



International Agency for Research on Cancer

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Cancer incidence in Indigenous people in Australia, New Zealand, Canada, and the USA: a comparative population-based study

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I acknowledge the traditional custodians of this land, the Jagara and Turrbal nations. I wish to pay respects to the elders past and present, and acknowledge the cultural heritage and beliefs that are still as important to the living Aboriginal and Torres Strait Islander people today.

Overview



- Overview of cancer burden among Indigenous people internationally.
 - Methods- for obtaining international epidemiological data.
 - Results- Cancer Incidence in four countries.
 - Moving forward to improving cancer outcomes.
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Background



Indigenous people in many parts of the world suffer disproportionately worse health, poverty and shorter life expectancy.

However, cancer burden has largely been overlooked:

? not a priority

? ascertainment of Indigenous status inadequate

Background



Evidence from Australia, New Zealand, Canada and the United States, four highly developed countries:

- greater incidence of some cancers [1-3]
- greater mortality [4]
- worse cancer survival [5-6]

1. AIHW 2013 2. NZ Ministry of Health 2012 3. Wiggins et al 2008 4. Moore et al 2010 5. Condon et al 2005 6. Valery et al 2006

No previous assessment of cancer incidence between the four countries.

AIM



We conducted a collaborative study, comparing cancer incidence among Māori (New Zealand), Aboriginal and Torres Strait Islander (Australia), First Nation and Inuit (Canada) and American Indian/Alaska Native (US) people with non-Indigenous people.

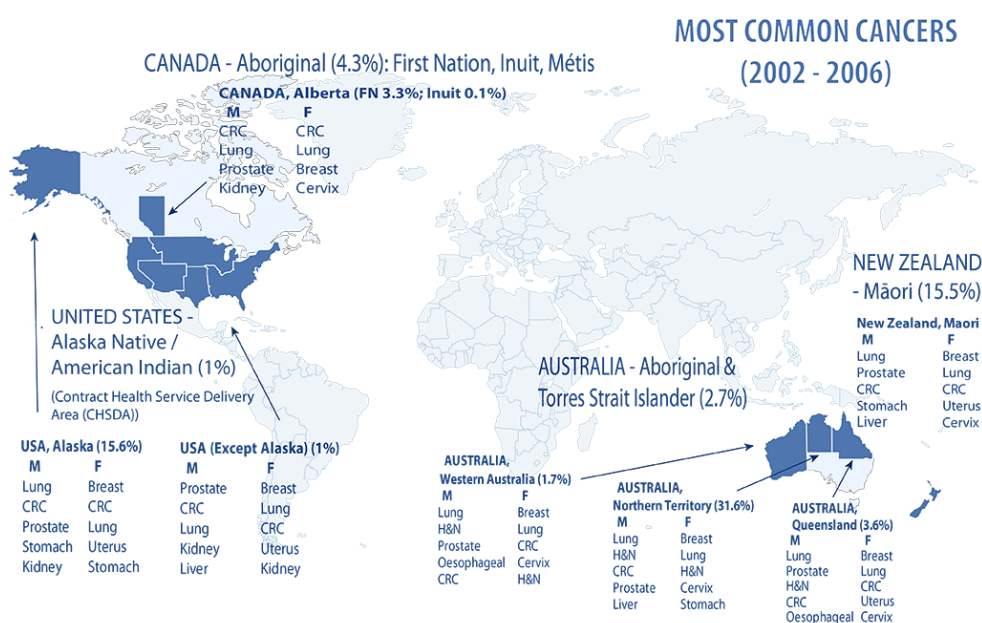
Lancet Oncology 2015 nov;16(15):1483-92 Moore SP, Antoni S, Colquhoun A, Healy B, Ellison-Loschmann L, Potter JD, Garvey G, Bray F. Cancer incidence in indigenous people in Australia, New Zealand, Canada, and the USA: a comparative population-based study.

