

$\label{eq:link} Indicators\, Aotearoa\, New\, Zeal and - Ng\bar{a}\, T\bar{u}tohu\, Aotearoa\, :\, Consultation$

September 2018

Submitter: Cancer Society of New Zealand (National Office)

Measuring our wellbeing – te ine i tō tātou toiora

Stats NZ is developing Indicators Aotearoa New Zealand to track New Zealand's progress. The set of indicators will go beyond economic measures, such as gross domestic product, to include wellbeing and sustainable development.

The indicators will build on international best practice and will be tailored to New Zealand by including cultural and te ao Māori perspectives. They will enable the government, councils, businesses, communities, and individuals to make choices around wellbeing and sustainability.

Stats NZ is working with the Treasury to ensure Indicators Aotearoa New Zealand aligns with the Treasury's Living Standards Framework.

Indicators Aotearoa New Zealand will be delivered by Stats NZ, and will support the government's ambition to use a wellbeing approach to strategic decision-making.

The indicators will inform a range of domestic and international reporting, including reporting against implementation of the United Nations Sustainable Development Goals.

From the list below, please choose the five things your group / organisation think are most important for the well-being of New Zealanders.

Relationships with friends and whanau Health Housing Neighbourhood and community Access to facilities such as libraries, parks or green spaces Work, jobs, career Financial security Trust in government and the public sector Education, skills and training Leisure and recreation Ability to have a say on local and national issues



Cultural identity and expression Personal safety Spirituality or religion Air quality Rivers, lakes, and oceans Wildlife, forests and the bush

We'd like to know a little more about which aspects of those options you think contribute most to the well-being of New Zealanders.

1. What is it about health you think contributes most to well-being? Please be as specific as you can.

Cancer is the leading cause of death in New Zealand and incidence is expected to increase [1], resulting in tremendous human and economic costs. There are substantially worse outcomes and a high burden in socioeconomically disadvantaged populations [2-4].

Around one third of deaths from cancer are due to the 5 leading modifiable risks: tobacco use, obesity, unhealthy eating/low fruit and vegetable intake, limited physical activity and alcohol use [5]. Tobacco use is the most important risk factor for cancer and is responsible for approximately 40% of cancer deaths in New Zealand [6].

The full potential of cancer prevention is not being realised, particularly amongst our most vulnerable groups, although there are known proven strategies that will make a considerable difference in cancer prevention and control [7]. The Cancer Society (along with all global and national public health bodies) considers that considerable investment in the prevention of cancer and non-communicable diseases (NCDs) is urgently required if we are to make any progress in tackling the looming NCD crisis [8].

While cancer incidence and mortality are important measures of our health and well-being, the determinants of cancer, the 'causes of the causes' are also essential considerations that can be measured or assessed [9]. A comprehensive understanding of modifiable determinants of cancer and the burden on our population will inform cancer control strategies and enable us to be responsive to emerging data [10]. From a cancer prevention perspective, we argue that assessing our health and well-being should specifically consider traditional cancer incidence, survival and mortality statistics in addition to measures of progress in cancer prevention e.g. tobacco and alcohol use, overweight and obesity, physical activity.



We would also like to take this opportunity to present the case that 'health' is a crucial indicator that cannot be separated from 'well-being'. This is holistic understanding of health is captured in the World Health Organisation's definition of health as a state of "physical, mental and social well-being and not merely the absence of disease or infirmity" ([11] and similarly in Durie's definition of health as a balance of the four cornerstones: Te Taha Hinengaro (psychological health), Te Taha Wairua (spiritual health), Te Taha Tinana (physical health), Te Taha Whanau (family health) [12]. Factors that influence our physical, mental and social health and well-being are all modifiable determinants of cancer. This means that by intervening to improve or modify these factors among populations we can significantly reduce cancer incidence and mortality.

2. What is it about 'neighbour and community' you think contributes most to well-being? Please be as specific as you can.

Cohesive, well connected neighbourhoods and communities are healthier, happier and more productive. Social aspects of neighbourhoods and communities, such as crime, community support, social cohesion, cultural identity and social capital affect health and well-being as much as the individual characteristics of the residents themselves. Focusing on cancer prevention alone, we know that inadequate **social** support is associated with a substantial increase in cancer-related mortality (and is comparable to well established risk factors for cancer mortality including tobacco) [13, 14].

Neighbourhoods also comprise **man-made attributes**, including structural conditions affecting walkability and recreation, and availability of health-promoting resources (e.g., some grocery stores, playgrounds, community venues, sports facilities, sun shade, vegetable markets) and undesirable amenities (e.g., fast food restaurants, bottle shops) that influence health behaviours (e.g., physical activity, diet) [15, 16]. Tobacco companies in particular have been targeting deprived communities for decades, as evidenced by clustering of tobacco retail outlets in these communities [17, 18]

Compelling evidence shows that the social and built environmental conditions facing residents affect health as much as do the individual characteristics of residents themselves [19-21]. Neighbourhood and community conditions are therefore an important measure of the health and well-being of our communities. There are available methods to assess these conditions and proven interventions.

