This yearbook outlines the work of the Environmental Health Directorate, in the Public and Aboriginal Health Division of the Department of Health, Western Australia, for the 2018-19 financial year.
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From the Executive Director

The past financial year has seen a number of changes for the Environmental Health Directorate. I want to commend staff for managing and responding to various environmental health concerns during this time of change.

We said farewell to Jim Dodds, the previous Executive Director after 15 years of service. This meant I took over the reins and supported the roll out of five new positions that focus on delivering business improvements, including the Manager of System Performance, Principal Stakeholder Engagement Officer, Principal Surveillance Analyst, Principal Project Officer and Project Officer.

Reflecting back on a few unanticipated events, we had to respond to the national needles in strawberries scare, a substantial algal bloom that was causing havoc in the Swan River, concerns surrounding glyphosate risks and political attention around pill testing at music festivals.

On top of this we released six discussion papers reviewing the future need of environmental health legislation to support the roll out of stage 5 of the Public Health Act, coordinated the review of the State Public Health Plan, funded the creation of a new food safety consumer awareness campaign, hosted training on wastewater management and mosquito management, and released numerous publications to support the application of legislation or clarify community concerns on a range of environmental health topics, just to name a few.

This was all achieved during a time when the majority of our team relocated from Grace Vaughan House in Shenton Park, after 25 years, making the move to head office in East Perth. Although this move was a long time coming, it required extensive coordination to relocate. The move happened seamlessly, and we are now settled in the May Holman building at 189 Royal Street. This means we can collaborate more effectively across the Public and Aboriginal Health Division and central office.

I want to thank our many stakeholders, particularly local governments, for your support. We are especially pleased with how engaged local governments have been with the regulation review program.

I hope you enjoy reading about the diverse projects managed by the Environmental Health Directorate. The majority of these projects were done in partnership with our many and varied stakeholders across WA.

Dr Michael Lindsay
A/Executive Director
Environmental Health Directorate
Public and Aboriginal Health Division
Department of Health, Western Australia
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>ADG</td>
<td>Assistant Director General</td>
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<td>CLAG</td>
<td>Contiguous Local Authorities Group</td>
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<td>DAP</td>
<td>Development Assessment Panel</td>
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<td>DOH</td>
<td>Department of Health</td>
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<td>DAWR</td>
<td>Department of Agriculture and Water Resources</td>
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<td>DWER</td>
<td>Department of Water and Environmental Regulation</td>
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<td>DPIRD</td>
<td>Department of Primary Industries and Regional Development</td>
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<td>EHD</td>
<td>Environmental Health Directorate</td>
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<td>EHTP</td>
<td>Environmental Health Trachoma Project</td>
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<td>FSANZ</td>
<td>Food Standards Australia and New Zealand</td>
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<td>Food Act</td>
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<td>HSP</td>
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<td>PAHD</td>
<td>Public and Aboriginal Health Division</td>
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<td>PFAS</td>
<td>Poly-fluoroalkyl substances</td>
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<td>Public Health Act</td>
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<td>WA</td>
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<td>WAPOL</td>
<td>WA Police</td>
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<td>WACHS</td>
<td>Western Australia Country Health Service</td>
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<td>WALGA</td>
<td>Western Australian Local Government Association</td>
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</table>
The Environmental Health Directorate (EHD), led by A/Executive Director Dr Michael Lindsay, is one of seven Directorates within the Public and Aboriginal Health Division of the WA Department of Health, in 2018-19.

During this time, the EHD finalised its organisational restructure. Officers now sit in either the **System Performance Team** or one of six **Discipline-specific Teams**; Biological and Applied Environmental Health Hazards, Chemical Hazards, Food, Radiation Health, Science and Policy, and Water (**Figure 1**). The purpose of this restructure has been to group similar service-focused activities together in System Performance, whilst maintaining core expertise in key environmental health disciplines.
The EHD administers a wide range of **Acts and regulations**, including those listed below, as well as relevant Codes of Practice:

**Public Health Act 2016**  
**Health (Miscellaneous Provisions) Act 1911**

**Environmental Health Hazards**  
**Construction Camp Regulations**  
**Fly Eradication Regulations**  
**Health (Air-handling and Water Systems) Regulations 1994**  
**Health (Asbestos) Regulations 1992**  
**Health (Cloth Materials) Regulation 1985**  
**Health Act (Carbon Monoxide) Regulations 1975**  
**Health (Garden Soil) Regulations 1998**  
**Hairdressing Establishment Regulations 1972**  
**Health (Skin Penetration Procedure) Regulations 1998**  
**Health (Offensive Trades Fees) Regulations 1976**  
**Health (Construction Work) Regulations 1973**  
**Health Act (Laundries and Bathrooms) Regulations**  
**Health (Public Buildings) Regulations 1992**  
**Health (Rottnest Island) By-laws 1989**  
**Health (Pesticides) Regulations 2011**  
**Health (Prescribed Insect Pests) Regulations 1991**  
**Health (Notification of Lead Poisoning) Regulations 1985**  
**Health (Section 112(2) Prohibition) Regulations 2006**  
**Piggeries Regulations 1952**  
**Registration, Enforcement and Discharge of Local Authority Charges on Land Regulations**  
**Sewerage (Lighting, Ventilation and Construction) Regulations 1971**

**Food**  
**Food Act 2008**  
**Food Regulations 2009**

**Water**  
**Fluoridation of Public Water Supplies Act 1966**  
**Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974**  
**Health (Temporary Sanitary Conveniences) Regulations 1997**  
**Health Act (Underground Water Supply) Regulations 1959**  
**Health (Aquatic Facilities) Regulations 2007**

**Radiation Health**  
**Nuclear Waste Storage and Transportation (Prohibition) Act 1999**

**Radiation Health as secretariat to the Radiological Council**  
**Radiation Safety Act 1975**  
**Radiation Safety (General) Regulations 1983**  
**Radiation Safety (Qualifications) Regulations 1980**  
**Radiation Safety (Transport of Radioactive Substances) Regulations 2002**

**Science and Policy**  
**Tobacco Products Control Act 2006**  
**Tobacco Products Control Regulations 2006**
Major achievements for 2018 - 2019

<table>
<thead>
<tr>
<th>Operating structure</th>
<th>Enabling legislation</th>
<th>Major achievements</th>
<th>Our year in review</th>
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</thead>
<tbody>
<tr>
<td>Trachoma prevention initiatives</td>
<td>Coordinated the Environmental Health Trachoma Project and implementation of Safe Bathroom Checks across Aboriginal communities.</td>
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<tr>
<td>Supporting Stage 5 Public Health Act 2016</td>
<td>Released six regulatory review discussion papers to support Stage 5 of the Public Health Act.</td>
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<tr>
<td>WA Foodborne Illness Reduction Strategy 2018-2021+</td>
<td>Funded the development of a consumer awareness campaign to improve food handling practices and reduce the incidence of foodborne illness at home.</td>
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<tr>
<td>Illicit drug residue guidance</td>
<td>Published guidance for occupants, landlords and property managers on managing risk associated with illegal drug activity in homes.</td>
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<tr>
<td>Restructure and relocation</td>
<td>Finalised the organisational restructure and relocated to Royal Street, resulting in increased business efficiency and co-location of all PAHD Directorates.</td>
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PUBLICATION ACT

The Science and Policy team coordinate projects that support the implementation of the Public Health Act 2016, in collaboration with teams across the EHD.