METHODS

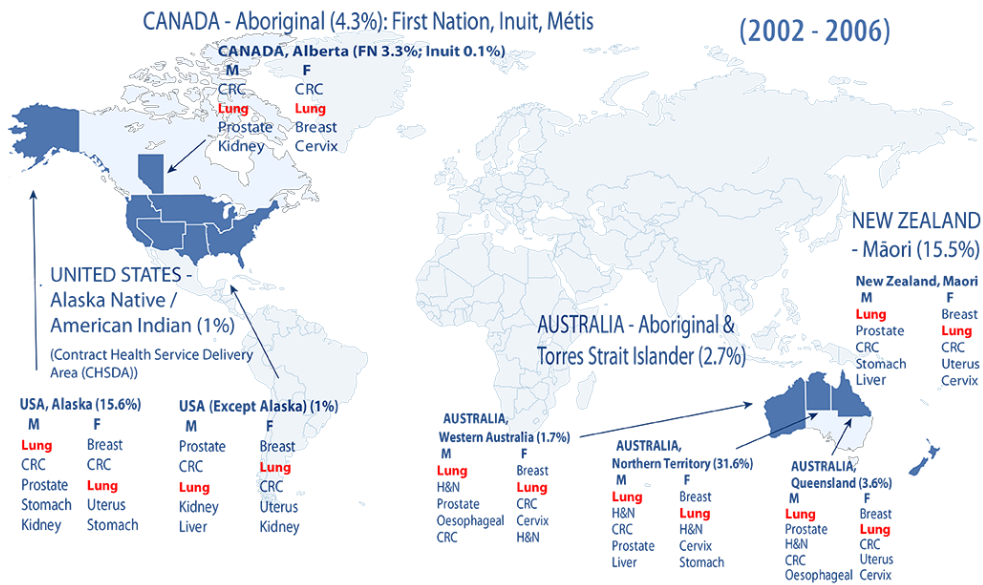


Incidence data were derived from population-based cancer registries; 3 Australian states- Queensland, WA, NT; New Zealand; Alberta, Canada; the 5 Contract Health Service Delivery Area (CHSDA) regions of the US.

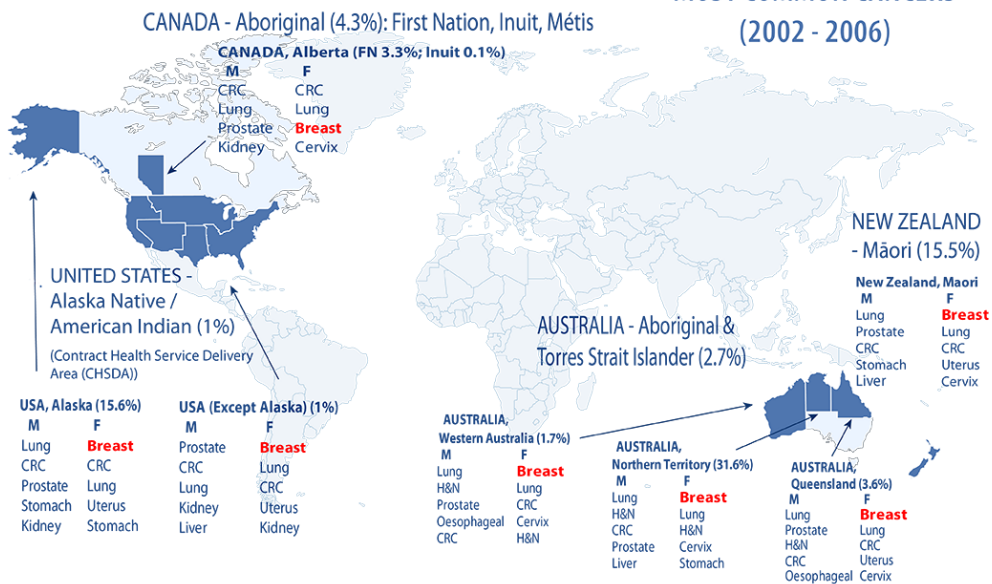
Age-standardized incidence rates computed by registry, year, sex, site and ethnicity (2002-2006), using the Segi World Standard Population (Segi 1966). Rates from Alberta were calculated directly by the registry using same methods.



