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# MNZEH Update

Greetings to the latest issue of the MNZEH newsletter which brings you the recent news and developments of our EHI programme. I have just returned from a meeting of the programme leaders of EUROCAT, the European Surveillance of Congenital Anomalies in Belfast. The NZ Birth Defects Registry is a world affiliate of EUROCAT as well as a full member of the International Clearinghouse for Birth Defects Surveillance and Research (ICBDSR). While there was little evidence of the 'Troubles' period in the centre of Belfast, it was especially sobering to see the 3km Peace Wall emanating from the period of the 'Troubles', the Falls Road which is predominantly Republican and proclaims it is 'Irish and Proud It' and the Shankill Road which is mainly loyalist and proclaims 'it is English and Proud of It'. These roads are extensively festooned with murals depicting people on both sides who died in the 'Troubles' and flags (Union Jack and Irish).

In course of a short stay in London, there was the mandatory pilgrimage to the epidemiologists' 'holy shrine' – namely the John Snow pub on Broadwalk St. The actual or replicator of the famous pump has been replaced by a plaque and a pink painted stone. There was the statutory pint of English beer to celebrate the great man in the Salon Bar (surrounded by a few pixs of Snow) and the accompanying very greasy fish and chips.

Barry

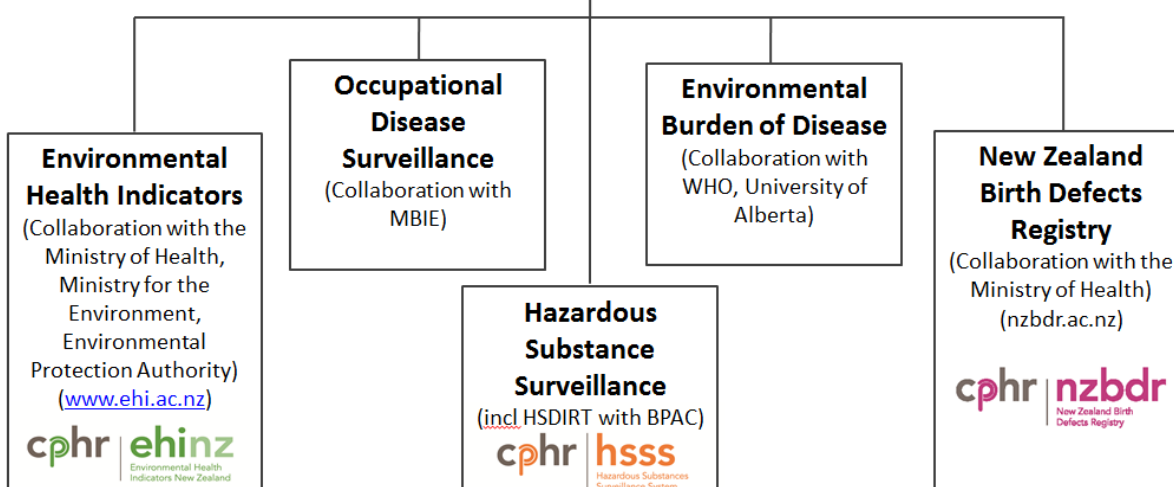
[B.Borman@massey.ac.nz](mailto:B.Borman@massey.ac.nz)

## MNZEH Project Update

### Environmental Health Indicators Programme



Online mapping tool for information from multiple sources  
<http://cphronline.massey.ac.nz>



## Highlights from Environmental Health Indicator factsheets

Indicator	Key findings
<b>Climate change</b>	<ul style="list-style-type: none"> <li>Models project more droughts for eastern New Zealand by the mid-21st century</li> <li>New Zealand is getting warmer</li> <li>Climate change in New Zealand can affect health in different ways</li> <li>Monitoring vulnerable groups to climate change helps plan extra support</li> </ul>
<b>Population Growth</b>	<ul style="list-style-type: none"> <li>New Zealand population hit 4.5 million in 2013</li> <li>Approximately one in three people in New Zealand lives in Auckland</li> <li>On average, for one square kilometer, there are 16 people</li> </ul>

For more information, please visit: <http://www.ehinz.ac.nz>

## Upcoming improvements to the Environmental Health Indicators website

We are currently updating our Environmental Health Indicators website, which reports on about 60 core environmental health indicators. The updated website is due to go live in the next month or two.

Key changes to the website will include:

- A new look and feel
- Over 50 new pages of content, including a webpage for each Environmental Health Indicator
- Information and monitoring data, grouped by topic: air quality, recreational water, drinking water, climate change, hazardous substances, indoor environment, biosecurity, UV exposure
- Interactive graphs and maps

We will let you know when the new website is available. It will be available at the same URL as the existing website ([www.ehinz.ac.nz](http://www.ehinz.ac.nz)).