Discussion papers released
- Air-handling and warm water systems
- Public buildings
- Drinking water
- Commercial garden soils
- Offensive trades
- Events

Guidelines drafted
- Preparation of the deceased for burial or cremation
- Cloth materials and second hand clothing
- Temporary sanitation provisions
- Commercial garden soils

Public health planning

An animated video was created to help explain local governments role in public health. The video aims to raise awareness about local governments long standing role in improving health and wellbeing at a local district level.

View the video at: https://youtu.be/CBzjEo4Fqys
Regulation review program

To support stage 5 of the implementation of the Public Health Act, six discussion papers were released to seek stakeholder input on the most appropriate option to progress for WA. All papers are available to view on the regulation review program webpage. These included:

Air-handling and water systems


Public buildings

The Managing public health risks in public buildings in Western Australia discussion paper reviewed the management of public health risks in public buildings as prescribed by the Health (Public Buildings) Regulations 1992. Consultation was conducted between October 2018 and January 2019. The consultation summary report identified the preferred option was the ongoing regulation of public buildings. The Minister has approved the development of new regulations. Work continues with the Public Buildings Working Group to develop regulations that integrate with and compliment the Building Code of Australia. A number of construction requirements from the Health (Public Buildings) Regulations 1992 have also been successfully adopted into the National Construction Code 2019 as a WA Appendix.
Drinking water

A new regulatory framework for drinking water in Western Australia discussion paper was released for public consultation in June 2019. The paper provides a summary of the current regulatory framework and presents the options on how the public health risks associated with the supply of drinking water can be managed. It also proposes a new and more robust regulatory framework made under the Public Health Act. Feedback from stakeholders is being summarised into a consultation summary report.

Commercial garden soils

The Commercial Garden Soil Regulation Review discussion paper was released for public comment from December 2018 – February 2019. This paper outlined the public health risks of Legionella Longbeachae associated with commercial garden soils in WA, currently managed under the Health (Garden Soil) Regulations 1998. Following consultation, the Minister has approved the repeal of the regulations with replacement by an industry guideline at stage 5 of implementation of the Public Health Act. A Guideline for managing the public health risks associated with commercial garden soils in WA has been drafted for the commercial garden soils industry to minimise the public health risk of Legionnaires’ disease. The guideline will be consulted on further, and published at stage 5 of implementation of the Public Health Act when the existing Health (Garden Soil) Regulations 1998 are repealed.

Offensive trades

The Management of public health risks related to offensive trades in Western Australia discussion paper was released for public comment from April to July 2019. Offensive trades are currently managed under Health (Miscellaneous Provisions) Act 191 Part VII, Division 2, Sections 186 – 198 and Health (Offensive Trades Fees) Regulations 1976. A consultation summary paper is being finalised, and will outline the next steps for WA.

Events management

The Managing public health risks at events in WA discussion paper reviewed the regulation of public health risks at events, currently managed under the Health (Public Buildings) Regulations 1992. This paper was released between March and June 2019, and explored the options of retaining status quo, self-regulation or development of new regulations under the Public Health Act to manage the risks associated with events into the future. A consultation summary is in development.

Pesticide safety

The Pesticides Regulation Discussion Paper was released for consultation, and examines the Health (Pesticide) Regulations 2011 and the existing regulatory environment to determine whether this public health risk must continue to be regulated in WA. The public consultation closes on the 10 October 2019, and will be used to inform the
direction of the pesticide regulation review and the management of public health risks associated with pesticides.

**Housing**

A draft paper has been developed discussing housing risks to health currently managed under the *Health (Miscellaneous Provisions) Act 1911* Part V Division 1 Houses unfit for occupation, the *Health (Laundries and Bathrooms) Regulations* and the *Sewerage (Lighting, Ventilation and Construction) Regulations 1971*. This paper will explore the options of retaining status quo, repeal or the development of new regulations under the Public Health Act. The paper will be examined by a review group and released for consultation later in 2019.

**Regulations supported for repeal at stage 5**

To support stage 5 of the implementation of the Public Health Act, and following extensive consultation, the Minister for Health has now approved the repeal of the legislation related to:

- Cloth materials
- Construction sites, temporary or remote worksites
- Morgues

This legislation can only be repealed at stage 5, once the general public health duty, and enforcement tools come into effect.

**Cloth materials guidance**

A *Guideline for the management of public health risks associated with cloth materials in WA* has been developed. The guideline outlines the generally accepted practices for use by local government agencies and other stakeholders as the primary guidance material to assist in the management of used cloth material items. The guideline will be published at stage 5 implementation of the Public Health Act when the existing *Health (Cloth Materials) Regulations 1985* are repealed.

**Construction sites, temporary or remote worksites**

The EHD released a draft guideline for *Sanitation provision and maintenance on construction sites and mobile, temporary or remote worksites in WA* for public comment. The guideline is currently being reviewed in response to feedback obtained during consultation and will be published at stage 5 implementation of the Public Health Act when the existing *Health (Temporary Sanitary Conveniences) Regulations 1997* and the *Health (Construction Work) Regulations 1973* are repealed.

**Mortuaries guidance**

A *Guideline for the preparation of human remains prior to burial or cremation* has been developed in preparation for stage 5 implementation of the Public Health Act. The guideline can be used by local government...
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authorised officers in the application of the general public health duty and outlines generally accepted practices for funeral industry workers in addition to people who provide community care services and members of the general public. The guideline will be published at stage 5 implementation of the Public Health Act when current provisions for morgues in the Health (Miscellaneous Provisions) Act 1911 are repealed.

Design and construction of temporary toilets guidance

A draft guideline is currently being developed to ensure temporary toilets are designed and constructed in a manner which does not pose a risk to the health and safety of any person using the facility. A range of accessible temporary toilet types have also been included in the guideline to ensure these facilities meet the needs of people with mobility and/or vision impairment, people who require wheelchair access, people who require hoist transfer options or carer assistance. The guideline will be published at stage 5 implementation of the Public Health Act when the existing Health (Temporary Sanitary Conveniences) Regulations 1997 are repealed.

Public health planning

Part 5; public health planning, of the Public Health Act will come into effect at stage 5. Work has progressed to support local governments to prepare for these new requirements.

Formation of the Public Health Planning Reference Group

EHD coordinates a WA Health system wide group to discuss the provision of support to local government by the DOH and the Population Health Units of the Health Service Providers (HSPs); North, South and East Metropolitan Health Services, the WA Country Health Services, and the Child and Adolescent Health Service. The WA Local Government Association (WALGA) is also a key member.

Activities of the group have included:

- Documenting the roles and responsibilities for public health planning support to local government by the WA Health system
- Development of public health planning tools available for local governments
- Organisation of two half day sessions for DOH and HSP staff to introduce the public health planning requirements and ensure consistency of support across WA Health
- Participation in awareness raising activities for CEO’s and elected members hosted by the WALGA
- Formation of a Health Status Report Working Group
What is local government’s role in public health?

The EHD, in collaboration with PAHD, the Population Health Units of each HSP and WALGA, released an animated video helping to explain local government’s role in public health.

The video aims to raise awareness about local government’s important and long standing role in improving the health of local communities since the turn of the century.

The resource is intended to support local government officers who have a role in promoting the requirement for developing a public health plan to their colleagues and community.

Drafting of the State Public Health Plan

On behalf of the Chief Health Officer, the EHD was tasked with coordinating the review of feedback received following consultation of the Interim State Public Health Plan, in partnership with the Epidemiology Branch and other areas of the PAHD.

