

INDEX**NSW EPA Litter Tracking (1)****Crypto Response Plan (2)****Illegal Tobacco Imports (2)****Mister Germ Hand Hygiene Program (3)****Beat the Heat (4)****Arbovirus Monitoring in NSW (4)****Conferences & Training (5)****Environmental Health Risks Web update (5)****Welcome!**

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 the Hunter New England Local Health District.

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

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:

www.hnehealth.nsw.gov.au/hnepH/Pages/HNE-Population-Health.aspx

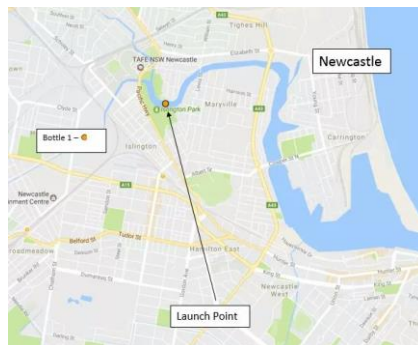
Bottles tracking the movement of Litter NSW EPA 'Hey Tosser!' Campaign

Last week the NSW EPA launched 40 GPS tracked plastic bottles into harbours, rivers and lakes across the state to demonstrate how litter can travel once it reaches our waterways. The bottle tracking project aims to demonstrate to the NSW community how far litter can travel once it reaches our waterways, or alternatively, how litter can linger in local mangroves, harbours and rivers.

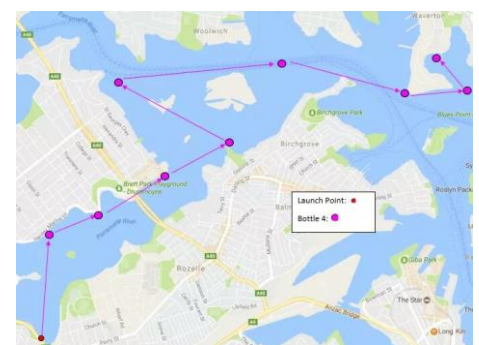
Many members of the community fail to recognise where litter goes once it is tossed in the street, at bus stops, on highways and at beaches. The bottle tracking will provide a real visual of what happens to rubbish that is tossed into our own community.

Launch locations include Canada Bay, Cooks River, Hawkesbury River, Newcastle, Parramatta, Vaucluse, Wagga Wagga and Wollongong.

The location of the bottles will be tracked on a daily basis via the GPS systems. Updates will then be shared via the Facebook page (<https://www.facebook.com/heytosser1external> link) so that members of the community can see the journey the bottles take.



Newcastle Launch site



Tracking bottle 4 from Canada Bay

For further information on the 'Hey Tosser' program, visit the EPA website at: <http://www.epa.nsw.gov.au/litter/bottle-tracking.htm>

Cryptosporidium Notification Response Plan

When Swimming Pool operators are notified by NSW Health that two or more cases of cryptosporidiosis have been associated with their swimming pool or swimming complex the following response plan is advised:

1. Close all pools using water common to the children's pools.
2. Adjust pH to less than 7.5.
3. Dose pools to achieve a CT* value of 15,300 ie. free chlorine concentration of 20 mg/L for 13 hours or 10mg/L for 26 hours.
*CT = concentration (mg/L) x time (minutes).
4. Pools fitted with an oxidation-reduction potential (ORP) automatic dosing system should achieve an ORP value of 865 mV for 30 minutes or 800 mV for 24 hours.
5. Check filtration (and coagulation) is efficient.
6. Once CT has been achieved, backwash the filter to waste or replace media/cartridge as appropriate.
7. When free chlorine is less than 10mg/L reopen pool(s).
8. Re-test the pool and log the incident and remedial action taken.



Additional information on cryptosporidium risk management can be found in Chapter 8 of the *Public Swimming Pool & Spa Pool Advisory Document*.

For guidelines, fact sheets and range of contamination response plans visit the NSW Health webpage at:

www.health.nsw.gov.au/environment/publicpools/Pages/default.aspx

Illegal Tobacco Imports on the Rise

Australian Border Force (ABF) officials have seized a record volume of illegal cigarettes and tobacco, with products hidden inside fluffy toys, machinery, picture frames and platform shoes.

For the month of January, five million illegal cigarettes and one tonne of loose leaf tobacco were detected at the International Mail Centre (IMC) in western Sydney. This is a new monthly record for the IMC, which takes in three quarters of Australia's mail from overseas.

During the six months from June to December 2016 ABF officials intercepted 145 tonnes of illegal tobacco at the IMC.



Photo Credit: ABC News, Mazoe Ford

Illegal cigarettes typically do not meet Australian legal requirements which require tobacco products to display health warnings and be contained in plain packaging.