## Home Insulation and General Health Status (HIGHS) Project

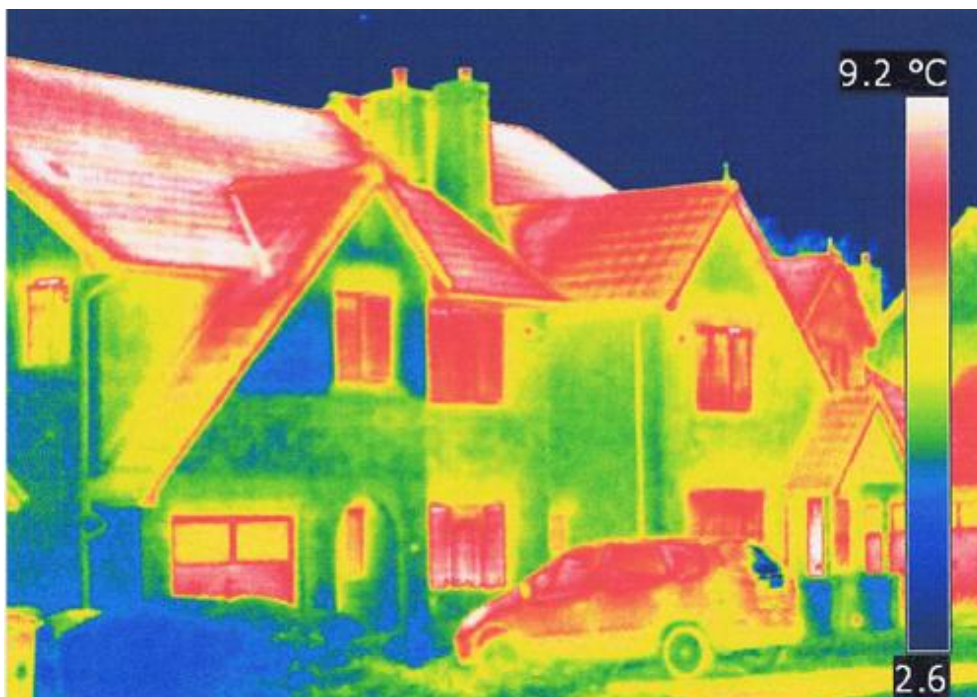
We are currently working on a project to map and conduct spatial analysis on homes insulated as part of EECA projects between 2009 and 2013.

The World Health Organization recommends minimum indoor temperatures of 18°C in the living room and 16°C in the bedroom. Many New Zealand houses fall short of this recommendation due to a combination of poor heating and inadequate insulation<sup>1</sup>. Prior to a 1977 amendment to the building code there was no requirement to insulate homes. Since then new homes have had to be insulated, however retrofitting insulation into existing homes is at the discretion of the homeowner.

We have recently received data from EECA on home insulation installed under two of its programmes. We are using this data for a two-stage project under our Environmental Health Indicators Programme to examine the relationship between home insulation and occupant wellbeing.

Initially we are undertaking a descriptive analysis of how the EECA programme has been accessed. We are going to examine uptake of the programme by households according to level of deprivation, the age of the house and the source of heating used. We will also look at whether there is even access across the country particularly between urban and rural areas. Look out for results over the coming months.

Once we have completed the descriptive analysis we are hoping explore the relationship between home insulation retrofits and health outcomes using hospital data for selected indoor environment conditions.