63 responses were received from various stakeholders including State and local Government, not-for-profit organisations, industry and community groups.

As part of the review process, the EHD collaborated with the Mental Health Commission to incorporate mental health and other drug related priorities for the State into the revised Plan.

The Chief Health Officer made a commitment to release the Plan for mid-2019, to support local governments commencing or continuing the public health planning process. The intention is for local governments to consider the Plan’s priorities and adapt them as necessary to reflect the particular public health risks prevailing in its local district.

Extensive information is available online to support local governments with the public health planning process:

- State public health plan
- Public health planning for local governments
ABORIGINAL ENVIRONMENTAL HEALTH

The Science and Policy team manage the Aboriginal Environmental Health Program for regional and remote communities.

$8.18 million in Aboriginal environmental health expenditure

22 Aboriginal environmental health service providers

71 FTE staff employed by service providers to deliver program

72% Staff employed by service providers with Certificate II Indigenous Environmental Health qualification or higher

EHD Aboriginal Environmental Health Program team member, Robert Mullane, in the Pilbara.

The Environmental Health Trachoma Program vehicle.

Our year in review

Aboriginal Environmental Health

Health
Aboriginal Environmental Health: A shift in focus

The Aboriginal Environmental Health Program has focussed on the important role that the home environment plays in supporting healthy living practices. To achieve this, it is critical that every home provides a safe environment and functioning health hardware.

Environmental health processes that encourage participation with primary care clinics have been developed, with the clinic-based Environmental Health Referral process developed into a formal approach in the Kimberley. There is now an opportunity to incorporate this into other health regions of WA.

The response to trachoma prevalence and a concerted effort to eliminate this disease from remote Aboriginal communities – the only places where it is found in Australia – has relied on a strengthened program more directed at improving hygiene in the home environment. Environmental health is recognised as core primordial prevention for trachoma, rheumatic heart disease and other preventable diseases.

The shift in program focus has not resulted in increased funding.

Aboriginal environmental health workforce development

During the months of March and April 2019, two Certificate II courses in Indigenous Environmental Health were held in Broome and Geraldton. The EHD contracted two state based Registered Training Organisations to deliver the training to 15 students.

The EHD continues to invest in training the Aboriginal environmental health workforce in order to maintain a high rate of qualified staff. This is a significant achievement and ensures that practitioners have the appropriate skills to improve environmental health conditions in remote communities.

Aboriginal environmental health web content

Online Aboriginal environmental health resources were substantially expanded to support environmental health practitioners working in Aboriginal communities throughout WA. Content has been organised under a series of icons and includes training videos, digital forms, newsletters and guidance resources across a range of topics, including:

- Community Environmental Health Action Plans (CEHAPs)
- Dog health
- Environmental health referrals
- Plumbing in remote communities
- Safe Bathroom initiative
Environmental Health Trachoma Project

The WA Aboriginal Environmental Health Trachoma Project (EHTP) commenced in July 2018, after the EHD and the WACHS signed a Memorandum of Understanding for the provision of environmental health support services to address the ‘E’ component (environmental improvement) of the ‘SAFE Strategy’. Funding for the next four years was secured from the Commonwealth Government, via WACHS Central, to support the delivery of the EHTP.

The EHD is partnering with the Public Health Advocacy Institute of WA (PHAIWA) to assist in delivery of the EHTP in at-risk communities located within the Midwest, Goldfields, Pilbara and Kimberley regions. Key outcomes of the project include:

- Environmental health practitioner visits
- Environmental health activities in at-risk communities
- Education and training
- Implementation of Squeaky Clean Kids
- Trachoma screening and treatment programs

Key aspects of the EHTP, including support, mentoring and training programs have been well received both by regionally-based environmental health service providers and communities.

WA is leading the way, both nationally and internationally, with this innovative project. The national Trachoma Coordinating Reference Group has taken a keen interest in the project and its associated activities. Additionally, Dr Andreas Mueller (Consultant for the WHO Office of the Western Pacific Region) recently attended the Pilbara trachoma screening activities, and provided this feedback after witnessing the coordinated environmental health response:

"I was impressed with the comprehensive team approach I was able to witness in the Pilbara, where nurses visited remote communities for trachoma screening not by themselves but together with staff responsible for health promotion and with environmental health experts. We are close to eliminating trachoma in Australia and this team approach is a great example of effective partnerships for health. I will promote the WA example in other parts of the world."
Regional forums

The Aboriginal Environmental Health Program continues to be actively engaged in the facilitation of the Goldfields, Midwest and Pilbara Aboriginal Environmental Health Forums. The forums provide an opportunity for local, regionally based health, environmental health, community and housing related agencies to work together to better coordinate, plan and improve the environmental health and living conditions for Aboriginal people and their communities.

These forums provide a valuable place for traditionally siloed agencies and programs to discuss a range of topics and drive improving the living conditions of people in regional and remote Aboriginal communities. The Midwest and Pilbara forums met twice in 2018/19 and the Pilbara forum four times. Each report to and have formal links to the “parent” Regional Aboriginal Health Planning Forums. The Kimberley region has their own active Aboriginal environmental health sub-committee which reports to the Kimberley Aboriginal Health Planning Forum. Although included from time-to-time, the EHD is not a formal member of either of these Kimberley groups.

Environmental health service delivery

The EHD contracts 22 service provider agencies to deliver a range of basic environmental health services to the State’s regional and remote Aboriginal communities. This financial year the State invested over $8.18 million in the WA Aboriginal environmental health program. The EHD has embarked on developing the next generation of contracts by engaging with all contracted service providers and WACHS to co-design a new service delivery model and scope of services to meet community outcomes.

Aboriginal Environmental Health Service Providers workshop

A workshop engaging stakeholders to assist in the co-design of a new model of service delivery that will underpin the 5-8 year procurement process of future Aboriginal environmental health services was hosted by the EHD. The workshop was independently facilitated by Aha! Consulting and well attended by 38 delegates, representing 20 Preferred Service Providers and WACHS (Kimberley). The workshop was successful in stimulating robust discussion and jointly determining draft community and service level outcomes/activities.
Enabling Legislation

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Enabling legislation

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Tobacco

2,312
Store visits and/or audits related to the Tobacco Products Control Act 2006

<table>
<thead>
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<th>31</th>
<th>70</th>
<th>23</th>
<th>4</th>
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<tr>
<td>Complaints investigated</td>
<td>Infringements written</td>
<td>Warnings issued</td>
<td>Prosecutions</td>
<td>Search warrants executed</td>
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Tobacco licensing

2949
Tobacco licences renewed

491
New licences issued

12
Training sessions conducted

SMOKING CAUSES EMPHYSEMA

SMOKING CAUSES PERIPHERAL VASCULAR DISEASE

LUNG WITH EMPHYSEMA

GANGRENE

The System Performance team is responsible for coordinating state-wide administration and enforcement of tobacco legislation.
Our year in review

Enabling legislation

A Controlled Purchase Operation (CPO) in the metropolitan area was funded to determine the likelihood of tobacco retailers selling tobacco products to minors. The Tobacco Products Control Act 2006 prohibits the sale and supply of tobacco products to children under the age of 18 years. The results of 81% compliance, is a significant improvement from the last CPO of 67% compliance in 2016.

