

INDEX

Emergency Preparedness (1)

Arbovirus & Mosquito Workshop (2)

OzFoodNet (3)

Review of the ADWG (3)

Waterwatch (3)

Hep A and Semi Dried Tomatoes (4)

Beachwatch (4)

Indigenous Community Dog Health Program (5)

Conferences & Training (6)

Hunter New England Environmental Health Staff (6)

NSW Health Drinking Water Monitoring Program (6)

Happy New Year to you all!

Welcome to the Environmental Health Bulletin, the quarterly newsletter which provides information on developments in the field of environmental health. The bulletin is edited by Hunter New England Population Health and is distributed via email to people working in the field of environmental health within the area covered by Hunter New England Health.

Your contributions, news and feedback are welcome to help ensure the Bulletin is relevant and interesting. Our contact details are on page six.

Managers – we would appreciate it if new staff or staff without email have access to this newsletter. It can also be downloaded from our website at: http://www.hnehealth.nsw.gov.au/hnep/health_environmental

Emergency Preparedness this Summer

Less than 30 days into the year and across Australia we have already experienced flooding, extreme high temperatures and bushfires! These emergency incidents highlight the need and importance of having a prepared and informed public health team across the Hunter New England Health region.



Incidents such as bushfires, floods or hot weather not only affect the environment but also people's health. Floods often result in hazardous and unsanitary conditions in and around the home and can enhance mosquito numbers, which increases the risk of arboviral diseases.

Bush fires produce large amounts of smoke particles in the air that can cause itchy/burning eyes, shortness of breath, headaches, irritated sinuses and throat irritation. People with existing respiratory conditions, such as asthma, may experience an exacerbation of their symptoms.

Very hot temperatures can result in serious health problems including heat stress and heat stroke. It is especially important to stay hydrated on very hot days.

HNEPH encourages all people to be prepared for emergencies that can have an adverse affect on their health. Fact Sheets and information to assist during and after a flood, bushfire or extreme heat emergency can be downloaded from: <http://www.emergency.health.nsw.gov.au/index.asp>

Arbovirus & Mosquito Surveillance Workshop Yamba, 2009

In December, approximately 25 Environmental Health Officers (EHOs), Trainee EHOs and Council employees from around the state attended the Arbovirus & Mosquito Surveillance Workshop facilitated by Glenis Lloyd from NSW Health. Presenters included Dr Cameron Webb, Stephen Doggett and Linda Hueston from the Institute for Clinical Pathology and Medical Research.

The workshop focussed on mosquito biology, identification, arboviruses of public health concern, vector hosts, mosquito trapping, larval surveys and habitat identification, flock sera collection and animal ethics. Discussions included the arboviruses of concern in NSW, human case numbers, geographic distribution and major vectors. Mosquito-borne diseases (including dengue fever, JEV, WNV, chikungunya and malaria) were also discussed and why they don't currently pose a risk in NSW.

Stephen Doggett outlined the roles that local government, medical entomology and NSW Health play in the **NSW Arbovirus Surveillance Program**. He discussed the history of the program and its aims in assisting with mosquito-borne disease issues. Participants were shown the biology and ecology of the major groups of mosquitoes in NSW covering their life cycle, host seeking and blood feeding behaviour, and major ecological requirements. The medical entomology website is a valuable information resource. Go to: <http://medent.usyd.edu.au/index.htm>

Adult mosquito sampling techniques were discussed with an emphasis on dry-ice baited light traps, their operation, trap site selection and mapping. The importance of preparing, packing and sending samples for processing was demonstrated. Traps were set in the surrounding forest area for mossie collection and identification. The nearby salt marshes provided examples of larvae for collection.



Ruth sets a mozzie trap amongst the trees

Dr Cameron Webb discussed the importance of urban planning, wetlands and the creation of buffer zones. Plans for housing developments near swamp areas need to recognise that they could be potential breeding grounds for mosquitoes. The impact of climate change on the future of mosquito activity and arboviral disease transmission was also discussed.

The public can unintentionally be providing perfect breeding areas for mosquitoes by leaving old tyres and pot plant holders full of water lying around in the back yard. Graham Plumb from Ballina Shire Council gave an example of how he has dealt with mosquito management and urban planning within Ballina Shire.

Sentinel Flocks are chickens used to assist with the identification of mosquito borne infections. Animal ethics and OH&S issues were examined.