In NSW, inspectors from the Department of Health have the power to seize illegal tobacco products from retailers. The offence has a maximum fine of \$11,000. The state's Chief Health Officer, Dr Kerry Chant, recently confirmed that recent raids uncovered more than 58,000 cigarettes and three kilograms of loose leaf tobacco at one business, and 3,000 cigarettes at another.

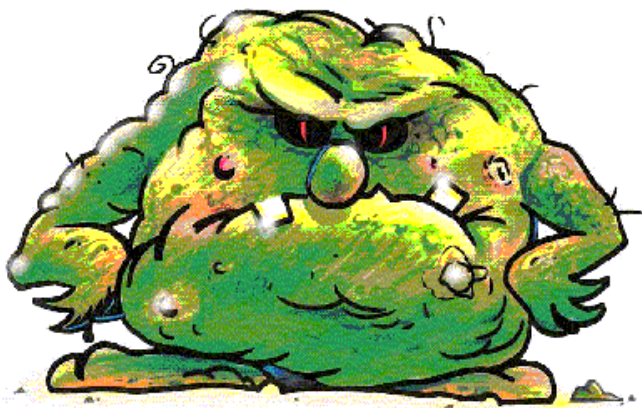
The lower priced illegal tobacco is more appealing, particularly for young people, which is putting them at a greater risk of initiating or continuing this serious health habit.

NSW Health has conducted 71 inspections for illicit tobacco since seizure powers were introduced twelve months ago, resulting in the seizure of around 240,000 cigarettes and 24 kilograms of loose leaf tobacco.

Mister Germ Hand Hygiene Program

The Mister Germ Hand Hygiene Program was developed locally as a disease prevention strategy by the North Coast Public Health Unit, following ongoing outbreaks of communicable diseases in children aged between 0-5 years of age.

The initiative is based on the Queensland Health Mister Germ Schools program which focuses on hand washing in the classroom as a way to reduce and prevent transmission of disease.



Young children, especially those in child care and preschool settings, are particularly vulnerable to infectious disease for several reasons including; exposure to germs in group care, their immature immune systems and common behaviours that spread germs, like thumb sucking, putting objects in their mouths and lack of control of bodily fluids.

It was decided that a hand washing program needed to be established in local preschools that addressed communicable diseases and was also culturally appropriate for the high percentage of Aboriginal children present in the local settings.

Despite the proven health benefits of hand washing, many people do not practise this habit as often as they should. Infrequent hand washing can lead to the spread of infections and can contribute to the spread of diseases, such as Salmonella and Hepatitis, which are spread by the ingestion of faecal material. Handwashing can also reduce the spread of respiratory diseases such as the common cold and Influenza. This is particularly important for immunosuppressed or vulnerable people who can experience a much more serious illness.

The Mister Germ Hand Hygiene Program is designed to assist teachers in incorporating evidence-based hygiene practices into preschool classes to reduce the risk of infectious diseases spreading.

The program contains a variety of physical, visual and verbal educational activities that show students what germs are, how they spread sickness and how this can be prevented. Activities include:

- introduction of Mister Germ
- washing hands activity and song
- insects carrying Mister Germ onto food
- washing fruit before eating it
- putting rubbish in the bin
- patting the dog/pets
- germs in the toilet
- passing the ball activity

The Germinator is introduced as the 'good' character teaching the children about 'bad' Mister Germ, who spreads the disease.



HNE Health has adopted the program, with EHOs visiting preschools and introducing the children to Mister Germ and The Germinator. It is pleasing to see the preschools implement the handwashing principles following our visits.

This year will see the introduction of the Mister Germ Smartboard program which is more interactive and uses hands-on technology to engage the children in the lesson, complete activities on the screen and have fun whilst learning how to avoid becoming sick.

 Watch this space! 

Beat the Heat Resources

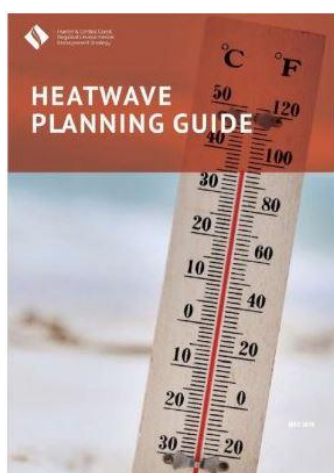
Extreme heatwave conditions were experienced this summer with temperatures of up to 47°C realised in parts of the Hunter region.

Heatwaves, or long periods of extreme heat, can have serious impacts on human health. Heat related illness includes dehydration, heat stroke and heat cramps, while extreme heat can also seriously worsen existing health conditions including cardiac disease, mental health and behavioural disorders, asthma and obstructive lung conditions.