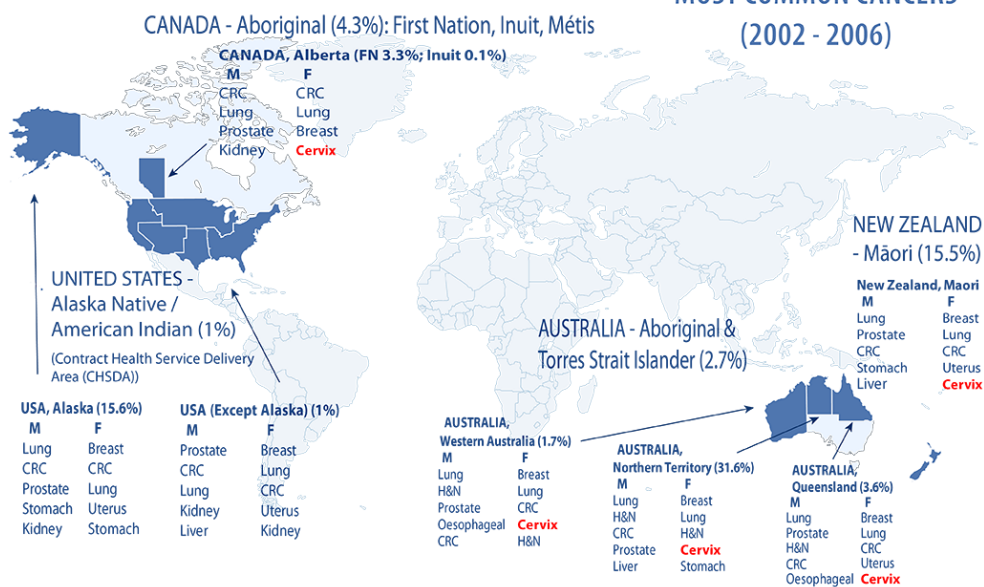
MOST COMMON CANCERS (2002 - 2006)



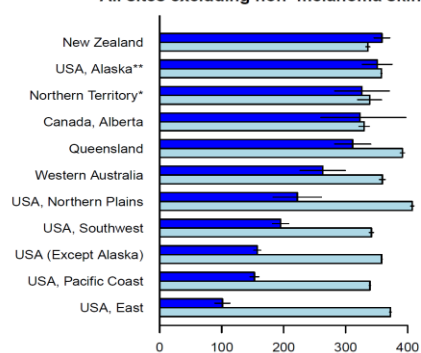
MOST COMMON CANCERS (2002 - 2006)



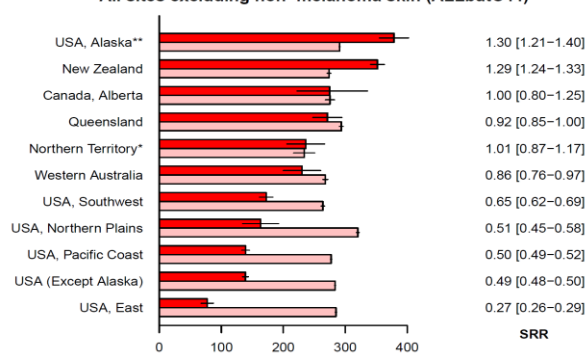
MOST COMMON CANCERS (2002 - 2006)



All sites excluding non-melanoma skin (ALLbutC44)

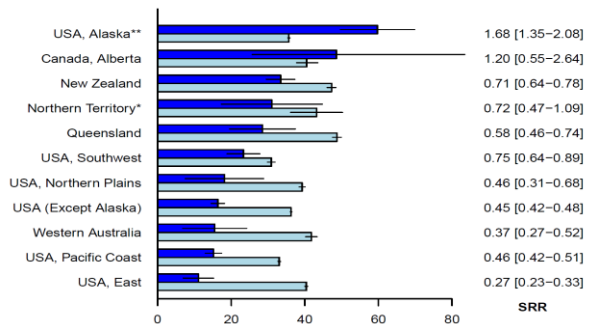


All sites excluding non-melanoma skin (ALLbutC44)

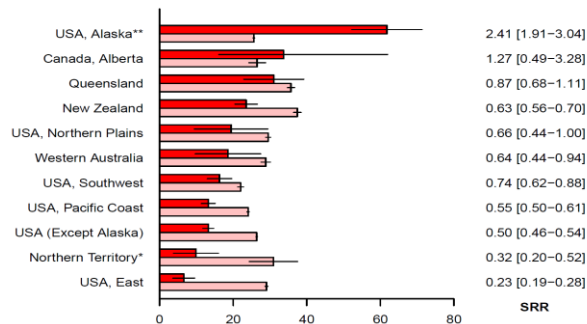


Indigenous men Indigenous women
Non-indigenous men Non-indigenous women

Colorectal (C18-20)