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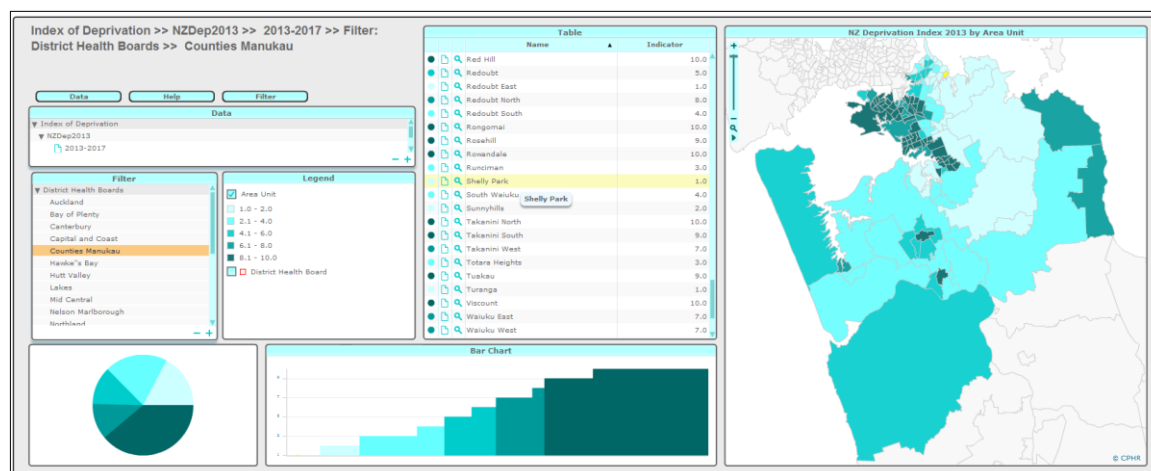
<sup>1</sup> Source: Howden-Chapman, P., Matheson, A., Crane, J., Viggers, H., Cunningham, M., Blakely, T., et al. (2007). Effect of insulating existing houses on health inequality: cluster randomised study in the community. British Medical Journal, DOI:10.1136/bmj.39070.573032.

## NZDep2013 is now on CPHROnline

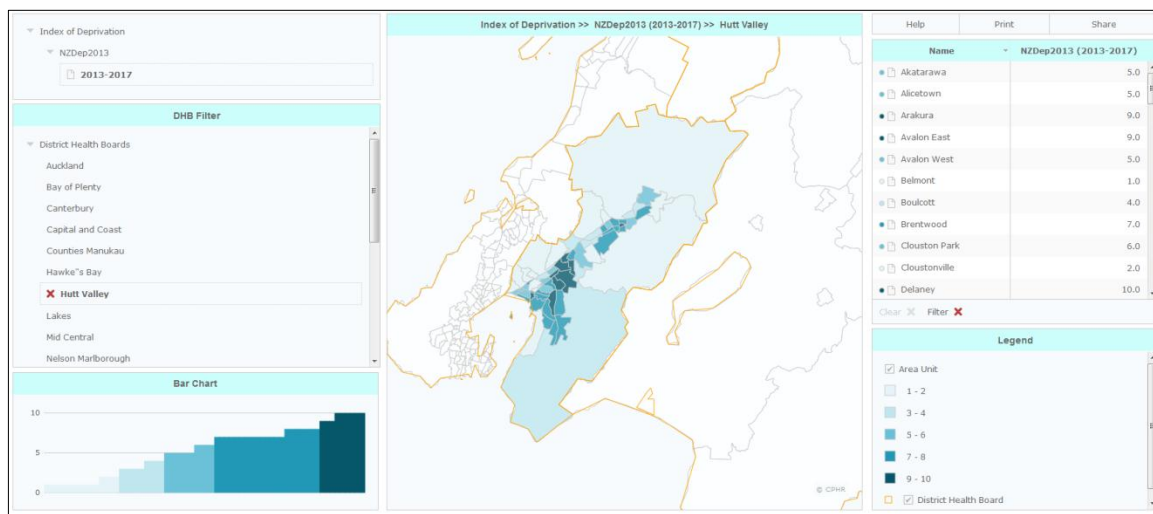
The release of a new Index of Socioeconomic Deprivation (NZDep2013) last month, based on data from the 2013 census was a cause for great excitement amongst the EHI team. NZDep2013 combines census data relating to income, home ownership, employment, qualifications, family structure, housing, access to transport and communications to provide a (weighted) deprivation value for each census meshblock unit in New Zealand. Deprivation values range from 1 – least deprived to 10 – most deprived. NZDep2013 estimates the relative socioeconomic deprivation of an area, so cannot be used to look at changes in deprivation over time. (Ten percent of areas will always be the most deprived as they are measured only in comparison to other areas in New Zealand).

Meshblock scores have been aggregated to provide values for Census Area Units (CAUs). Deprivation values by CAU can now be viewed on CPHROnline. A filter allows users to zoom in on their District Health Board of interest, whilst a pie chart illustrates the proportion of each deprivation quintile found in the chosen DHB. This interactive mapping tool is available both as a flash report and an HTML file, suitable for smartphones and tablets.

Click [here](#) to visit CPHROnline.



Flash report



HTML



## Recall of highly toxic mothballs

On 4 June 2014 the Ministry of Health released a public health advisory that all currently available mothball products should be removed from all retail shops in New Zealand. Mothballs and moth flakes contain the chemicals camphor, naphthalene, and dichlorobenzene which pose a significant health risk to the public, particularly small children, if eaten.