Retailer training package

A retailer training package was developed to assist tobacco retailers in training their staff regarding restrictions on selling tobacco products to minors. Whilst the 2018 CPO results show strong improvements in levels of compliance, several new priority areas for future education and targeting have been identified to help further improve compliance with the Tobacco Products Control Act 2006 in reducing minors access to tobacco products in WA.

Changes to tobacco control legislation

On 18 March 2019 the State Government introduced further tobacco control legislation that affects the sale of tobacco, signage and the display of tobacco products. The introduction of more graphic health warning signs as well as the banning of shopping reward schemes to include the tobacco purchases and the cessation of tobacco sales at sporting, cultural or other events as well as the reduction in size of tobacco ‘price boards’ is a comprehensive move forward in reducing the prevalence of tobacco related illness on our health system.

The new legislation also introduced new regulation restricting smoking area buffer distances to reduce the impact of second hand smoke and smoke drift in our community.

Past surveys and operations have shown that retailers and wholesalers who hold tobacco licences are predominately compliant with the legislation and associated regulations and understand their obligations as holders of a tobacco licence.

The EHD coordinates, develops and conduct enforcement activities to promote industry and community compliance with the legislative changes.
The Food Team, with support from System Performance, work within a food regulatory system responsible for administering the Food Act 2008, with the aim of ensuring food for sale is safe and suitable for human consumption. Functions at the national, state and local government level, involve the provision of leadership, strategic direction, education and statewide coordination of food safety, food regulation and nutrition related matters.
Foodborne illness outbreak management

36 outbreaks of foodborne or probable foodborne disease were investigated in WA that caused at least 415 cases of reported illness during the 2018/19 period as part of the WA foodborne disease investigation program.

The EHD liaises with local government during the investigation of suspected food businesses, and coordinates food business investigations when multiple local governments are involved. Estimates of the effects of foodborne illnesses and individual pathogens provide evidence for policy interventions and food safety regulation.

Food Act 2008 Reporting

The Food Act 2008 (WA) Enforcement Agency Reporting 1 July 2017 to 30 June 2018, summarising local government enforcement agencies performance of functions under section 121 of the Food Act was published. Enforcement agencies reported information on:

- authorised officers
- registration and assessment of food businesses
- compliance and enforcement activities
- primary production and processing
- regulatory food safety auditing and
- food safety education and training.

Resources available for allergen declarations

Allergen resources to support local governments and food businesses to comply with the legislative requirements regarding allergens in food were updated, including:

- The Food Act 2008 (WA) – guideline for allergen declarations by food businesses
- Food allergen declarations information for food businesses
- Food allergy: creating safer food choices

The resources provide information on:

- statutory requirements for food business on identifying food allergens in their food
- practical suggestions on risk reduction strategies and managing risks
- allergen declaration requirements for enforcement agencies and practical and consistent compliance and enforcement approaches
- national incident investigation protocols that support investigating EHOs to effectively investigate any incidents of anaphylaxis.
Safe handling of eggs and products containing eggs

Guidance on the safe handling of eggs and products containing eggs, associated with the implementation of Regulatory Guideline No. 5 – The preparation of raw egg-based products – was published to promote a consistent approach by enforcement agencies. This guideline was developed in response to the strong epidemiological link between consumption of raw or undercooked eggs and human Salmonellosis cases, and aligns with the aim of the WA Foodborne Illness Reduction Strategy 2018-2021+.

EHD acknowledges the multi-agency response to such investigations including Local Governments, OzFoodNet, PathWest and Public Health Units.

Food recall review

A food recall is action taken by a food business to remove unsafe food from distribution, sale and consumption. All food businesses must be able to quickly remove food from the marketplace that is unsafe, to protect public health and safety.

To better understand the main challenges faced by small food businesses when dealing with a food recall, the EHD collated and examined the past eight years of food recall statistics.

From 2011 to 2018, a total of 524 food recalls were conducted across Australia, with 180 affecting WA. Of the food recalls affecting WA, 33 were initiated by WA food businesses with an average of four recalls initiated per year. These figures show an infrequent number of recalls being initiated by WA food businesses when assessed against the total number of recalls affecting WA.

These findings were published in the Journal of Environmental Health Australia (WA); Food Recall: Examining the Challenges for Small Food Businesses. The EHD will use the information to support the development of strategies that aim to improve the effectiveness of the food recall process in WA.

Removing drama from food recalls

As part of the National Environmental Health Australia conference held in Perth in November 2018, the EHD had the opportunity to present the topic ‘Removing Drama from Food Recalls’.

The presentation consisted of four parts: the anatomy of a food recall; three-acts of a WA food recall drama; ‘4P’ approach to food recalls; and the future of food recalls. Feedback from WA local governments found that the ‘4P’ approach to food recalls was most beneficial.

An extended version of this presentation was also presented to regional local governments, and explored additional topics related to food recall roles and responsibilities; mastering the food recall steps and the concept of risk analysis.
Research project on egg layer farms

In a first for WA, the egg industry was invited to participate in a research project with DOH. The on farm component of the project has been completed, with the DOH and Murdoch University delivering various feedback sessions to the egg industry and stakeholder groups. Findings of the project are positive with specific research translation currently underway with many new projects being identified.

The research project would not have been possible without the expertise of Murdoch University School of Veterinary and Life Sciences and the continued support and cooperation of the WA egg industry and stakeholders groups.

The importance of collaborative engagement opportunities such as this cannot be underestimated, as it is crucial to the effective long term management of reducing food borne illness.

Funding a food safety consumer awareness campaign

The need to develop a long-term consumer awareness campaign was identified as a key priority of the Foodborne Illness Reduction Strategy (2018–2021+).

The EHD allocated $150,000 towards funding a community awareness campaign, which aims to raise awareness of safe food handling practices in the home.

A pilot campaign is proposed and is anticipated to be trialled in the Busselton area. Curtin University will evaluate the campaign to determine the scope and target of further funded marketing.

Health Star Rating Toolkit

The Health Star-Rating (HSR) system was introduced in 2014 as a front-of-pack labelling system that rates the overall nutritional profile of packaged food from ½ a star to 5 stars. It provides a simple way to compare similar packaged foods and make healthier choices.

Phase 5 of the HSR advertising campaign launched in 2018. As the nominated WA member of the HSR Social Marketing Advisory Group, the EHD assisted in promoting the stakeholder toolkit to local government and the general public.

Energy drink consumption study

The EHD has been collaborating as a co-investigator on the Telethon Kids Institute (TKI) research study, “Amped Up”. This study is investigating the prevalence of energy drink consumption in WA youth (12-17 year olds) and reported adverse effects. As part of the research dissemination, a recent poster was presented at an international conference, the Nutrition Education: Rooted in Food: 52nd Annual Conference, and published in the Journal of Nutrition Education and Behaviour.
Risk assessment and legislative requirements for honey production

Following an increase in enquiries related to clarification of the risks and legislative requirements for commercial honey production, the EHD responded by publishing Guidance on the Risk Assessment and Legislative Requirements for Honey Production in WA.

The guidance highlights the steps in the manufacturing process including different hazards associated with each step, and captures legislative requirements for honey production.

Fruit and vegetable survey

In partnership with local government, the Fruit, Vegetables and Agricultural Chemicals Survey was conducted to monitor agricultural chemical residue levels on fresh fruit and vegetables, with results released in 2018-19.

This survey forms part of routine surveillance under the WA Food Monitoring Program to monitor compliance by WA growers with the maximum residue limits contained in the Australian New Zealand Food Standards Code. The survey was conducted with the support from local government environmental health officers across WA, who collected a variety of fruit and vegetables from growers, packers, wholesale and retail markets.