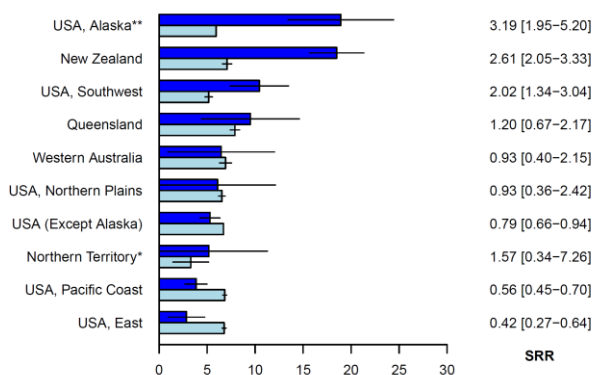


Colorectal (C18-20)

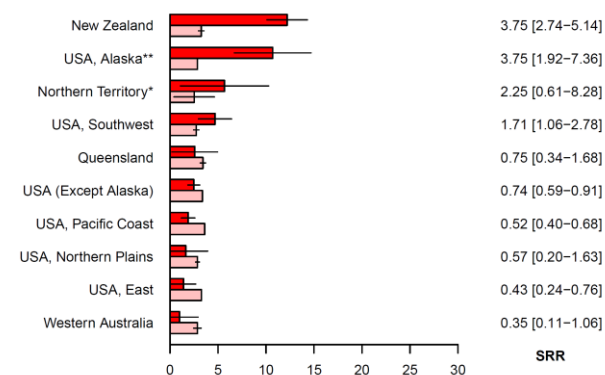


Indigenous men
Non-Indigenous men
Indigenous women
Non-Indigenous women

Stomach (C16)

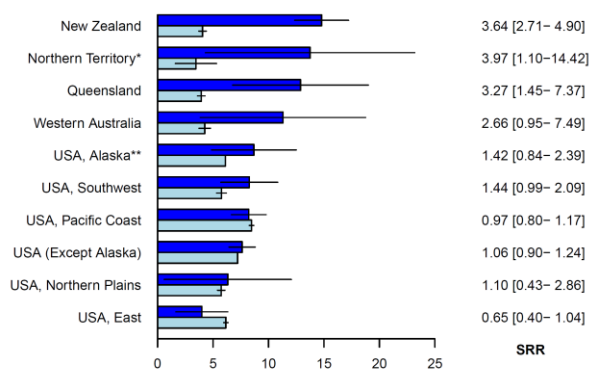


Stomach (C16)

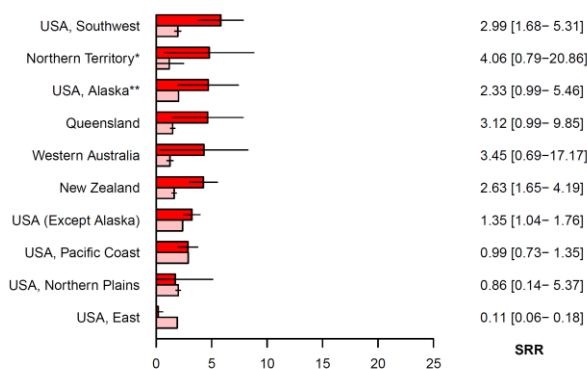


Indigenous men
Non-Indigenous men
Indigenous women
Non-Indigenous women

Liver (C22)

