <http://www.sciencedirect.com/science/article/pii/0167487096000037>

68. Prince's Trust, Macquarie Group. Youth Index 2017. [Internet] 2017; [cited 2017 July 17] London: Prince's Trust, Macquarie Group. Available from <https://www.princes-trust.org.uk/Youth-Index-2017-report.pdf>
69. Fergusson DM, Horwood LJ, Woodward LJ. Unemployment and psychosocial adjustment in young adults: causation or selection? *Soc Sci Med*. [Internet] 2001; [cited 2017 July 20] 53(3):305-20. Available from www.sciencedirect.com/science/article/pii/S0277953600003440?via%3Dihub
70. Wells JE, Baxter J, Schaarf D (eds). Substance use disorders in Te Rau Hinengaro: The New Zealand Mental Health Survey. [Internet] 2007; [cited 2017 July 24] Wellington: Alcohol Advisory Council of New Zealand. Available from <http://www.hpa.org.nz/research-library/research-publications/substance-use-disorders-te-rau-hinengaro-new-zealand-mental>.
71. Ministry of Health. New Zealand Health Strategy: Future direction. [Internet] 2016; [cited 2017 July 14] Wellington: Ministry of Health. Available from <http://www.health.govt.nz/publication/new-zealand-health-strategy-2016>.
72. Kuh D, Ben-Schlomo Y, Lynch J, Hallqvist J, Power C. Life course epidemiology. *J Epidemiol Community Health*. [Internet] 2003; [cited 2017 July 24] 57:778-783. Available from <http://jech.bmj.com/content/57/10/778.long>
73. Social Policy Evaluation and Research Unit. Families and Whānau Status Report. [Internet] 2017 [cited 2017 July 18]. Wellington; Social Policy Evaluation and Research Unit. Available from <http://www.superu.govt.nz/publication/families-and-whanau-status-report-2017>.
74. World Health Organization. Social determinants of health: What are the social determinants of health? [Internet] 2012; [cited 2017 July 19] World Health Organization. Available from http://who.int/social_determinants/sdh_definition/en/.
75. Marmot M. The health gap: the challenge of an unequal world. New York; London: Bloomsbury; 2015.
76. Rudolph L, Caplan J, Mitchell C, Ben-Moshe K, Dillon L. Health in All Policies: Improving health through intersectoral collaboration. Discussion paper. [Internet] 2013; [cited 2017 July 21] Washington: Institute of Medicine of the National Academy of Sciences. Available from <http://www.phi.org/resources/?resource=health-in-all-policies-improving-health-through-intersectoral-collaboration>.
77. Royal Australasian College of Physicians. Health in All Policies. Position statement. [Internet] 2016; [cited 2017 July 18] Sydney: Royal Australasian College of Physicians. Available from <https://www.racp.edu.au/docs/default-source/advocacy-library/health-in-all-policies-position-statement.pdf>.
78. Ministry of Health. Health loss in New Zealand 1990-2013: a report from the New Zealand Burden of Disease, Injuries and Risk Factors study. [Internet] 2016; [cited 2017 July 22] Wellington: Ministry of Health. Available from <http://www.health.govt.nz/publication/health-loss-new-zealand-1990-2013>.
79. Ministry of Health. Obesity statistics. [Internet] Updated 24 January 2017. [cited 2017 July 22] Available from <http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/obesity-statistics?mega=Health%20statistics&title=Obesity>.
80. Pearse J, Blakely T, Witten K, Bartie P. Neighbourhood deprivation and access to fast food retailing: a national study. *Am J Prev Med* [Internet]. 2007; [cited 2017 July 18] 32(5):375-82. Available from [http://www.ajpmonline.org/article/S0749-3797\(07\)00017-7/fulltext](http://www.ajpmonline.org/article/S0749-3797(07)00017-7/fulltext)

81. Vandevijvere S, Sushil Z, Exeter DJ, Swinburn B. Obesogenic food retail environments around New Zealand schools: a national study. *Am J Prev Med.* [Internet] 2016; [cited 2017 July 18] 51(3):e57-66. Available from [http://www.ajpmonline.org/article/S0749-3797\(07\)00017-7/fulltext](http://www.ajpmonline.org/article/S0749-3797(07)00017-7/fulltext)
82. Suglia SF, Shelton RC, Hsiao A, Wang YC, Rundle A, Link BG. Why the neighbourhood social environment is critical in obesity prevention. *J Urban Health* [Internet] 2016; [cited 2017 July 24] 93(1):206-12. <https://link.springer.com/article/10.1007%2Fs11524-015-0017-6>
83. Carter AM, Dubois L. Neighbourhoods and child adiposity: a critical appraisal of the literature. *Health Place* 2010; 16(3):616-28. DOI: <https://doi.org/10.1016/j.healthplace.2009.12.012>. Accessed 25 July 2017.