3. What is it about 'leisure and recreation' you think contributes most to well-being? Please be a s specific as you can.

Physical inactivity is a key risk factor for non-communicable diseases and is a leading cause of early death in New Zealand [5]. Only around 23% of New Zealand adults meet the Ministry of Health's Physical Activity guidelines which recommend at least 2 ½ hours of moderate physical activity spread throughout the week to protect health [22]. As we face alarming growing levels of cancer and heart



disease, it is vital that we maintain and improve access to parks, green spaces, walking tracks and recreational activities. Access to these spaces and facilities for all is dependent on reliable and frequent public transport, neighbourhood walkability, affordable housing, job creation and low cost/free events and facilities (among others).

We need systematic monitoring of levels of physical activity and comprehensive action to increase levels of physical activity. In 2013, member states of the World Health Assembly (WHO), including NZ, endorsed the need to implement actions to reach the target of a 10% reduction in physical inactivity by 2025 [23]. We all have a responsibility.

4. Financial security

In general, poor and deprived New Zealanders are more likely to die of cancer than their more welloff counterparts [24]. Poverty is therefore a very significant risk factor for cancer in New Zealand. Without financial security, it is more challenging to engage in cancer prevention behaviours as more immediate 'survival priorities' take precedence [25] New Zealanders living in deprived neighbourhoods struggle to afford healthy fresh food, are less able to access health care (for cancer screening or for cancer therapies for example), are more likely to face poor health literacy, and a lack of safe environments, including violent crime, reduce the possibility of exercising. Disadvantaged groups are more vulnerable to environmental factors inducing cancers such as tobacco use, sunlight and ionizing radiation (particularly from outside 'blue collar' employment), alcohol consumption and organic and inorganic chemicals [26].

Lung cancer mortality has continued to increase in lower socioeconomic groups but has started to decrease in wealthier groups [27]. In New Zealand, those living in the most deprived areas are almost four times as likely to smoke daily [28]. This is due to a cumulative load of factors such as the clustering of tobacco outlets in deprived neighbourhoods, socio-cultural norms around tobacco, exposure to second-hand smoke as children, underemployment and poor mental health. Ironically, tobacco also contributes to poverty of the smoker and their families [29].

Māori and Pacific peoples are over-represented in deprived groups and therefore action to address poverty is fundamental to improving cancer inequities in New Zealand [27]. Proven policies and practices that create healthy environments are also vital, including smokefree legislation, shade/tree policy, walkable cities, taxes on unhealthy products – such as sugary drinks- but increasing access to low cost, fresh nutritious food (30)

5. Cultural identity and expression

Secure cultural identity is a protective factor that reduces the risks of poor health and promotes wellbeing and resilience [30, 31] Although the associations between ill health and ethnicity are mediated by socioeconomic factors, it is well documented that cultural alienation contributes to poor mental health and a range of other negative outcomes [32]. From a cancer control perspective, alienation and an inability to access services which are grounded in your own ethnic worldview can result in mistrust and disengagement with health and social services and influence health seeking behaviours,



engagement with preventive health behaviours, coping strategies and contribute to health disparities [33]. In summary, healthy cultural expression represents a healthier, more resilient and tolerant society.