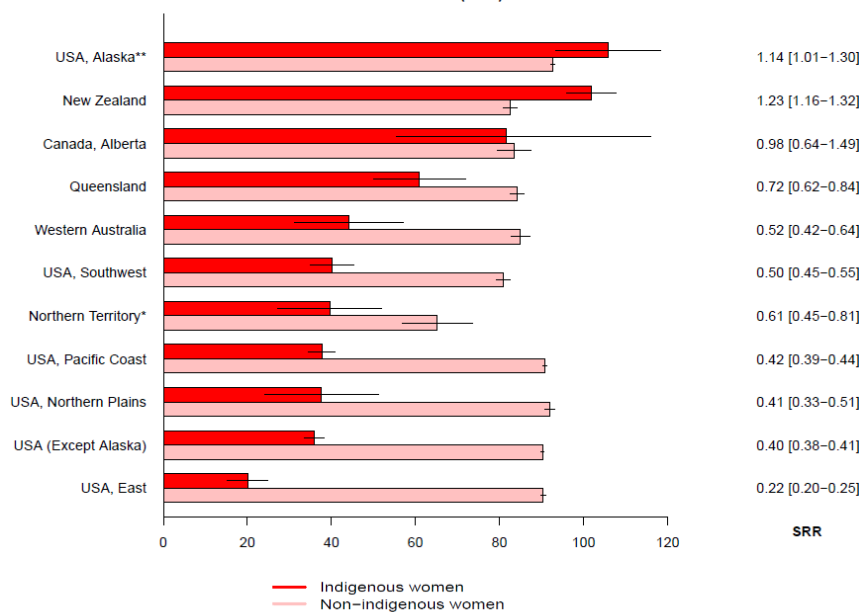


Liver (C22)

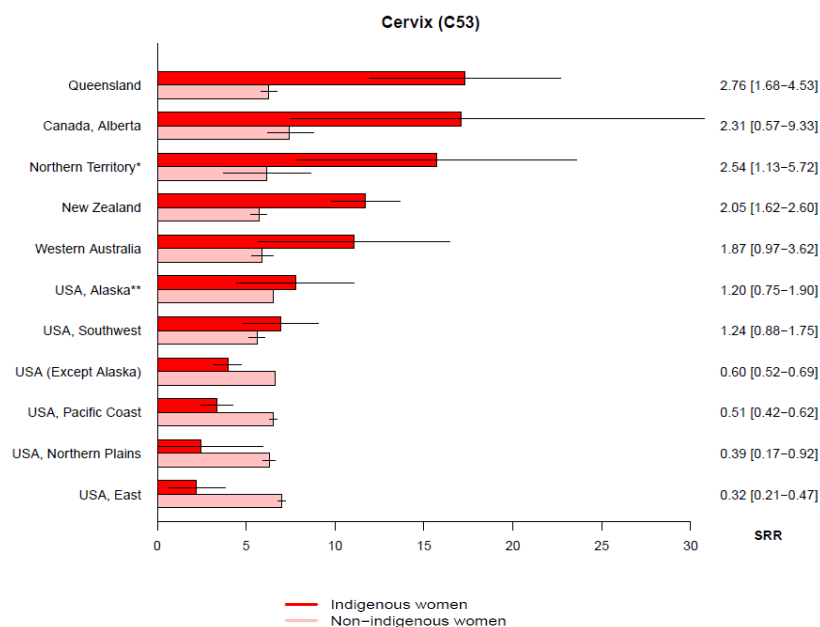


— Indigenous men — Indigenous women
— Non-indigenous men — Non-indigenous women

Breast (C50)



— Indigenous women
— Non-indigenous women



Modifiable Risk factors



- Screening
- Smoking
- Alcohol
- Infection (HPV, *H. pylori*, Hep B and C)
- Diet, physical inactivity and obesity

1 AIHW 2013 Cancer in Aboriginal and Torres Strait Islanders people of Aust

Conclusions



Greater understanding of cancer burden among Indigenous populations is of major public health importance, given that poorer outcomes contribute to the lower life expectancies of many Indigenous peoples.

Barriers include:

- History of poor consultation & engagement with Indigenous people (diminished trust in researchers).
- Inadequate identification of Indigenous status in health records.
- Lengthy and disparate processes for data acquisition across and within countries.

Ways forward....



Through extensive consultation and partnership between Indigenous communities, survivors, and researchers, cancer disparities among Indigenous people globally can be addressed.



Acknowledgements



- This work was undertaken during the tenure of an IARC-Australia Postdoctoral Fellowship from the International Agency for Research on Cancer, supported by the Cancer Council Australia (**CCA**)IARC.
 - Alberta First Nations Information Governance Center.
 - Cancer registry and data custodians in all four countries.
 - Those who have passed from cancer, those with cancer and those who are supporting a family member or friend through their cancer journey.
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