An overview was given on the revised enHealth guidelines on public health pests including bird mites, bed bugs, fleas, flies, lice and other important biting, stinging and nuisance-causing arthropods. NSW has no specific legislation on mosquito control. However examples of legislation that may influence mosquito management strategies include:

- State Environment Planning policy No 14-Coastal Wetlands
- Fisheries Management Act 1994
- Threatened Species Conservation Act 1995
- Environmental Planning and Assessment Act 1979
- Pesticides Act 1999 and
- Native Vegetation Conservation Act 1997.

With the problems that mosquitoes impose, disease, nuisance biting and urban planning, and the future threats of climate change, the importance and value of mosquito training courses and workshops cannot be over emphasised.

Every year across Australia there are close to 5000 patients with Ross River virus, 1000 Barmah Forest disease notifications and growing numbers of potentially deadly arbovirus disease notifications like Dengue Fever and Murray Valley Encephalitis virus. The workshop ended with information on ways we can protect ourselves from mossies and help prevent ourselves from becoming a name on the arbovirus disease notification list!

OzFoodNet in the Hunter New England Area.

Enhanced foodborne disease surveillance is recognised as an essential tool to help reduce food poisoning by the World Health Organization. The Australian Government Department of Health and Ageing established OzFoodNet in 2000 as a collaborative initiative with Australia's State and Territory health authorities to provide better understanding of the causes and incidence of foodborne disease in the community and to provide an evidence based policy formulation.

OzFoodNet was first piloted in the former Hunter Area Health Service. Since then, OzFoodNet sites have been created in each State and Territory of Australia including Hunter New England Population Health. Site staff are responsible for the epidemiological investigation of food borne disease outbreaks at a regional level, and are involved in leading and assisting in epidemiological investigations at state and national levels. OzFoodNet staff are also involved in conducting research into foodborne pathogens.

Usually an outbreak of foodborne disease is defined as a situation where two or more people report enteric symptoms following the consumption of a common contaminated food or drink, or consumption of a meal from a common food premises.

In NSW, OzFoodNet is responsible for the epidemiological investigation of outbreaks of foodborne or suspected foodborne disease, whereas the NSW Food Authority is responsible for the environmental aspects of outbreak investigations. In some situations, NSW Food Authority requests local government to inspect food premises associated with outbreaks of foodborne or suspected foodborne disease.

Local Government plays an important role in the investigation of foodborne disease through involvement in outbreak investigations e.g. food premises inspections, or prompt notification of suspected clusters or outbreaks of illness. Work conducted by Environmental Health Officers contributes to reports describing the findings in outbreak investigations, which ultimately provide evidence for new food standards or changes in food safety legislation.

For further information regarding the role of OzFoodNet or to report a suspected outbreak of foodborne disease, please contact OzFoodNet by telephoning 02 4924 6477



Review and update of the Australian Drinking Water Guidelines



The Australian Drinking Water Guidelines (ADWG) is currently being updated with the revision of *Chapter 8: Drinking Water Treatment Chemicals*, and the associated 34 fact sheets.

The Guidelines are undergoing a rolling revision process that ensures it represents the latest scientific evidence on good quality drinking water. As sections of the Guidelines continue to be reviewed, the website will be updated to ensure the latest information. For details go to:

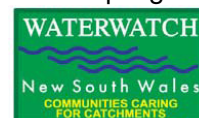
<http://www.nhmrc.gov.au/publications/synopses/eh19syn.htm>

Waterwatch

Waterwatch is a national community based water quality monitoring program, which promotes environmental awareness and action through involvement. The key to the success of the Waterwatch program is the cooperation between a range of groups and organisations to ensure that everyone plays a role in keeping our waterways clean and healthy. In the Hunter-Central Rivers Region, there are over 200 registered Waterwatch groups.

The NSW Office of Water (NOW) is striving to improve integration and communication within and between algal management stakeholders. Over the next six months NOW will be working closely with the State Waterwatch Co-ordinators to facilitate these links and draw on the large networks of community samplers if required, in the event of contingent bloom sampling.

For further details go to:
www.waterwatch.nsw.gov.au





Hepatitis A and Semi Dried Tomatoes; an ongoing outbreak investigation

In Australia, Hepatitis A infection is usually associated with travel to developing countries. Foodborne outbreaks are relatively uncommon, with previous outbreaks linked to consuming contaminated oysters and foods handled by infectious food handlers. Symptoms of Hepatitis A include acute fever, malaise, anorexia, nausea and abdominal discomfort, dark urine and jaundice. The disease varies in severity, with mild illness lasting between 1-2 weeks, while severely debilitating illness can last several months.