84. Leal C, Chaix B. The influence of geographic life environments on cardiometabolic risk factors: a systematic review, a methodological assessment and a research agenda. *Obes Rev* [Internet] 2011; [cited 2017 July 20] 12(3):217-30. Available from <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-789X.2010.00726.x/abstract;jsessionid=E2BE800ECCBB07556CDC885440D69501.f02t04>
85. Luan H, Law J, Quick M. Identifying food deserts and swamps based on relative healthy food access: a spatio-temporal Bayesian approach. *Int J Health Geogr.* [Internet] 2015; [cited 2017 July 26] 14:37. Available from <https://ij-healthgeographics.biomedcentral.com/articles/10.1186/s12942-015-0030-8>
86. Tenkanen H, Saarsalmi P, Järv O, Salonen M, Toivonen T. Health research needs more comprehensive accessibility measures: integrating time and transport modes from open data. *Int J Health Geogr.* [Internet] 2016; [cited 2017 July 26] 15:23. Available from <https://ij-healthgeographics.biomedcentral.com/articles/10.1186/s12942-016-0052-x>
87. Sushil Z, Vandevijvere S, Exeter DJ, Swinburn B. Food swamps by area socioeconomic deprivation in New Zealand: a national study. *Int J Public Health* [Internet] 2017; [cited 2017 July 28] epub ahead of print. Available from <https://link.springer.com/article/10.1007%2Fs00038-017-0983-4>
88. Auckland Regional Public Health Service. Healthy Auckland Together Monitoring report 1: 2015 baseline. [Internet] 2015; [cited 2017 July 28] Auckland: Auckland Regional Public Health Service. Available from <http://www.healthyaucklandtogether.org.nz/assets/Uploads/Healthy-Auckland-Together-Monitoring-Report-2015-Baseline-Final.pdf>.
89. Walton M, Signal L, Thomson G. Household economic resources as a determinant of childhood nutrition: policy responses for New Zealand. *Social Policy J New Zealand.* [Internet] 2009; [cited 2017 July 26]. 36:194-207. Available from <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj36/36-household-economic-resources.html>.
90. Office of the Children's Commissioner. Stats on kids. [Internet] [not dated, cited 2017 August 3]. Available from <http://www.occ.org.nz/statsonkids/>.
91. Office of the Children's Commissioner. Being-child-centred: elevating children's interests in the work of your organization. [Internet] 2015; [cited 2017 August 3] Wellington: Office of the Children's Commissioner. Available from <http://www.occ.org.nz/publications/reports/>
92. Statistics New Zealand. Household economic survey (income): year ended June 2015. [Internet] November 2015 [cited 2017 July 19]. Available from http://www.stats.govt.nz/browse_for_stats/people_and_communities/Households/HouseholdEconomicSurvey_HOTPYeJun15/Commentary.aspx#sufficient.

93. Gibson K, Abraham Q, Asher I, Black R, Turner N et al. Child poverty and mental health: a literature review. [Internet] 2017; [cited 2017 July 16]. Auckland: New Zealand Psychological Association and Child Poverty Action Group. Available from http://www.cpag.org.nz/assets/Publications/170516%20CPAGChildPovertyandMentalHealthreport-CS6_WEB.pdf.
94. Due P, Merlo J, Harel-Fisch Y, Damsgaard MT, Helstein BE, Hetland J, Currie C et al. Socioeconomic inequality in exposure to bullying during adolescence: a cross-sectional, multilevel study in 35 countries. *Am J Public Health*. [Internet] 2009; [cited 2017 July 24]. 99(5):907-14. Available from http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2008.139303?url_ver=Z39.88-2003&rft_id=ori%3Arid%3Acrossref.org&rft_dat=cr_pub%3Dpubmed
95. Murachver T. Bullying in adolescence. In *Improving the transition: reducing social and psychological morbidity during adolescence*. A report from the Prime Minister's Chief Science Advisor. [Internet] 2011; [cited 2017 July 25]. Auckland: Office of the Prime Minister's Science Advisory Committee. Available from <http://www.pmcsa.org.nz/wp-content/uploads/Adolescence-transition-interim-report-release-1Jul101.pdf>.