Dairy and smallgoods survey

In partnership with local government, the Dairy, Smallgoods and Pathogenic Microorganism Survey was conducted to monitor the presence of pathogenic and indicator microorganisms in a range of WA produced dairy and smallgoods products, with results released in 2018-19.

As part of the WA Food Monitoring Program, the DOH monitors the microbiological safety of food products by undertaking regular monitoring surveys. Survey results help to identify or anticipate where there may be a public health concern.
Our year in review

A national scare: Needles in strawberries

In September 2018, there was a series of reports of needles being found in strawberries of various brands across Australia. Affected punnets were first reported in Queensland, with concerns about potential copycats for cases later reported in other states and territories including WA.

As a result of this unique investigation, regular meetings were held between WA DOH, EHD, WA Police (WAPOL), the Department of Primary Industries and Regional Development (DPIRD) and other affected State Health Authorities to share information and manage the investigation of the reported incidents.

While EHD coordinated investigative activities, the major work on the ground was done by three WA Local governments: The City of Wanneroo; the City of Swan and the Shire of Gingin, who effectively and in a timely manner investigated ten different brands of WA strawberries with a number of growers, distributors, packers and agents. It was reported that all businesses managed food safety risks through accredited quality assurance programs and there were no obvious consistencies between implicated brands and affected businesses.

Food Standards Australia and New Zealand (FSANZ) published a comprehensive Strawberry tampering incident report.
WATER

The Water Team, with support from System Performance, provide policy advice and administer water regulatory requirements for all forms of water use of public health significance in WA.

26,520
Water monitoring samples collected

17,751 Aquatic facilities
3,917 Drinking water
3,456 Environmental waters
1,354 Wastewater and recycling schemes
6 Airconditioners (Legionella)
24 Abattoir and meat processors

*An additional 12 miscellaneous samples were collected

Assessments and Approvals

TOTAL 722
- Subdivisions (WAPC) (228)
- Sewage applications (326)
- Aquatic facilities (70)
- Onsite wastewater systems (21)
- Development approval reviews (24)
- Recycled water quality management plans (30)
- Biosolids (18)
- Drinking water quality management plans (5)

Responses to Events of Public Health Significance

Significant events in recreational water bodies
- Algal bloom: 12
- Fish kills: 3
- Bacteria: 4
- Shellfish alert: 43

Wastewater overflows and sewage spills
- Commercial: 14
- Domestic: 119
- Environmental: 189

*An additional 6 responses related to miscellaneous issues
*An additional 7 related to other sources
Our year in review

Wastewater management training workshops

Five full-day Wastewater Management Workshops were organised across Perth, Busselton, Bruce Rock and Albany (July-August, 2018). Presenters from the DOH, Department of Planning, and Department of Water and Environmental Regulation (DWER) covered a range of topics, including the new Government Sewerage Policy 2018, sewage overflows into buildings, site and soil evaluation under AS/NZ/1574, on-site wastewater system installation and the development of sewage schemes.

The workshops were well attended by over 100 environmental health professionals and 85 industry representatives. Feedback was very positive and will be used to inform future training opportunities. These workshops support the EHD to partner with local government and industry, both in setting regulatory priorities and sharing information on the best practice in wastewater management.

Updated Australian Drinking Water Guidelines endorsed

The Minister for Health endorsed the August 2018 edition of the Australian Drinking Water Guidelines, published by the National Health and Medical Research Council (NHMRC), as the basis for setting policy for drinking water quality, safety and risk management in WA. Previously, policy was based on the 2004 edition of the Guidelines.

The EHD oversaw a consultative process with drinking water suppliers to assess the significance and incremental cost (if any) of moving to the latest edition of the Guidelines. This confirmed that, except for nitrate in a small number of remote communities with existing special provisions, drinking water supplied by licensed water suppliers in WA complies with all health-related requirements set out in the 2004 Guidelines and will continue to do so under the August 2018 Guidelines.
Pesticide Monitoring Exclusion Policy

The Pesticide Monitoring Exclusion Policy (the Policy), was published and sets out a risk-based routine monitoring framework for pesticides relevant to drinking water catchment areas in WA.

The Policy is designed for drinking water suppliers in WA in the context of the overall risk management framework set out in the Australian Drinking Water Guidelines. It may be applied to any drinking water catchment, but is principally focussed on surface water catchments and ground water catchments that may be affected by surface land use activities.

The Policy defines those pesticides which can be excluded from routine catchment monitoring program of drinking water suppliers in WA and provides a methodology for developing a risk-based monitoring approach for the remainder.

Swan River Toxic Alexandrium Microalgae Bloom

Between March and May 2019, the Swan River Estuary experienced a toxic Alexandrium microalgae bloom. The bloom commenced near East Perth and quickly spread both up and down stream on the flood and ebb tides.

Alexandrium sp. produces toxins that are concentrated by filter feeding shellfish, e.g. mussels. Human consumption of shellfish containing high levels of the toxin can result in paralytic shellfish poisoning (PSP). In the worst-case scenario, this can cause muscular paralysis and death due to respiratory failure.

The DOH issued the first of multiple media warnings advising people not to fish, or collect crabs or shellfish in the Swan River, provided local government authorities with health warning signs to erect at popular fishing spots, jetties and boat ramps within the impact area and published algal bloom Frequently Asked Questions online.

The longevity, and extent of this bloom and the high species and toxin concentrations recorded, and the impact upon Swan River commercial and recreational fishing, is of particular concern, especially with likelihood for potential annual or seasonal re-occurrence.
CHEMICAL HAZARDS

The Chemical Hazards team, with support from System Performance, provide policy advice and manage regulatory requirements associated with chemicals, pesticides, asbestos, contaminated sites and other common environmental hazards of public health significance in WA.

Pesticide Safety and Licensing

- 2,020 Pest management technician licences renewed
- 81 Pest management business registrations renewed
- 292 New pest management technician licences issued
- New pest management vehicle inspections undertaken
- 292 New pest management businesses registered

Contaminated sites

- 112 Contaminated site applications assessed
- 3 Contaminated site inspections
- 309 Contaminated sites requiring EHD sign-off
- 41 *Clandestine drug laboratories reported
Managing risk from illegal drug activities in homes

In response to concerns of cleaning homes that may be damaged due to the production or smoking of illicit drugs, including methamphetamine (meth, ice, crystal meth) or cannabis (marijuana, THC), the Illegal Drug Activity in Homes guideline was published.

The Guideline supports real estate agents, property managers, landlords and occupants addressing potential contamination and correct cleaning procedures to make safe the residential home.

The 2018 Meth Desk Project informed development of the new guidance and were shared with stakeholders attending the Tenancy WA State Conference in April 2019. The guideline will be reflected in proposed changes to the WA Tenancy Act to ensure this on-going public health issue is addressed in the future.

A media campaign, initiated by Consumer Protection (DMIRS), launched the guidance and engaged the public and the real estate industry in discussions about how to address this issue.

Pesticide technician survey

The WA Pest Tech survey was initiated following recognition that a better understanding of the WA pest management technician’s level of knowledge, understanding and expectations within the pesticide safety industry. All licensed pest management technicians (2895) were given the opportunity to complete the survey.

The finding from this report will be used to inform and support the identification of key priority areas that target improvements to the pesticide safety functions over the next 1-3 years.

