Regional Public Health
Better Health For The Greater Wellington Region

PUBLIC HEALTH POST

Public Health for Primary Care in Wellington, Wairarapa and the Hutt Valley

Also available online at www.rph.org.nz

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UNHEALTHY HOUSING – THE NEW SMOKING?

Ask questions and deliver a brief intervention

Key points for primary care

1. Poor quality housing causes poor health
2. The main housing-related conditions are respiratory infections, asthma, rheumatic fever, meningococcal disease, tuberculosis and skin infections
3. Health professionals should routinely ask about housing status (e.g. 'HOT Water'):

- **H**eat: Indoor temperature, heating and insulation.
- **O**vercrowding: Number of occupants vs number of bedrooms
- **T**enure type / living arrangements: Owner/private rental/ state house/council house/boarding house/no fixed abode (influences possible interventions).
- **Water:** Presence of moisture / dampness or mould.

4. The RPH website has a list of housing resources that you can use to help your patients improve their housing situation

http://nusitegroup.com/wp-content/uploads/2012/09/IMG_0539.jpg

http://howtobuildahouseblog.com/black-mold-removal-cleanup-guides/

Ahh, summer. The hectic Christmas period, ice creams on the beach and a break from the winter ritual of wiping water off your window panes in the morning.

'Crying windows' are a sign that houses are cold and damp- and cold, damp homes contribute to ill health. A home should be warm and dry, but this is not the case for many of New Zealand homes.

73% of rental homes have some mould[1]

A third of NZ homes have no insulation; 60% of homes have inadequate ceiling and subfloor insulation.[2]

A recent Regional study identified that, for paediatric admissions to Wellington Hospital in a two-week winter period, 50.9% had a home that had been colder than caregivers would have liked for at least some of the time.[3] Pacific children were five times more likely to be exposed to a colder home than NZ European children.

There is no definitive list of housing-related conditions, but the major groups in the New Zealand context are:

- Respiratory infections
- Asthma
- Serious skin infections
- Rheumatic fever
- Meningococcal disease
- Tuberculosis

Within Capital & Coast and Hutt Valley DHBs, housing-related conditions account for three out of the top five 'avoidable' causes of hospitalisation. (Table 1).

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Table 1. Ambulatory sensitive hospitalisations,
0-74y, in C&C DHB (2005-7) and HVDHB (2011-12) (no Wairarapa data available). * denotes housing-related condition.

Rank	C&C DHB	HVDHB
1	Respiratory infections*	Cellulitis*
2	Cellulitis*	Angina
3	Angina	Dental conditions
4	Ear nose and throat infections	Asthma*
5	Asthma*	Pneumonia*

Cellulitis rates in the Hutt Valley are higher than the national average, and Capital & Coast rates, while slightly below the national average, have increased by 42% in recent years[4]. Among 5-14 year olds in Porirua, the rate for rheumatic fever initial attacks is the highest in the country at 72/100,000[5] (the national rate for an initial attack was 3.5/100,000 in 2011[6]).

Homes can contribute to illness in different ways

The components of a house that are important when it comes to health are outlined in Table 2.

Table 2. Housing components that contribute to illness

Problem	Examples of relevant housing components	How it is linked to disease
Moisture and damp	Moisture content of the air is higher in colder homes. Moisture added from unflued gas heaters, inadequate ventilation, no extractor fan in kitchen, drying washing inside.	Leads to mould/fungus development. Damp also increases dust mites which can exacerbate asthma
Mould	Mould affects health in several different ways, including airway irritation, toxin production, and sensitisation.	Linked to respiratory disease and asthma
Inadequate heating	Low indoor air temperature increases moisture content of air.	Cold air leads to increased respiratory disease.
Lack of insulation	No ceiling/floor/wall insulation/curtains.	Difficult to maintain indoor temperature, leading to either high heating costs or 'forced choice' to not use heating.
Overcrowding	Not only a house that is too small for the number of occupants: also room sharing to save heating costs.	Spread of diseases including meningococcal disease, rheumatic fever, and skin infection, increases when overcrowding is present. Overcrowding increases moisture production.
Exposure to toxins	Cigarette smoke, old lead-based paint flakes, asbestos components, carbon monoxide from unflued gas heaters, pest infestations.	Health effects vary depending on toxin. Examples are pest bites causing skin infection, respiratory effects of smoke and carbon monoxide exposure, multiple effects from lead poisoning
Safety hazards	Multiple hazards, depending on occupants' age/ disability etc.	Multiple injury effects depending on hazard and status of occupants.