96. Fergusson D, Boden J. Alcohol use in adolescence. In *Improving the transition: reducing social and psychological morbidity during adolescence*. A report from the Prime Minister's Chief Science Advisor. [Internet] 2011; [cited 2017 July 25]. Auckland: Office of the Prime Minister's Science Advisory Committee. Available from <http://www.pmcsa.org.nz/wp-content/uploads/Adolescence-transition-interim-report-release-1Jul101.pdf>.
97. D'Souza A, Signal L, Edwards R. Patchy advances in child health hide a systemic failure to prioritise children in public policy. Editorial. *NZ M J* [Internet] 2017; [cited 2017 July 27]. 130(1450). Available from <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2017/vol-130-no-1450-17-february-2017/7154>. Accessed 27 July 2017.
98. Mental Health Foundation of New Zealand. Quick facts and stats about mental health. [Internet] 2014; [cited 2017 July 10]. Auckland: Mental Health Foundation.
99. Ministry of Health. NZ Health Survey: Annual update of key results 2015/16. [Internet] 2017; [cited 2017 July 10]. Ministry of Health. Available from <http://www.health.govt.nz/publication/annual-update-key-results-2015-16-new-zealand-health-survey>.
100. Radio New Zealand. Is this the brighter future? The faces of mental health. [Internet] 2017 June 26; [cited 2017 July 28]. Wellington: Radio New Zealand. Available from <http://www.radionz.co.nz/programmes/brighter-future/story/201848039/brighter-future-the-faces-of-mental-health>.
101. McAllen J. Trauma layered upon trauma: the fight to turn the tide in Māori youth suicide. The Spinoff. [Internet] 8 February 2017. [cited 2017 July 27] Available from <https://thespinoff.co.nz/society/08-02-2017/trauma-layered-upon-trauma-the-fight-to-turn-the-tide-in-maori-youth-suicide/>.
102. Moir J and Hunt E. Suicides expose failings in mental health service. *Dominion Post*. [Internet] 15 February 2013. [2017 July 24] Available from <http://www.stuff.co.nz/national/health/8306492/Suicides-expose-failings-in-mental-health-service>.
103. Meier C. Canterbury families 'struggle to cope' as children wait 'months' for mental health help. *The Press*. [Internet] 11 May 2017. [cited 2017 July 27] Available from <http://www.stuff.co.nz/national/health/92425319/Canterbury-families-struggling-to-cope-as-children-wait-months-for-mental-health-help>.

104. McDonald N. Children and teenagers with serious mental health problems wait months for help. Stuff.co.nz. [Internet] 2 April 2016. [cited 2017 July 27] Available from <http://www.stuff.co.nz/national/health/77955402/Children-and-teenagers-with-serious-mental-health-problems-wait-months-for-help>.
105. Health Quality and Safety Commission. Ngā rāhui hau kura: Suicide mortality review committee feasibility study 2014-15. [Internet] 2016; [cited 2017 July 27] Wellington: Health Quality and Safety Commission. Available from <https://www.hqsc.govt.nz/our-programmes/mrc/sumrc/publications-and-resources/publication/2471/>.
106. Te Pou o Te Whakaaro Nui. Equally Well: Take action to improve physical health outcomes for New Zealanders. [Internet] 2014; [cited 2017 July 26]. Auckland: National Centre of Mental Health Research, Information and Workforce Development. Available from <https://www.tepou.co.nz/uploads/files/resource-assets/equally-well-consensus-position-paper-september-2014.pdf>.
107. New Zealand Drug Foundation. Drug use in New Zealand. [web page] [not dated; cited 2017 July 27]. Available from <https://www.drugfoundation.org.nz/policy-and-advocacy/drugs-in-nz/>.
108. Sellman D, Conner J. Too many risky drinkers, too little alcohol reform. Editorial. N Z MJ [Internet] 2014; [cited 2017 July 27] 127(1401). Available from <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2014/vol-127-no-1401/6270>. Accessed 27 July 2017.
109. Te Pou o te Whakaaro Nui. The physical health of people with a serious mental illness and/or addiction: An evidence review. [Internet] 2014; [cited 2017 July 21]. Auckland: National Centre of Mental Health Research, Information and Workforce Development. Available from <https://www.tepou.co.nz/uploads/files/resource-assets/the-physical-health-of-people-with-a-serious-mental-illness-andor-addiction-an-evidence-review.pdf>.
110. United Nations Development Programme. Sustainable development goals. [web page] 2017; New York: United Nations Development Programme. Available from <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>
111. Statistics New Zealand. New Zealand youth NEET by regional council by age (Annual-December). [data file]. Available from <http://www.stats.govt.nz/infoshare/SelectVariables.aspx?pxID=53321c90-e329-48c0-ad89-622a62f5babd>. Accessed 17 July 2017.