PFAS (Per and poly-fluroalkyl) substances

Per Fluoroalkyl Substances (PFAS) are a large group of industrial chemicals developed since 1950’s for their ability to repel water, resist oily staining and to form dense foams, making them ideal for use in modern fabrics, non-stick cookware, food containers, personal hygiene products and in firefighting foams. Australia and other countries have taken action to phase out the use of these materials in products.

There has been significant community concern around the possible health effects from the ingestion of low levels of PFAS compounds, found to be accumulating in some fresh foods such as shellfish, fish, meat and dairy products and in drinking water. Extensive research has concluded that, to date, there are no recorded health impacts from public exposures to PFAS...
Our year in review

Enabling legislation

Operating structure

Major achievements

Financial overview

compounds. The Chemical Hazards team has contributed to:

- Updating information on the Department of Health and HealthyWA websites to reflect the findings of the Expert Health Panel report issued in May 2018
- NHMRC guidance on PFAS in Recreational Waters
- Delivery of Australian Land and Groundwater Association (ALGA) Seminar, “PFAS – A Global Take on Risks and Responses”

EHD has provided site-specific advice to Department of Water and Environmental Regulation and the Water Corporation on public health issues around PFAS in drinking water supply and wastewater treatment.

Asbestos guideline review

The EHD is currently engaged in a review of the Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites (2009) as it reaches its 10 year anniversary. The Guidelines continue to provide a highly pragmatic and protective response to the widespread contamination legacy of asbestos in soils in WA, and throughout Australia, following their adoption into the National Environmental Protection (Assessment Contamination Sites) Measure in 2013. The Guidelines are widely referred to by contaminated sites professionals, auditors and regulators and are regularly cited as best practice in international conferences and forums. The EHD will update the Guidelines to reflect new knowledge and best practice in the assessment and management of asbestos in soils.

Technical support for asbestos concerns

The EHD continues to provide support to local government EHOs in their enforcement of the Health (Asbestos) Regulations 1992. Technical asbestos advice is also provided to DWER and industry on waste classification criteria, recycling of building waste (Road to Reuse Program) and specifications for uncontaminated fill as well as continuing to provide regular advice on matters relating to the assessment and management of asbestos-contaminated sites.

Ageing asbestos infrastructure

The National Asbestos Safety Conference was held in Sydney in November 2018. As part of the event a workshop was organised on ageing asbestos infrastructure. Pierina Otness from the EHD was invited to present on the public health response to ageing infrastructure in WA and the challenges faced in responding to deterioration by local government authorised officers. The presentation can be viewed online.
The Biological and Applied Environmental Health Hazards team, manage the Medical Entomology program which provides advice and carries out surveillance, monitoring and control of insects that cause disease or that serve as vectors of organisms that cause disease in humans. Surveillance efforts throughout WA are used to inform public health warnings and interventions.

<table>
<thead>
<tr>
<th><strong>486</strong></th>
<th>Mosquito traps set over 23 nights in the Southwest of WA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>91,577</strong></td>
<td>Adult mosquitoes collected</td>
</tr>
<tr>
<td><strong>23</strong></td>
<td>Sentinel chicken flocks managed throughout WA</td>
</tr>
<tr>
<td><strong>3,768</strong></td>
<td>blood samples tested</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Mosquito-borne virus infections detected in chickens</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>Ross River virus detections</td>
</tr>
<tr>
<td><strong>0</strong></td>
<td>Barmah Forest virus detections</td>
</tr>
<tr>
<td><strong>24</strong></td>
<td>aerial larvicide applications totalling</td>
</tr>
<tr>
<td><strong>2,525 ha</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Stakeholder engagement**

- 17 Local government funding applications assessed
- 2 Media statements issued related to mosquitoes
- 2 Mosquito identification courses conducted
Annual mosquito collection and virus isolations from northern WA

Between March – April 2019, officers from the EHD travelled to the Kimberley to undertake Medical Entomology’s annual mosquito and arbovirus surveillance survey. The opportunity was also used to meet with local government environmental health officers to discuss mosquito management issues. The trip was timed to coincide with the end of the wet season in the region. Mosquito traps were set in all major towns in the Kimberley including Broome, Wyndham (including Parry’s Creek Farm), Kununurra, Lake Argyle, Halls Creek, Fitzroy Crossing, and Derby.

Adult mosquitoes were collected in dry ice baited EVS/CO₂ (encephalitis virus surveillance) traps. It is estimated that almost 20,000 mosquitoes were collected in approximately 170 traps. Mosquito numbers were lower than 2017-18 due to environmental conditions. The mosquitoes were frozen on dry ice and transported to Perth where they will be tested for viruses of public health significance, including Ross River virus, Barmah Forest virus, Murray Valley encephalitis virus and Kunjin virus.

2018-19 Northern WA Mosquito Trapping Data

Mosquito traps set across the Kimberley, Pilbara and Gascoyne regions of WA.

405,528 Adult mosquitoes collected

Adult mosquitoes trapped by Local Government region

- Shire of Broome (330,046)
- Shire of Wyndham/East Kimberley (56,815)
- Shire of Derby/West Kimberley (15,960)
- Shire of Ashburton (1,159)
- Shire of Halls Creek (578)
- Shire of East Pilbara (414)
- Town of Port Hedland (272)
- Shire of Mount Magnet (184)

*2017-18 data is presented here as sample processing and reporting undertaken in 2018-19
Mosquito identification courses

Two one-day mosquito identification courses for local government officers involved in mosquito management were held in November 2018. Courses were hosted in the southwest of WA in Capel and Perth.

The courses were well attended by 37 participants, presenting 20 local governments, the EHD and consultants. Participants were provided with an opportunity to learn or refresh mosquito identification skills, through a combination of theory and practical sessions, to support their local programs.

The course also addressed how this information can be incorporated into local government mosquito management plans to provide a measure of mosquito-borne disease risk to the public.

Annual Combined CLAG Forum

In June 2019, the EHD hosted its eighth annual, combined Contiguous Local Authorities Group (CLAG) forum. 51 participants attended, representing 20 local governments, the DOH, and the South Eastern Regional Centre for Urban Landcare.

The theme at this year’s forum was community engagement, with an emphasis on using social media to promote ‘Fight the Bite’ and raise public awareness. Other sessions focused on the management of midge and mosquito breeding in constructed wetlands, options for managing mosquitoes under the Public Health Act, and local government examples of innovative initiatives within their programs.

The level of attendance and positive feedback received regarding the forum, is evidence that mosquito management remains a high priority for many local governments.
Constructed wetlands

Medical Entomology has been investigating mosquito productivity in various constructed wetlands and stormwater infrastructure within the Perth metropolitan area with an aim to:

- identify the potential for mosquito breeding and associated nuisance risks related to constructed freshwater wetlands in urban areas in WA; and
- further define public health risks and identify practical management solutions associated with constructed wetlands in urban areas in WA.

The team will use the findings from the investigation to develop guidelines for mosquito management in constructed wetlands in urban areas.

March fly (Tabanidae) Anaphylaxis project

In the late 2000s there was an increase in the number of people reporting to Pilbara hospitals following reactions to March fly bites, with some requiring antibiotics for secondary infections and a few with anaphylactic reactions.

In response, the DOH and the University of Western Australia Arbovirus Surveillance Laboratory began collecting specimens in 2007 whilst conducting routine mosquito surveillance in WA, with further specimens provided by local government and members of the public. In December 2018, 167 frozen March fly specimens were shipped on dry ice, to preserve nucleic acids and proteins, to the Australian National Insect Collection at the CSIRO in Canberra.