Primary care can make a difference

NZ housing stock does not have to cause poor health. It is a huge challenge to change the status quo, but the work has started. The significant output of the He Kainga Oranga/Housing and Health Research Programme led by Philippa Howden-Chapman has brought the issue to the national consciousness and led to the roll out of the Warm Up New Zealand: Heat Smart insulation programme.

At a regional level, Regional Public Health (RPH), along with others, is making information on regional housing interventions easier to access and refer to. RPH is a member of the multi-agency Regional Housing Coalition, formed by Tu Kotahi Māori Asthma Trust to address housing and health issues. RPH is also trialling new approaches to assist patients to access improvements for their houses.

Primary Care has a part to play. Firstly, asking about the housing conditions of your patients helps to raise awareness of the link between housing and health. It may be that this is enough for some people to consider stopping draughts, heating bedrooms and opening windows for ventilation. Table 3. gives some examples of appropriate questions and discussion points.

Table 3. How Primary Care providers can play a role to improve patients' housing

Questions to ask	
Heat	Is your house as warm as you would like? Which rooms in your house do you heat? What is your main source of heating? Does your house have ceiling and floor insulation? Do you sleep in different rooms in the winter, just to keep warmer?
Overcrowding	How many people live in your house? How many bedrooms are there? Do you have lots of visitors staying?
Tenure type	Who owns your house?
Water	Is your house damp? Do you have mould in any rooms in your house? Are your windows 'crying' on cold mornings?
Interventions to recommend	

Low cost simple advice
↓
High cost / more complex
	• Close curtains before dark; open them in the day.
	• Open windows for 30 minutes a day to vent excess moisture.
	• Close the bathroom door and open window when showering or bathing.
	• Put lids on pots when cooking / boiling water
	• Use draught stoppers under doors.
	• Avoid unflued gas heaters (on high, they produce 1L of water per hour).
	• Use a 'squeegee' to remove condensation.
	• Clean mould with white vinegar:water 50:50 spray.
	• Use a timer ($15) with plug in heaters.
	• Discuss contribution of overcrowding to health.
	• Discuss importance of ventilation especially when overcrowding is present.
	• Consider a 'Warm Fuzzies' referral (see website links).
	Consider a curtain bank referral (see website links).
	• Recommend insulation (see website links):
	  • If owned/private rental: insulation subsidies available (see website links).
	  • If rented: template letters to owner available to explain role of housing in health and illness (see website links).

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For many people, though, the additional upfront expense of insulation installation or ongoing cost of additional heating is not affordable. Therefore, the second action that primary care professionals can take is to assist their most vulnerable patients to access housing interventions. These include:

- Insulation (ceiling and floor)
- Curtain provision through a curtain bank (thermally lined and fitted to window size)
- Referral to 'Warm Fuzzies' home energy assessment and prioritised action plan (through the Sustainability Trust).
- Patient advocacy for tenants

Many companies are currently offering free, or 80% funded, insulation for eligible groups, but the referral criteria do change, so check that sources are up to date. Criteria often include a community services card, and may include the presence of housing related health problems. Housing New Zealand houses are not eligible for subsidised immunisation programmes as they are being insulated by HCNZ.

To make it easier for primary care providers to find relevant information, the RPH website has been updated to include a comprehensive table of housing interventions available in the Wellington region, and links to organisations listed in this article.

Website links

www.rph.org.nz (quick reference information on healthy housing providers e.g. insulation, curtain banks etc, with eligibility criteria and contact details- Wellington, Hutt Valley, Kapiti, Wairarapa, pamphlets on healthy housing/heating and pest control, links to other useful websites)

www.compassnetwork.org.nz/services/healthy_housing (letter for landlords about healthy housing to assist with advocacy, healthy housing providers information mainly for Wellington region)

www.sustaintrust.org.nz (several initiatives including insulation, curtain bank, Warm Fuzzies home energy assessment programme)

Good ventilation is very important!!
http://thousandislandsmama.files.wordpress.com/2012/11/front-open.jpg