References

- 1. Ferlay, J., et al., *GLOBOCAN 2012 v1.1 Cancer Incidence and Mortality Worldwide*. 2014, International Agency for Research on Cancer: Lyon, France.
- 2. Tervonen, H.E., et al., *Cancer survival disparities worsening by socio-economic disadvantage over the last 3 decades in new South Wales, Australia.* BMC Public Health, 2017. **17**: p. 691.
- 3. Singh, G.K. and A. Jemal, *Socioeconomic and Racial/Ethnic Disparities in Cancer Mortality, Incidence, and Survival in the United States, 1950–2014: Over Six Decades of Changing Patterns and Widening Inequalities.* Journal of Environmental and Public Health, 2017. **2017**: p. 2819372.
- 4. Aye, P.S., J.M. Elwood, and V. Stevanovic, *Comparison of cancer survival in New Zealand and Australia, 2006–2010.* NZ Med J, 2014. **127**(1407): p. 14-26.
- 5. Ministry of Health, Health and Independence Report. The Director-General of Health's annual report on the state of public health 2015, Ministry of Health: Wellington.
- 6. Ministry of Health, Health Loss in New Zealand 1990–2013: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study. 2016, Ministry of Health Wellington.
- 7. Colditz, G.A. and K.M. Emmons, *Accelerating the Pace of Cancer Prevention- Right Now*. Cancer Prevention Research, 2018. **11**(4): p. 171.
- 8. Beaglehole, R., et al., *Priority actions for the non-communicable disease crisis*. The Lancet, 2011. **377**(9775): p. 1438-1447.
- 9. Braveman, P. and L. Gottlieb, *The Social Determinants of Health: It's Time to Consider the Causes of the Causes.* Public Health Reports, 2014. **129**(1_suppl2): p. 19-31.
- 10. Carter, S.M., L.C. Hooker, and H.M. Davey, *Writing social determinants into and out of cancer control: An assessment of policy practice.* Social Science & Medicine, 2009. **68**(8): p. 1448-1455.
- 11. World Health Organisation, *Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference*, in *Signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization (no. 2, p. 100) and entered into force on 7 April 1948*. 1946: New York.
- 12. Durie, M., Whaiora: Maori health development. 1998, Auckland: Oxford University Press.
- 13. Holt-Lunstad, J., T.B. Smith, and J.B. Layton, *Social Relationships and Mortality Risk: A Meta-analytic Review.* PLOS Medicine, 2010. **7**(7): p. e1000316.
- 14. Fleisch Marcus, A., et al., *Relationships between social isolation, neighborhood poverty, and cancer mortality in a population-based study of US adults.* PLOS ONE, 2017. **12**(3): p. e0173370.
- 15. Stafford, M., et al., *Social connectedness and engagement in preventive health services: an analysis of data from a prospective cohort study.* The Lancet Public Health, 2018. **3**(9): p. e438-e446.
- 16. Carmona, M., *Place value: place quality and its impact on health, social, economic and environmental outcomes.* Journal of Urban Design, 2018: p. 1-48.
- 17. Shortt, N.K., et al., *A cross-sectional analysis of the relationship between tobacco and alcohol outlet density and neighbourhood deprivation*. BMC Public Health, 2015. **15**: p. 1014.
- 18. Marsh, L., C. Doscher, and L.A. Robertson, *Characteristics of tobacco retailers in New Zealand*. Health & place, 2013. **23**: p. 165-170.
- 19. Gomez, S.L., et al., *The impact of neighborhood social and built environment factors across the cancer continuum: Current research, methodological considerations, and future directions.* Cancer, 2015. **121**(14): p. 2314-2330.
- 20. Gordon-Larsen, P., et al., *Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity*. Pediatrics, 2006. **117**(2): p. 417.
- 21. Singh, G.K., M. Siahpush, and M.D. Kogan, *Neighborhood Socioeconomic Conditions, Built Environments, And Childhood Obesity.* Health Affairs, 2010. **29**(3): p. 503-512.
- 22. Sport New Zealand, *Active NZ. Main report. The New Zealand participation survey 2017.* 2018, Sport New Zealand: Wellington.
- 23. World Health Organisation, *Global action plan for the prevention and control of noncommunicable diseases 2013-2020.* 2013, WHO: Geneva.



- 24. Jeffreys, M., et al., Socioeconomic inequalities in cancer survival in New Zealand: the role of extent of disease at diagnosis. Cancer Epidemiology and Prevention Biomarkers, 2009. **18**(3): p. 915-921.
- 25. Beaglehole, R., R. Bonita, and R. Magnusson, *Global cancer prevention: An important pathway to global health and development*. Public Health, 2011. **125**(12): p. 821-831.
- 26. Whiteman, D.C., et al., *Cancers in Australia in 2010 attributable to modifiable factors: summary and conclusions.* Aust N Z J Public Health, 2015. **39**(5): p. 477-84.
- 27. Teng, A.M., et al., *Ethnic inequalities in cancer incidence and mortality: census-linked cohort studies with 87 million years of person-time follow-up.* BMC Cancer, 2016. **16**: p. 755.
- 28. Ministry of Health, New Zealand Health Survey: Tier 1 statistics 2016/1. 2018, Ministry of Health: Wellington
- 29. Purcell, K.R., K. O'Rourke, and M. Rivis, *Tobacco control approaches and inequity—how far have we come and where are we going*? Health Promotion International, 2015. **30**(suppl_2): p. ii89-ii101.
- 30. Muriwai, E., C.A. Houkamau, and C.G. Sibley, *Culture as cure? The protective function of Māori cultural efficacy on psychological distress.* 2015.
- 31. Ataera-Minster, J. and H. Trowland, *Te Kaveinga: Mental health and wellbeing of Pacific peoples. Results from the New Zealand Mental Health Monitor & Health and Lifestyles Survey.* 2018, Wellington: Health Promotion Agency.
- 32. King, M., A. Smith, and M. Gracey, *Indigenous health part 2: the underlying causes of the health gap*. The Lancet, 2009. **374**(9683): p. 76-85.
- 33. Napier, A.D., et al., *Culture and health*. The Lancet, 2014. **384**(9954): p. 1607-1639.