



CENTRE FOR
PUBLIC HEALTH
RESEARCH



MASSEY
UNIVERSITY
TE KUNENGA KI PŪREHUROA

UNIVERSITY OF NEW ZEALAND

Environmental Health Indicators Programme

Presentation to NZPHC

Fei Xu, Barry Borman, Deborah Read

07 October 2014

Environmental Health Indicators

- Describe the link between the environment and health
- Based on known or plausible cause-and-effect relationships between the environment and health
- Provide **information for action**
- Provide key evidence to help decision-makers
- Raise awareness of environmental health risks to improve human health

Use of Environmental Health Indicators

Monitoring

- identifying potential risks to human health (environmental hazards, exposures and related health effects)

Connecting

- health outcomes with environmental hazards exposure

Comparing

- environmental health status by years, regions and countries

Providing evidence

- providing evidence for and monitoring the effectiveness of policy development and decision making

We provide

Monitoring New Zealand's Environmental Health

Our Environmental Health Indicators provide statistics and information to monitor how the environment affects the health of New Zealanders. Our research, training and consultancy group is part of the Centre for Public Health Research, Massey University.

Our Environmental Health Indicators



Latest News

Welcome to our new-look website! 30/09/2014
We have recently improved our EHINZ website. We'd love to hear your comments or suggestions - fill in our feedback form.

Climate change indicators released 29/09/2014
We have recently released new indicators for climate change and health. Explore the climate change indicators.

New hazardous substances statistics 22/05/2014
The Hazardous Substances Injuries 2013 report includes statistics on the adverse health effects of hazardous substances exposure in New Zealand. Read the key findings of this report.

Quick Links

- Publications
- Our newsletter
- CPHROnline website
- [New Zealand Birth Defects Registry website](#)

Get more regional data at CPHROnline

You can explore geographic health and population data for New Zealand on our CPHROnline website.



- Factsheets to report on over 60 indicators
- Up-to date statistics
- Clear and easy to read information
- Maps and graphs
- Extractable data (national and regional levels)
- Downloadable factsheets and reports
- Useful links

All the above information/documents are available at the **EHINZ website** (www.ehinz.ac.nz)

Indicator domains



Recreational water

Livestock, freshwater and coastal water quality, water-borne diseases



Drinking-water quality

Access to safe drinking-water, water-borne diseases, fluoridated water, oral health of children



Indoor environment

Cold and damp homes, household crowding, second-hand smoke, health impacts



Population information

Population groups more at risk from environmental hazards, demographic information



Air quality

Wood and coal fires, vehicles, air quality, health impact



Climate change

Changes in temperature, rainfall and drought, and health impacts



Hazardous substances

Injuries and diseases from exposure to hazardous substances



UV exposure

Ultraviolet (UV) levels, melanoma, vitamin D deficiency



Biosecurity

Vector-borne diseases, international infectious disease outbreaks

Air quality domain

Source of air pollution

- **Wood and coal fires**
 - Statistics on households using wood and coal fires for home heating in New Zealand
- **Motor vehicles**
 - Statistics on number and average age of motor vehicles in New Zealand

Air pollution levels

- **Particulate matter**
 - Monitoring data on PM₁₀ levels in New Zealand
- **Other air pollutants**
 - Monitoring data for NO₂, SO₂ and CO at selected New Zealand sites

Human health effects due to PM₁₀

- Statistics on health conditions related to anthropogenic PM₁₀ (premature death, hospital admissions and restricted activity days)



Data sources:

- Ministry for the Environment and Statistics New Zealand. 2014. *New Zealand's Environmental Reporting Series: 2014 Air domain report*.
- HAPINZ. 2012. *Updated Health and Air Pollution in New Zealand Study. Health and Air Pollution in New Zealand*.

Indoor Environment

Cold and damp houses

- **Home heating**

- Statistics on households with no source of home heating

Household crowding

- **Household crowding**

- Statistics on people living in crowded households

Second-hand smoke

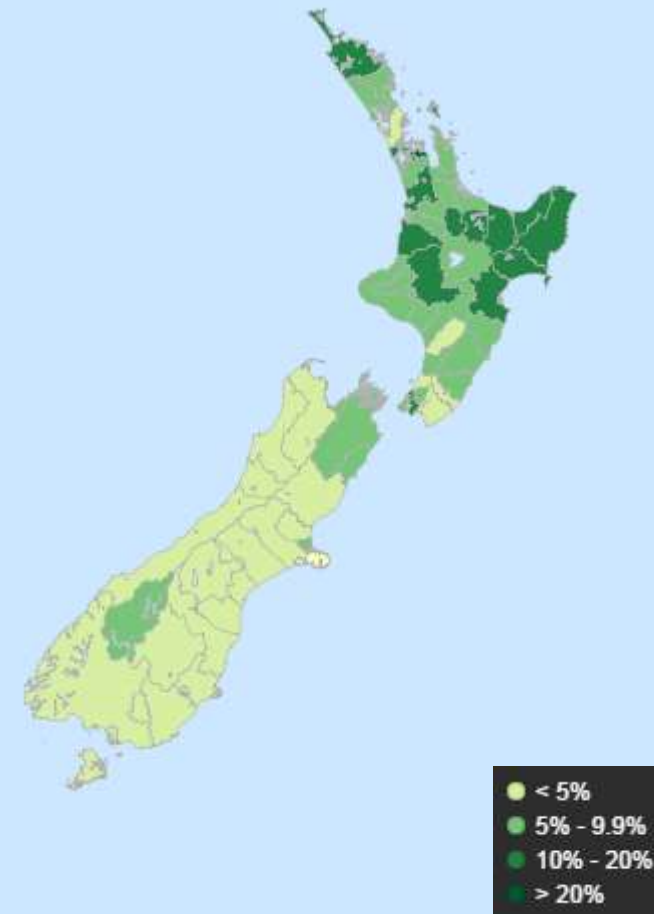
- **Exposure**

- Statistics on people exposed to second-hand smoke

Health effects associated with indoor environment

- Statistics on e.g. asthma, rheumatic fever, meningococcal disease

Proportion of people living in crowded households, 2006



Data sources:

- Ministry of Health. 2013. *New Zealand Health Survey: Annual update of key findings 2012/13*. Wellington: Ministry of Health.
- ESR. 2014. *Notifiable and Other Diseases in New Zealand: Annual Report 2013*. Porirua: The Institute of Environmental Science and Research Ltd.
- Statistics New Zealand. 2013. *Subnational crowding tables 1991-2006*. Wellington: Statistics New Zealand.

For more information

See the EHINZ website

- The Environmental Health Indicators website is the hub for environmental health information in New Zealand
- Visit the EHINZ website on:
www.ehinz.ac.nz



Acknowledgements:

The Environmental Health Indicators Programme is funded by the Ministry of Health.

Contact information: Fei Xu - f.xu@massey.ac.nz