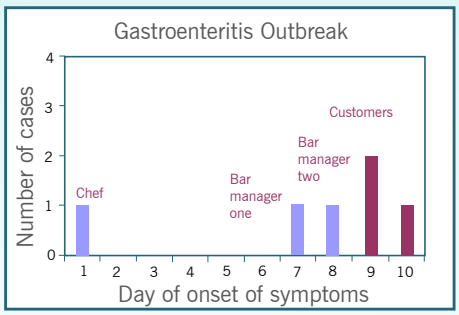
Sources:

1. Buckett N, Jones M, Marston N. BRANZ 2010 House Condition Survey- Condition Comparison by Tenure (SR264). Wellington: Department of Building and Housing,, 2011.
2. Keall M, Crane J, Baker M, Wickens K, Howden-Chapman P, Cunningham M. A measure for quantifying the impact of housing quality on respiratory health: a cross-sectional study. Environmental Health;11(1):33.
3. Abdulhamid A, Albabtain A, Beard M, Brimble J, Campbell A, Denning-Kemp G, et al. Kiwi Pride? A Snapshot of Wellington Paediatric Admissions. An Audit of Potential Risk Factors in Child Hospitalisation. Wellington: University of Otago Wellington School of Medicine, 2012.
4. Thompson I. Serious Skin Infection Hospitalisations in Children. Wellington Region 2010 Update. Wellington: Regional Public Health, 2010.
5. CCDHB. Improving Child Health Outcomes in Porirua City.
6. The Institute of Environmental Science and Research Ltd. Notifiable and Other Diseases in New Zealand: Annual Report 2011. Porirua, 2012.

EXCLUSION FROM WORK FOR CASES WITH DIARRHOEA

For patients with diarrhoea who are at high risk of spreading gastrointestinal infection to other people, please remember to give advice on exclusion from work or other activities to reduce the risk of transmission.

The following simple outbreak linked to a café illustrates the occupational spread of infection:



For most gastrointestinal infections people should be excluded from work until they are well and symptom free. If they fit into one of the high risk groups (see below) then they should be excluded until 48 hours after they are symptom free. Some infections have more specific exclusions as detailed in the chart below.

Disease	Group(s)	Exclusion from work or early childhood centre advised until symptom free for:	Exclusion for close contacts (usually household)
Campylobacter	1, 2, 3, 4	48 hours	Not required
Cryptosporidium	1, 2, 3, 4	48 hours. Exclude from swimming until symptom free for 14 days	Not required
Giardia	1, 2, 3, 4	48 hours	Not required
Yersinia	1, 2, 3, 4	48 hours	Not required
Rotavirus	1, 2, 3, 4	48 hours	Not required
Norovirus	1, 2, 3, 4	48 hours	Not required
Gastroenteritis (unknown organism)	1, 2, 3, 4	48 hours. During cryprosporidium outbreaks use the exclusion criteria above.	Not required
Salmonella	1	48 hours and until two consecutive negative stools have been provided at least 48 hours apart	For contacts also in group 1: exclude until one negative faecal specimen has been provided
	2, 3, 4	48 hours	For contacts in group 1: exclude until one negative faecal specimen has been provided
Shigella	1, 2, 3, 4	48 hours and until two consecutive negative stools have been provided at least 48 hours apart	For contacts in groups 1,2,3 or 4: exclude until one negative faecal specimen has been provided
Typhi and paratyphi	1, 2, 3, 4	48 hours and until two consecutive negative stools have been provided at least 48 hours apart after completing appropriate antibiotics. If not treated with effective antibiotics then no earlier than 1 month after onset of symptoms.	All household, close and travel contacts and other contacts in groups 1,2,3 or 4 are in some cases required to provide one negative faecal sample
	School children	Until the above clearance criteria are satisfied or as discussed with the Medical Officer of Health	All household, close and travel contacts and other contacts in groups 1,2,3 or 4 are in some cases required to provide one negative faecal sample
VTEC/STEC	1, 2, 3, 4	48 hours and until two consecutive negative stools have been provided at least 48 hours apart	For contacts in groups 1,2,3 or 4: exclude until one negative faecal specimen has been provided

Group 1. Food product handlers including visitors or contractors who could potentially affect food safety.
Group 2. Staff of health care or early childhood facilities.
Group 3. Children under the age of 5 attending early childhood services.
Group 4. Other people at higher risk due to illness or disability.