In 2009, there were two large outbreaks of Hepatitis A in Australia that were associated with the consumption of semi dried tomatoes.

The first outbreak, detected in early May, affected people in Victoria, South Australia and Queensland. This outbreak triggered a multijurisdictional investigation, which confirmed a strong link between illness and the consumption of semi dried tomatoes. By the end of May, the number of reported cases in Australia had decreased to usual levels.

The second outbreak, detected in early October, is ongoing, with new cases being reported each week. Cases associated with this outbreak are predominantly from Victoria, although other States and Territories have reported locally acquired cases of Hepatitis A in small numbers. Once again, the epidemiological investigation has identified a strong link between illness and consumption of semi dried tomatoes.

From 1 January 2009 to 11 December 2009, 498 notifications of Hepatitis A were notified in Australia, up from a five year mean of 273 cases per year between 2004-08. Most of the increase has been attributable to these two outbreaks.

Investigation into possible food sources for people with Hepatitis A infection is difficult, given the long incubation time (10 – 50 days). Although recall of semi dried tomato consumption has been relatively effective, trace back of product has been difficult given a complicated supply chain with multiple suppliers, multiple brands, and imported product being mixed with local product, or being repacked for sale.

As a preventative measure, Victoria has issued an emergency order mandating pasteurisation of the final product or chlorine washing of tomatoes used in the manufacture of the product, and improved traceability of all ingredients used in the manufacturing process. In New South Wales, consumers have been advised not to consume loose semi dried tomatoes unless they are thoroughly cooked. Given the long incubation time, it is difficult to say at this stage whether these measures have controlled the outbreak. Numbers of new notifications of locally acquired Hepatitis A do appear to be decreasing.

Beachwatch

Beachwatch Programs recently celebrated 20 years! It was established in response to community concern about the impact of sewage pollution on human health and the environment at Sydney's ocean beaches. It has expanded over the years with approximately 130 swimming locations being monitored in the Sydney, Hunter and Illawarra regions and a further 150 sites monitored in partnership with local councils along the NSW coast.

Local councils along the NSW coast are contacted in September of each year and invited to participate in the Beachwatch Partnership Program. Councils are required to fund their own program and Beachwatch provides quality assurance of monitoring, laboratory analysis and reporting; assistance with data management and community reporting.

Beachwatch and NSW Health have identified many benefits from partnerships between local councils, NSW Health and DECCW in regard to recreational water quality. The Beachwatch program assists local Councils and NSW Health in identifying potential health concerns resulting from recreational water quality. Environmental Health Officers gain knowledge of microbial water sampling and risk management surveys. It is also important that Local and State Government Environmental Health Officers are aware of their role in incident response plans in regard to recreational water quality.

Within the Hunter New England Health Area, Port Stephens and Newcastle Councils are currently participating in the Beachwatch Partnership program. Port Stephens Council samples seven swimming sites once a week from October to April. The samples are tested for enterococci. Sample results are published as weekly star ratings on the DECCW Beachwatch website.

Newcastle Council monitors four swimming sites once a week from October to April. The samples are also tested for enterococci and published on the DECCW website.

For further information go to:

<http://www.environment.nsw.gov.au/beach/BPP.htm>



Indigenous Community Dog Health Program

The Indigenous Community Dog Health Program aims to reduce unwanted breeding of domestic animals and to prevent the transmission of zoonotic diseases between dogs and humans in remote and regional Indigenous communities. The program runs for two to three days and offers much needed veterinary services including vaccination, health checking, micro-chipping, surgical or chemical de-sexing, worming, flea, tick and parasite management for cats and dogs. The program is funded by the Area Health Service, NSW Health and the local RSPCA and is offered to all local Aboriginal community members who wish to be involved.

Historically Indigenous communities have a strong relationship with animals, with many Aboriginal people owning both dogs and cats for companionship. Often dogs and cats in Aboriginal communities are not micro chipped, vaccinated or de-sexed and do not receive intestinal and heart worming medication.

The Purfleet Environmental Health Committee, which consists of members from the Local Aboriginal Lands Council, Aboriginal Medical Service, Local Council and Hunter New England Area Health Service identified that within the Purfleet and Taree Aboriginal community, there were a large number of cats and dogs that could be a potential health risk to the community.

An Animal Health Program (AHP) was planned for the Purfleet and Taree Aboriginal community in October 2009.



Nichole and Hannah take registrations.

An Education/ Registration day was held prior to these two days to increase awareness and provide information on animal management. Aboriginal community members were also encouraged to register their pets for the day.