The Ministry of Health has advised the public to return any mothballs they have to the retailer they bought them from or to dispose of them in the rubbish.

## Information for action

Prior to the recall notice, an urgent request was put through to the EHI team for any information of deaths, illness, or complaints relating to mothballs. A search of our hazardous substances databases and the provision of a rapid report to the Ministry of Health was an important factor in the decision to recall mothballs.

Click [here](#) to see the Ministry of Health Media Release





**NFIS**  
National Fluoridation  
Information Service

## What is in the water?

Fluoride has been a prominent topic of debate over the past year.

Hamilton initially removed fluoride from its water supply after a Council Tribunal in May/June 2013. However in a referendum, held alongside local authority elections in October that year, 69% of Hamiltonians voted in favour of a return to community water fluoridation. After winning a High Court challenge in April this year, Hamilton City Council recommenced fluoridating its water supply on 3 July 2014.

A judicial review of the decision by South Taranaki District Council to fluoridate water supplies in Patea and Waverley was seen as a test case for water fluoridation. New Health New Zealand challenged the council's decision on the grounds that fluoride was being used as a medicine and the council did not have the right to add fluoride to the water supply for therapeutic purposes. The court rejected both challenges in a ruling in March this year, however this ruling is being appealed.

The EHI team, under contract from the National Fluoridation Information Service (NFIS) conduct a monthly search and review of new literature on fluoride and its impact on both oral and general health. These reviews are designed to provide a scientifically robust assessment of the evidence to aid decision making on this controversial topic.

Click [here](#) for a summary of these reviews on the NFIS website.



"THE GOVERNMENT SHOULD NEVER HAVE PUT FLUORIDE IN THE WATER"

# Meetings and Presentations

The EHI team met with the Technical Advisory Group (TAG) at the Centre for Public Health Research (CPHR) to present their work and progress in the Environmental Health Indicators Programme on 26 May 2014.

**Presentations included:**

- Environmental Health Indicators Programme (Barry Borman)
- Environmental Health Indicator Factsheets (Fei Xu)
- Environmental Health Indicators Website (Kylie Mason, Andrew Parnell)
- Spatial Analysis for CPHROnline (Caroline Fyfe, Andrew Parnell)
- Hazardous Substances Disease and Injury Reporting Tool (HSDIRT) (Helene Marsters, Deborah Read)
- Hazardous Substances Communications (Maria Poynter)
- Environmental Burden of Disease (Kylie Mason)
- Asbestos Analysis (Mathu Shanthakumar)

The EHI team received a great deal of useful and valuable feedback from the TAG members in terms of developing CPHR into the hub for environmental health in New Zealand. The TAG members and the EHI team also evaluated the existing environmental health indicators and identified potential new indicators.





# Environmental Health Paper

The first block week of the Environmental Health paper went on well. Topics in this week included Climate Change, Food Safety, Housing and Health, Contaminated land, Applied Environmental Epidemiology etc.

Feedback from the students:

“...the course gave me a good understanding of the connection between our environment and us. The sessions included some of the major environmental health issues, associated legislation and current projects in New Zealand. I found it informative and relevant for my current work in this area.... “

“...the Environmental Health paper provides a wide range of information including the major environmental health issues, how the environmental health is practiced in New Zealand and the pros of cons of different research methods in terms of environmental health research. Lecturers who came from governmental agencies and universities provided the status quo of environmental health in New Zealand and the latest update in researches. Everything is so intriguing...”

Take a peek of the Environmental Health courses:



*The Environmental Health paper* covers the principles, techniques and practice of environmental health with particular reference to New Zealand. Topics included: surveillance, applied environmental epidemiology, risk management, exposure assessment, and the health effects resulting from specific environmental exposures.

# Farewell and Welcome

The EHI team said a sad farewell to Maria Poynter in June 2014. Maria came to us from Regional Public Health and has worked on the development of the environmental health indicators for climate change and the communications for the HSDIRT programme. Maria is part-way through completing her specialist training in public health medicine and will take the exam next year. We all wish her good luck.



Stephen Haslett is Professor of Statistics in the Institute of Fundamental Sciences at Massey. He is providing regular statistical support to the EHI team. His research interests are in sample survey design and analysis, small area estimation especially of poverty, linear and generalized linear mixed models, and statistical consulting. He has been involved in small area estimation projects for the UN World Food Programme and the World Bank in Bangladesh, Philippines, Nepal, Bhutan, Cambodia, Pakistan and Timor-Leste, and in more wide ranging projects linked to government statistics offices in over 20 countries including Thailand, Uganda, Kiribati, Vanuatu, Samoa, Fiji, Tonga and Azerbaijan.