Sources:

1. Regional Public Health case notes.
2. New Zealand Ministry of Health, Communicable Disease Control Manual 2012.

HAZARDOUS SUBSTANCES DISEASE AND INJURY NOTIFICATIONS: Information for Public Health Action

General Practitioners are soon to be asked to contribute to the surveillance of hazardous substance disease and injuries by notifying cases that they see in primary care. A short electronic form linked to your PMS and developed by Best practice decision support (BPAC) will be available to make notification as simple as possible.

What is a hazardous substance injury or disease?

This is a vast group of diagnoses; from children swallowing cleaning products or cosmetics, intentional overdoses with agrichemicals, carbon monoxide poisoning, illness caused by exposure to chemicals such as solvents or chlorine, contact dermatitis from chemicals, a fireworks burn or eye injury, or huffing of butane.

A hazardous substance is officially defined as anything that can explode, catch fire, oxidise, corrode, or be toxic to humans; this is set down in the Hazardous Substances and New Organisms Act 1996. The same act was amended in 2005 requiring medical practitioners to notify cases to the Medical Officer of Health.

How could GP information prevent hazardous substance disease and injuries?

Dishwasher powders are a useful example. In 2005 dishwasher powders were recognised as an area of concern with large numbers of children ingesting caustic dishwashing powder and requiring medical attention. Between 2003 and 2005 there were 610 calls to the National Poisons Centre and 11 admissions to Starship Hospital including five to intensive care. Primary care data was not available at the time, but many cases with minor effects are likely to have presented to general practices.

Data from National Poisons Centre calls and admissions were used to inform public health action. Regulatory changes were made prohibiting the sale of dishwashing powders with a pH of greater than 12.5. As a result of these actions the number of children referred for medical attention following a call to the National Poisons Centre for dishwashing powder ingestion has decreased considerably.

Primary care notifications could identify other substances which are causing harm and lead to controls being put in place to prevent disease or injuries.

Where do notifications for lead poisoning fit into this?

Most GPs will already be familiar with the requirement to notify individuals with a blood lead level ≥ 0.48 μmol/L from non-occupational lead exposure, under the Health Act 1956. The electronic form can also be used for these notifications.

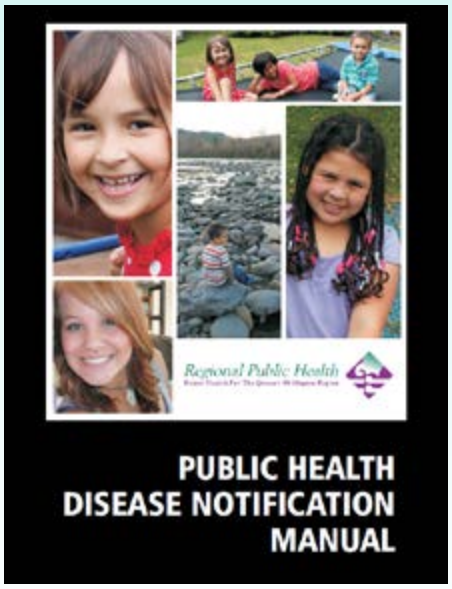
When is this coming?

Massey University's Centre for Public Health Research (CPHR) is developing the notification system with BPAC. A pilot will commence with practices in the Wellington, Hutt Valley and Wairarapa region from February 2013. More information will be available from Regional Public Health and CPHR in January 2013.

Sources

1. Bertinelli, A et al. Serious injuries from dishwasher powder ingestions in small children. Journal of Paediatrics and Child Health 42 (2006) 129-133.
2. Environmental Risk Management Authority New Zealand. Monitoring Report 2011. Available at http://www.epa.govt.nz/Publications/Monitoring%20Report%202011.pdf
3. Safekids New Zealand. Children ingesting dishwashing powder: Update 2007. Available at http://www.safekids.org.nz/Downloads/Safekids%20Position%20Papers/Safekids%20position%20paper%20Children%20ingesting%20dishwashing%20powder%20-%20Update%202007.pdf

WHAT'S NEW IN DISEASE NOTIFICATION?



A new version of "Public Health Disease Notification Manual" will be available in early 2013. This manual aims to inform and assist those at the frontline providing health services, including general practitioners, primary care nurses and hospital clinicians.