Three veterinarians and two vet nurses from the RSPCA together with an RSPCA Inspector worked tirelessly over the two days carrying out 61 health checks and de-sexing a total of 44 dogs and three cats. There was great community support and involvement. The Greater Taree City Councils Rangers also participated on the day performing micro-chipping and providing registration forms and advice on the Companion Animal Act, registration fees and Council requirements.



The AHP in the Purfleet and Taree Aboriginal community was a success with positive outcomes and a positive response from the community and also the workers who contributed on the two days.

Further post evaluation of the Purfleet and Taree AHP will be undertaken to effectively gauge the successes, barriers and downsides to the project. The AHP has previously been held in other Indigenous communities across NSW with similar positive outcomes.

A big thank you goes to everyone involved for their assistance and commitment to this worthwhile program. The participation of all stakeholders creates enhanced positive community relations between government organisations and the local Indigenous community, and most importantly improves the health and quality of life of the local Aboriginal Community.

Conferences & Training

AWTS Service Technician - Accredited Training Course

Nelson Bay, 17-19 February 2010

Details: Ian Fox cleanwaterh2o@bigpond.com

Erosion and Sediment Control Workshops

Sydney, 22-25 February 2010

Details: CET ph. (02) 4954 4997 or

Email: mail@environmentaltraining.com.au

NZ Institute of Environmental Health Conference

"Back to the Future" "Enabling Quality Living"

Taupo, New Zealand, 22-24 February 2010

Details: Sarah Williams swilliams@taupo.govt.nz

EHA (NSW) Public Health School

Sydney Olympic Park, 1-2 March 2010

Details: Margaret Hind - Ph. (02) 9181 3320

International Federation of Environmental Health (IFEH) 11th World Congress

Vancouver Canada, 5-10 September 2010

Details: <http://www.ifeh.org/>

Hunter New England Environmental Health Staff

Newcastle: Dr. David Durrheim, Service Director - Health Protection,
Philippe Porignieux, EH Mgr / SEHO
Chris Williams, EHO
Louise Prosser, Tobacco Officer
Cindy Gliddon, EHO (Mon – Wed)
Carolyn Herlihy, EHO (Thurs – Fri)
Nichole Ansell, Trainee EHO

Taree: Krystle Knowles, EHO
Hannah Ballard, Trainee EHO

Tamworth: Glenn Pearce, SEHO
Fidelis Jaravani, EHO
Ruth Williams, Trainee EHO

NSW Health Drinking Water Monitoring Program

NSW Health's Water Unit has recently sent water sample labels to each water utility, for the allocated number of microbiology and chemistry samples to be collected in 2010. The labels should only be used for drinking water samples collected from the water distribution system.

Water samplers are requested to take extra care to keep the labels dry during sample collection and transport due to a problem with the print on some of the 2010 water sample labels. The Division of Analytical Laboratories (DAL) has found that the printing on some labels fades when it gets wet, making it unreadable and barcode scanning difficult.

Freezer bricks should be used to keep samples cool during transport rather than ice, as melted ice may contaminate the samples and can damage the labels. Makeshift freezer bricks, such as frozen bags of water, should not be used. Sample bottles filled with water and frozen to act as freezer bricks can create confusion at the laboratory - you may be contacted to check if they are unlabelled samples. Dry ice should not be used to rapidly chill microbiology samples as this may result in a decline in bacterial populations.

DAL can return the freezer bricks it receives with samples. Contact the DAL Stores Manager to make arrangements.

The Division of Analytical Laboratories (DAL) recommends that for water chemistry a one litre sample AND a 250mL sample be submitted. To support the change in 2009 NSW Health distributed 250mL bottles. Please note that Water utilities will now need to provide their own 250mL chemistry sample bottles for 2010 and following years. For an electronic copy of DAL's chemistry protocol email: cindy.gliddon@hnehealth.nsw.gov.au

Hunter New England Population Health

Newcastle Office
Locked Bag 10
Wallsend NSW 2287

P: (02) 4924 6477 or (02) 4924 6499
F: (02) 4924 6490

Tamworth Office
PO Box 597
Tamworth NSW 2340

P: (02) 6767 8630
F: (02) 6766 3003

Taree Office
PO Box 966
Taree NSW 2430

P: (02) 6515 1853
F: (02) 6515 1804

After hours: P: (02) 4924 6499, request EHO on call P: (02) 6767 8630 P: (02) 4924 6499, request EHO on call

Email: phenquiries@hnehealth.nsw.gov.au
Internet: www.hnehealth.nsw.gov.au/hnep/h