There are 4 key messages to keep healthy in the heat:



Hunter Councils Environment Division, in a joint project with HNE Health and CC Health, developed a range of “Beat the Heat” communication resources which can be downloaded from the HCCREMS website. The resources help inform local communities, staff and clients about the health risks and strategies for staying safe in heat wave conditions.



With the hot weather now behind us, it is good to be aware of these resources in preparation for distribution next summer.

For more information visit

<http://www.hccrems.com.au/product-category/climate/>
or the NSW Health webpage at:
www.health.nsw.gov.au/environment/beattheheat/pages/default.aspx

Arbovirus Surveillance & Vector Monitoring in NSW

This year (1/07/16 - 11/03/17) there has been over 1100 cases of mosquito-borne disease notifications to NSW Health. The notifications include Ross River, Barmah Forest and Dengue*.

*acquired overseas or Northern Queensland

In NSW, mosquito monitoring is undertaken by the Institute for Clinical Pathology and Medical Research (ICPMR) on behalf of NSW Health. Mosquito populations are routinely monitored by way of trapping and Sentinel chicken surveillance at up to 30 locations across the State, through the months of November to April. This detects unusual densities of mosquitoes that may indicate increased arboviral activity. Recent routine mosquito surveillance has detected a marked increase in total numbers of mosquitoes in inland areas following flood events and heavy rains. Ross River notifications have also been high this year, particularly from southern NSW and Victoria which has recorded over 1000 notifications since 1 January 2017.

In the Hunter New England Health area, trapping is carried out by Lake Macquarie Council in the suburbs of Belmont, Dora Creek and Teralba. Sentinel chicken surveillance is conducted at Moree and Wee Waa within Moree Plains Shire Council. MidCoast Council has recently initiated re-joining the program, which will help to provide continuity of trapping up the coast towards the Mid North Coast LHD.

Through routine sampling, the program identifies the major pest and vector species for each locality, and monitors population fluctuations of the important species (especially *Culex annulirostris* for inland areas and *Aedes vigilax* for coastal sites). This provides NSW Health with an early warning of activity of arboviruses and vector mosquitoes of concern for public health. It also delivers an increased understanding of interrelationships between arboviruses, vectors and environmental conditions in the various regions of NSW.

For further information visit the ICPMR webpage:
<http://medent.usyd.edu.au/projects/arbovirus%20surveillance.htm>
or NSW Health at:
www.health.nsw.gov.au/environment/pests/vector/Pages/default.aspx

Conferences & Training

Aerated Wastewater Treatment Systems Servicing and Maintenance course
Centre for Environmental Training (CET)
Penrith, 26-28 April 2017
Details: www.environmentaltraining.com.au

Waste 2017
Coffs Harbour, 2-4 May 2017
Details: wasteconference@impactenviro.com.au

NSW Advanced Public Health School
Environmental Health Australia
Sydney, 8-9 May 2017
Details: www.ehansw.org.au/events

10th Making Cities Liveable Conference 2017
Brisbane, 10-11 July 2017
Details: <https://healthycities.com.au/>

11th National Aboriginal and Torres Strait Islander
Environmental Health Conference
Cairns, 4-7 September 2017
Details: www.natsieh.com.au

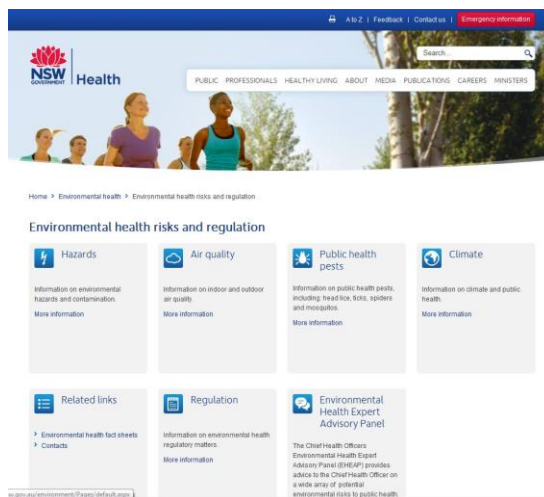
Water Management Conference
Local Government NSW
Dubbo, 4-6 September 2017
Details: <http://www.lgnsw.org.au/>

Annual State Conference and Educational Seminar
Environmental Health Australia (NSW)
Penrith, 11-14 September 2017
Details: www.ehansw.org.au/events

42nd EHA National Conference 2017
Environmental Health Australia
Brisbane, 16-19 October 2017
Details: www.ehansw.org.au/events

Environmental Health Risks & Regulation web update

NSW Health has recently updated its 'Environmental Health Risks' webpage for easier navigation.



The new web page, now called 'Environmental Health Risks and Regulation', contains new links and updated info boxes. You can check it out at: <http://www.health.nsw.gov.au/environment/Pages/health-risk.aspx>

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Cindy Gliddon, EHO (Mon, Tues, Wed)
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