The manual will be sent to all hospital/emergency departments, primary care facilities and healthcare services attached to institutional facilities. It will also be available online at Regional Public Health website www.rph.org.nz under "Health Professionals" tab.

The manual contains:

1. Detailed disease notification processes;
2. Lists of diseases or conditions requiring urgent and non-urgent notifications;
3. Exclusion and clearance criteria for people at high risk of transmitting diseases to others;
4. Examples of available resources/brochures;
5. Latest versions of Case Report Forms, including instructions for completion and sending.

Source:

Regional Public Health

HEPATITIS C – NEW MODEL OF CARE LAUNCHED

A new model of care for hepatitis C has emerged, and along with it, a fresh look at the role of the hepatitis nurse. The Hepatitis Foundation of New Zealand, in partnership with the Ministry of Health, and the Capital and Coast, Hutt Valley, and Wairarapa District Health Boards, has launched the Hepatitis C Pilot.

Central to the new model is the free hepatitis C Community Assessment and Support Programme, led by two nurses, who will provide dedicated support, assessment, and education in a community setting. The community hepatitis C nurses will manage each case prior to, and post-treatment, to allow secondary nurses more time to focus on treatment and more complex cases.

Hepatitis C Programme Manager, Kelly Barclay, said the aim of the new nursing role is to make care and support more accessible to patients in their communities.

"To help with this, the Foundation has purchased a portable FibroScan® (new ultrasound technology) for use in the community, which is a painless, non-invasive, assessment tool used to stage the degree of liver disease," he said.

Hepatitis C Programme Co-ordinator, Susan Hay said, "We [The Hepatitis Foundation of New Zealand] are delighted to introduce Lynnaire Matthews and Lorna Scoon as the two community hepatitis C nurses who will take on this challenge. Aside from working with patients, they will be liaising with secondary care, GPs, and other community-based service providers across the three DHBs, to provide an integrated model of care."

An estimated 5,800 people live with chronic hepatitis C in the Wellington, Hutt Valley, and Wairarapa regions, while nearly 4,400 of these people remain undiagnosed.

Photo: New Zealand Doctor. Left to right: Lynnaire Matthews, Susan Hay, and Lorna Scoon.

Risk factors

Hepatitis C is spread through blood-to-blood contact. People who are especially at risk are those who:

- Have ever injected drugs (once is enough);
- Have ever received a tattoo or body piercing using unsterile equipment;
- Had a blood transfusion prior to 1992;
- Have lived or received medical treatment in a high-risk country (South East Asia, China, Eastern Europe (including Russia), or the Middle East);
- Have ever been in prison;
- Were born to a mother living with hepatitis C.

"Your support and participation will help make this programme a success," Mr Barclay said. "We ask General Practice Teams to refer those already diagnosed with hepatitis C onto the Foundation's *Community Assessment and Support Programme*. From early 2013, we will be running a public campaign to encourage those at risk to get tested."

Referral forms can be found online at www.hepatitisfoundation.org.nz
Referrals can be sent via:

fax 07 571 2548,

post PO Box 15 347, Tauranga,

email referral@hepatitisfoundation.org.nz

or via secondary care.

For more information, visit www.hepatitisfoundation.org.nz, or call 0800 33 20 10.

Source

The Hepatitis Foundation of New Zealand

WHAT ARE YOU REPORTING?

'What are you reporting?' statistics for the final quarter of 2012 will be published as part of the yearly summary in the first edition of 2013. Indications are that in this quarter, gastrointestinal infections have increased when compared to the previous quarter, except for cryptosporidiosis which has substantially reduced. Pertussis infection notifications have increased further. It will be interesting to observe the effect of active measures by Capital and Coast DHB, funding pertussis vaccination for high risk groups that previously were not funded, given the high number of cases and hospitalisations.

Ordering Pamphlets and Posters:

To order any Ministry of Health resources, please contact the Health Information Centre on 04 570 9691 or email laurina.francis@huttvalleydhb.org.nz

For enquiries regarding The Public Health Post, please contact Dr Jonathan Kennedy, Medical Officer, Regional Public Health **jonathan.kennedy@huttvalleydhb.org.nz** or by phone **04 570 9002**. Alternatively contact one of the regional Medical Officers of Health: **Dr Jill McKenzie, Dr Margot McLean, Dr Annette Nesdale and Dr Stephen Palmer**

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