These samples included species that have been associated with anaphylaxis in the Pilbara and Kimberley regions, in particular *Pseudotabanus trypherus* as identified by CSIRO. Research has also been conducted by CSIRO on a small sample to generate the full mitochondrial sequence, and analysed using transcriptomics for the presence of allergen protein coding genes. Results so far are promising with sequence and relevant coding genes identified, pending validation of results with repeat testing.

![Figure 4 Image of Pseudotabanus trypherus courtesy of CSIRO Australian National Insect Collection, 2019](image-url)
The Biological and Applied Environmental Health Hazards team plays an important role in approving, planning and assessing events throughout WA, as well as monitoring crowd incidents and event trends worldwide.

**The new WA Museum**

EHD is working with Brookfield Multiplex, OMA & Hassell and other stakeholders to ensure public building compliance, as well as the health and safety of visitors to the new Perth Museum, due to open to the public in 2020.

The 5 storey museum will consist of a number of gallery and event spaces, as well as food and beverage and retail outlets. We are working with a dedicated group of stakeholders to ensure the original heritage listed areas and new zones of the museum are blended seamlessly to allow for a unique, yet operational, visitor experience.

**Assisted in the planning and approval of 37 major events in WA**

**21 events monitored and/or public buildings assessed**

- Cut Copy at Ice Cream Factory
- AFL Games
- Groovin’ the Moo
- Taylor Swift
- The Great Moscow Circus
- Origin Music Festival
- Boorna Waaginy: The Trees Speak
- Perth Festival
- Eminem
RADIATION HEALTH

Radiation Health provides the secretariat for the Radiological Council of Western Australia in enforcing the Radiation Safety Act 1975. The aim of the Act is to regulate the keeping and use of radioactive substances, irradiating apparatus (x-ray equipment) and certain electronic products (eg lasers and transilluminators) in order to protect public health and to maintain practices in the use of radiation.

10,846
Total Radiation Safety Act applications

<table>
<thead>
<tr>
<th>Registrations</th>
<th>Licences</th>
</tr>
</thead>
<tbody>
<tr>
<td>244 New applications</td>
<td>1,247 New applications</td>
</tr>
<tr>
<td>834 Renewed</td>
<td>3,137 Renewed</td>
</tr>
<tr>
<td>92 Terminated</td>
<td>886 Terminated</td>
</tr>
</tbody>
</table>

799 Amendments to registrations and licences (outside renewal process)

Various Radiation Health Unit activities

- General incoming correspondence (6,295)
- Radiation safety examination papers assessed (678)
- Applications to import radioactive substances (263)
- Radiation incidents reviewed and actioned (76)
- Medical x-ray equipment compliance tests recorded (1,413)
- Industrial radiation device compliance tests (301)
- Building plans assessed for structural radiation shielding (32)
- Medical research projects; Patient radiation dosimetry and risk statements reviewed (37)

Total 9,095
## Committees

During 2018-19, EHD officers participated in the following committees and working groups:

<table>
<thead>
<tr>
<th>Committee/Working Group</th>
<th>Organisational level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Agricultural Chemicals Working Group</td>
<td>National</td>
</tr>
<tr>
<td>Advisory Committee for the Purity of Water (ACPOW)</td>
<td>State</td>
</tr>
<tr>
<td>Advisory Committee on Novel Food</td>
<td>National</td>
</tr>
<tr>
<td>Air Quality Coordinating Committee</td>
<td>State</td>
</tr>
<tr>
<td>Asbestos Safety and Eradication Council (ASEC) - for Asbestos Safety and Eradication Agency</td>
<td>National</td>
</tr>
<tr>
<td>Australasian College of Toxicology &amp; Risk Assessment (ACTRA)</td>
<td>National</td>
</tr>
<tr>
<td>Australian Council of Smoking and Health (ACOSH)</td>
<td>National</td>
</tr>
<tr>
<td>Australian Dairy Regulators Forum</td>
<td>National</td>
</tr>
<tr>
<td>Australian Health Protection Committee - Expert Reference Panel on Environmental Health</td>
<td>National</td>
</tr>
<tr>
<td>Australian Institute for Disaster Resilience (AIDR) Crowdted Places Handbook Working Group</td>
<td>National</td>
</tr>
<tr>
<td>Australian Meat Regulators Group (AMRG)</td>
<td>National</td>
</tr>
<tr>
<td>Australian Shellfish Quality Assurance Advisory Committee</td>
<td>National</td>
</tr>
<tr>
<td>Avian Industries Consultative Group Meeting</td>
<td>State</td>
</tr>
<tr>
<td>Cockburn Sound Management Council</td>
<td>State</td>
</tr>
<tr>
<td>Contiguous Local Authorities Groups (x17 individual CLAGs)</td>
<td>Local</td>
</tr>
<tr>
<td>CRC for Water Sensitive Cities Western Regional Advisory Panel</td>
<td>State</td>
</tr>
<tr>
<td>Defence Interagency Working Group</td>
<td>State</td>
</tr>
<tr>
<td>Department Executive Committee (DEC) - Risk and Audit Sub-committee</td>
<td>State</td>
</tr>
<tr>
<td>Department of Fire and Emergency Services Working Group</td>
<td>State</td>
</tr>
<tr>
<td>Environmental Health Standing Committee (enHealth)</td>
<td>National</td>
</tr>
<tr>
<td>enHealth Advocacy Committee</td>
<td>State</td>
</tr>
<tr>
<td>enHealth Aquatic Facilities Working Group</td>
<td>National</td>
</tr>
<tr>
<td>enHealth National Received Water Regulators Forum</td>
<td>National</td>
</tr>
<tr>
<td>enHealth Technical Working Group on Environmental Health (TWGEH)</td>
<td>National</td>
</tr>
<tr>
<td>enHealth Water Quality Working Group</td>
<td>National</td>
</tr>
<tr>
<td>enHealth Water Regulation Group</td>
<td>National</td>
</tr>
<tr>
<td>Essential and Municipal Services Implementation Steering Committee</td>
<td>State</td>
</tr>
<tr>
<td>Events Working Group</td>
<td>State</td>
</tr>
<tr>
<td>Expert Reference Panel for Aboriginal and Torres Strait Islander</td>
<td>National</td>
</tr>
<tr>
<td>Environmental Health</td>
<td></td>
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<tr>
<td>Fluoridation of Public Water Supplies Advisory Committee</td>
<td>State</td>
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</tbody>
</table>

*Continued overleaf*
Committees cont.
During 2018-19, officers from the EHD participated in the following committees and working groups:

<table>
<thead>
<tr>
<th>Committee/Working Group</th>
<th>Organisational level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food-borne Illness Reduction Strategy – Across Government Advisory Group</td>
<td>State</td>
</tr>
<tr>
<td>Food-Medicine Interface Working Group</td>
<td>National</td>
</tr>
<tr>
<td>Food Regulation Standing Committee (FRSC)</td>
<td>National</td>
</tr>
<tr>
<td>FRSC Energy Labelling of Alcoholic Beverages Advisory Group</td>
<td>National</td>
</tr>
<tr>
<td>FRSC Policy Guideline for Dietary Guidelines Reference Group</td>
<td>National</td>
</tr>
<tr>
<td>FRSC Primary Production and Processing Working Group</td>
<td>National</td>
</tr>
<tr>
<td>FRSC Strategic Planning Working Group</td>
<td>National</td>
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<tr>
<td>FRSC Sugar Working Group</td>
<td>National</td>
</tr>
<tr>
<td>Goldfields Region Aboriginal Health Planning Forum</td>
<td>State</td>
</tr>
<tr>
<td>Health Star Rating (HSR) Social Marketing Advisory Group</td>
<td>National</td>
</tr>
<tr>
<td>Implementation Subcommittee for Food Regulation (ISFR)</td>
<td>National</td>
</tr>
<tr>
<td>Interagency Collaborative Working Group for Recreation in Water Catchments</td>
<td>State</td>
</tr>
<tr>
<td>ISFR Surveillance, Evidence and Analysis Working Group</td>
<td>National</td>
</tr>
<tr>
<td>ISFR Food Service Management Working Group</td>
<td>National</td>
</tr>
<tr>
<td>ISFR Food-Medicine Interface Working Group</td>
<td>National</td>
</tr>
<tr>
<td>ISFR Primary Production and Processing Requirements for High Risk Horticulture</td>
<td>National</td>
</tr>
<tr>
<td>Joint Consultative Committee (JCC)</td>
<td>State</td>
</tr>
<tr>
<td>Jurisdictional Nutrition Food Regulation Group</td>
<td>National</td>
</tr>
<tr>
<td>Jurisdictional Recall Committee</td>
<td>National</td>
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<tr>
<td>Jurisdictional Technical Forum</td>
<td>National</td>
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<tr>
<td>Local Health Authorities Analytical Committee (LHAAC)</td>
<td>State</td>
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<tr>
<td>Minimum Training Licensing Requirement Working Group</td>
<td>National</td>
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<tr>
<td>Mosquito Control Advisory Committee (MCAC)</td>
<td>State</td>
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<tr>
<td>Mosquito Control Association of Australia (MCAA)</td>
<td>National</td>
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<tr>
<td>Municipal Services Working Group</td>
<td>State</td>
</tr>
<tr>
<td>National Arbovirus and Malaria Advisory Committee (NAMAC)</td>
<td>National</td>
</tr>
<tr>
<td>National Cruise Ship Policy Working Group</td>
<td>National</td>
</tr>
<tr>
<td>National Trachoma Control and Surveillance Reference Group</td>
<td>National</td>
</tr>
<tr>
<td>Novel Food Committee</td>
<td>National</td>
</tr>
<tr>
<td>Pesticides Advisory Committee (PeAC)</td>
<td>State</td>
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</table>
During 2018-19, officers from the EHD participated in the following committees and working groups:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Pilbara Aboriginal Health Planning Forum</td>
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<tr>
<td>Policy Engagement Group (PEG)</td>
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<td>Policy Guideline on food labelling in relation to the Dietary Guidelines Working Group</td>
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<td>Policy Framework Project Advisory Group</td>
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<tr>
<td>Public Buildings Working Group</td>
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<tr>
<td>Public Health Act Reference Group</td>
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<td>Public Health Planning Reference Group</td>
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<td>Radiation Health Committee</td>
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<tr>
<td>Radiation Regulators Network</td>
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<td>Smoke Management Liaison Group</td>
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<tr>
<td>Special Interest Group for Asbestos-in-soil (SIGNAL)</td>
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<tr>
<td>Steering Committee – Western Trade Coast Managed Aquifer Recharge Feasibility Study</td>
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<td>Surveillance, Evidence and Analysis Working Group</td>
<td>National</td>
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<td>WA Asbestos Across-Agency Group</td>
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</tr>
<tr>
<td>WA Health Emergency Management Committee</td>
<td>State</td>
</tr>
<tr>
<td>Wastewater Services &amp; Groundwater Replenishment Health Advisory Committee</td>
<td>State</td>
</tr>
</tbody>
</table>
The following peer-reviewed publications were co-authored by individuals from the EHD:


## COMMUNICATION ACTIVITIES

<table>
<thead>
<tr>
<th>32</th>
<th>Freedom of information requests</th>
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<tr>
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<td>Parliamentary questions</td>
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<tr>
<td>5</td>
<td>Cabinet comments</td>
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<td>5</td>
<td>Contentious issue briefing notes</td>
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<tr>
<td>130</td>
<td>Briefing notes</td>
</tr>
<tr>
<td>28</td>
<td>Memos to Executive Director</td>
</tr>
<tr>
<td>196</td>
<td>Letters signed by Executive Director</td>
</tr>
<tr>
<td>34</td>
<td>Letters drafted for ADG signature</td>
</tr>
<tr>
<td>11</td>
<td>Letters drafted for DG signature</td>
</tr>
</tbody>
</table>

**Ministerial Correspondence**

- Food (137)
- Water (53)
- Science and Policy (33)
- Directorate (10)
- Radiation Health (32)
- Chemical Hazards (56)
- Biological Applied EH Hazards (11)
- System Performance (19)

**Common Ministerial Topics**

- 5G technology
- Labelling of sugar, oils and fats
- Drinking water
- Health local laws

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Position acronyms:
- Director General (DG)
- Assistant Director General (ADG)
Enabling Legislation

Operating structure

Major achievements

Our year in review

Financial overview

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Media releases issued

1. 17/09/2018 Contaminated strawberries, Western Australia
2. 18/09/2018 Contaminated strawberries, Western Australia (update #2)
3. 12/11/2018 Spotlight on food hygiene as rates of food poisoning soar
4. 21/11/2018 Shellfish and fishing warning for Mindarie Marina
5. 20/11/2018 Ross River virus disease risk warning for south-west WA
6. 20/11/2018 Take care when maintaining asbestos cement roofs
7. 14/12/2018 Algal bloom warning for near Augusta
8. 21/12/2018 Be attentive with food safety over the holidays
9. 17/01/2019 Recreational water users warned of disease risk
10. 14/02/2019 Murray Valley encephalitis warning for Kimberley
11. 15/02/2019 All clear for Molloy Island Augusta algal bloom
12. 13/03/2019 Shellfish and fishing warning for the Swan River
13. 15/03/2019 UPDATED: Shellfish and fishing warning for the Swan River
14. 21/03/2019 Revised shellfish and fishing warning for the Swan River
15. 28/03/2019 Revised shellfish and fishing warning for the Swan River (update #2)
16. 04/04/2019 Revised shellfish and fishing warning for the Swan River (update #3)
17. 12/04/2019 Revised shellfish and fishing warning for the Swan River (update #4)
18. 18/04/2019 Reminder shellfish and fishing warning for the Swan River update 5
19. 07/05/2019 Reminder shellfish and fishing warning for the Swan River update #6
20. 21/06/2019 All-clear for fishing and crabbing in the Swan River
<table>
<thead>
<tr>
<th>Financial Overview</th>
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<tbody>
<tr>
<td><strong>$8.18 million</strong> for the provision of environmental health services in Aboriginal</td>
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<tr>
<td>communities</td>
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<tr>
<td><strong>$2.53 million</strong> for testing of water and food samples through PathWest</td>
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<td><strong>$524,253</strong> for control of mosquito populations in the southwest of WA through</td>
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<tr>
<td>aerial larviciding</td>
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<tr>
<td><strong>$237,048</strong> for assistance to local governments in the management of mosquitoes</td>
</tr>
<tr>
<td><strong>$187,998</strong> for WA's contribution towards the Front of Pack Labelling project</td>
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</tbody>
</table>
Yearbook contributors

Thank you to the following EHD staff who made a significant contribution to the 2018-19 Yearbook.

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