During the trip in the UK, Barry visited the statue of Sir James Horner Haslett who was the first Lord Mayor of Belfast from 1887 to 1888 and also an MP in the UK House of Commons. Can you tell the resemblance of him and Professor Stephan Haslett who happens to be the great-great-nephew of the mayor?

# EHI News

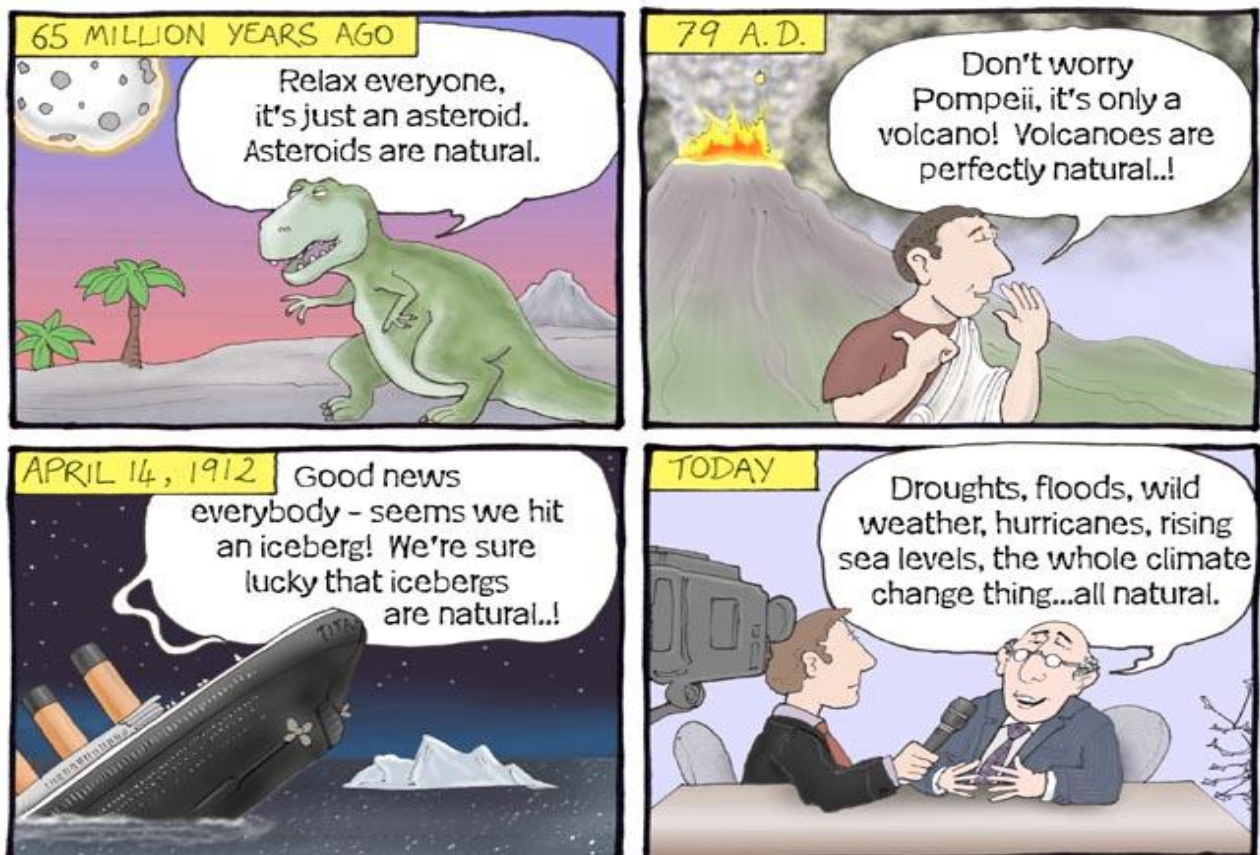


Deborah Read has been reappointed to the Hazardous Substances & New Organisms committee of the Environmental Protection Authority.  
Congratulations Deborah!

## Environmental Health Websites

The EHI team recommends you to visit: CPHROnline (<http://cphronline.massey.ac.nz>), which maps health data, and the Environmental Health Indicators website: [www.ehinz.ac.nz](http://www.ehinz.ac.nz), which reports on 60 core environmental health indicators.

In the coming month, the new look of Environmental Health Indicators website will be available for web users. Be sure to have a look.



Experts through the ages.

Our editor:



For any questions or feedback regarding the MNZEH newsletter, please contact Fei Xu - [ehnz@massey.ac.nz](mailto:ehnz@massey.ac.nz)

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