



Government of **Western Australia**
Department of **Health**

Guideline for the management of public health risks associated with commercial garden soils in Western Australia

Public Health Act 2016 (WA)





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Disclaimer

This document provides general guidance on aspects of the *Public Health Act 2016*. This Guideline is not a substitute for reading the Public Health Act and should not be regarded as legal advice.

Legal advice relevant to the user's circumstances should be obtained when necessary. It is the responsibility of users to inform themselves of any updates to the Guideline and the relevant legislation applying, and to ensure that they rely on information that is current.

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Glossary

Term	Explanation
Garden soil	Any composted organic material produced with or without soil made to be used in or around a house and includes potting mixes, composts, soil conditioners, mulches and soils for landscaping and general garden use.
Legionnaires' disease	Legionnaires' disease is a type of severe pneumonia caused by bacteria of the <i>Legionella</i> species including <i>Legionella longbeachae</i> .

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1. Purpose

This Guideline is issued by the Chief Health Officer of the Department of Health of Western Australia in accordance with the *Public Health Act 2016* (WA). This Guideline sets out the generally accepted practices related to the sale and use of garden soils in Western Australia in order to minimise the risk of Legionnaires' disease to consumers who purchase packaged or bulk garden soils.

1.1 Who should use this Guideline

This Guideline provides information to assist commercial businesses, consumers and government agencies to understand and manage the public health risks associated with handling and the sale and/or supply of garden soils.

2. Background

Previously the public health risks associated with garden soils were managed under the *Health (Garden Soil) Regulations 1998* (WA). With the implementation of the *Public Health Act 2016* all regulations under the *Health (Miscellaneous Provisions) Act 1911* (WA), including the *Health (Garden Soil) Regulations 1998* were reviewed.

The Discussion Paper entitled '[Managing the public health risks of *Legionella longbeachae* associated with commercial garden soils](#)' (Discussion Paper) was released in December 2018 for consultation until February 2019. [A consultation summary paper](#) of stakeholder feedback for the Discussion Paper was released in July 2019. Stakeholder consultation demonstrated strong support to repeal the legislation and replace it with a guideline to provide advice to local government, industry and the public. As a result, the *Health (Garden Soil) Regulations 1998* (WA) were repealed and this Guideline is now the primary guidance material which may assist those handling and managing the sale of garden soils.

3. Risks to public health

What is a public health risk?

A risk to public health is something that is known to cause or potentially cause disease or harm to the public health or wellbeing of humans.

3.1 Legionnaires' disease

Garden soils, including potting mixes, composts, soil conditioners, mulches and soils, are biologically active materials that contain algae, protozoa and other bacteria which provide essential nutrients to improve the condition of soils and support plant growth. The composition and dampness of potting mix creates an ideal environment for bacterial growth.¹

The *Legionella* bacterial species are natural inhabitants of water and soil in the environment. *Legionella longbeachae* bacteria are commonly found in garden soil. Contaminated airborne soil particles can cause human infection when exposure occurs via inhalation or by hand to mouth transmission.² Legionnaires' disease, a serious and sometimes fatal form of pneumonia, can be caused by exposure to *Legionella longbeachae*. *Legionella longbeachae* is naturally occurring in the environment and regulated labelling of these products does not control for this public health

risk. *Legionella* infection is not typically spread from person to person.

Certain people are at a higher risk of contracting Legionnaires' disease, including those who are smokers, immunocompromised, over the age of 50 or living with chronic health conditions.³

The early symptoms of Legionnaires' disease are typically similar to severe 'flu-like' illness, and may include:

- fever
- chills
- muscle soreness
- headaches
- tiredness
- reduced appetite
- dry cough and shortness of breath.

For further information about Legionnaire's disease, visit the [Healthy WA](#) website.⁴



4. Enforcement options

The enforcement options available to local governments for the management of public health issues associated with garden soils are available in the [Public Health Act 2016 Handbook for local government](#).

4.1 Serious and material public health risks

Under the *Public Health Act 2016*:

Serious public health risk –

- a) means a public health risk involving potential harm to public health that is irreversible, of a high impact or on a wide scale; and
- b) includes a public health risk declared by the regulations to be a serious public health risk; but
- c) does not include a public health risk declared by the regulations not to be a serious public health risk.

Material public health risk –

- a) means a public health risk involving potential harm to public health that is neither trivial nor negligible; and
- b) includes a public health risk declared by the regulations to be a material public health risk; but
- c) does not include a public health risk declared by the regulations not to be a material public health risk.

As defined in the *Public Health Act 2016*, **harm** includes physical or psychological harm to individuals, whether of long-term or immediate impact or effect.

In cases where matters are a nuisance or amenity problem but are not likely to result in harm, the serious and material public health risk provisions will not apply.

The *Public Health Act 2016* considers conduct that will cause or is likely to cause a material or serious public health risk. Under Part 4 of the *Public Health Act 2016*, the term 'engage in conduct' means

- (a) do an act or
- (b) omit to do an act.

The *Public Health Act 2016* prescribes a range of offences for conduct that causes, or may cause, a serious or a material public health risk. There is a defence of due diligence to these offences – that the person took all reasonable precautions and exercised all due diligence to prevent the commission of the offence.

It is unlikely that the normal supply of garden soils will create a serious public health risk without significant extenuating circumstances. However, this activity may be considered as causing a material public health risk if a person is not adhering to best practice guidance and they are generating significant and consistent impacts that have a demonstrable harm or potential harm to public health.

4.2 General public health duty

General Public Health Duty – *Public Health Act 2016 (WA)*

“A person must take all reasonable and practicable steps to prevent or minimise any harm to public health that might foreseeably result from anything done or omitted to be done by the person”.

The general public health duty specified in Part 3 of the *Public Health Act 2016 (WA)* requires that a person must “*take all reasonable and practicable steps to prevent or minimise any harm to public health that might foreseeably result from anything done or omitted to be done by the person*”.

In assessing what is reasonable and practicable, regard must be had to the objects of the *Public Health Act 2016* and to a range of other matters. A person will not breach the public health duty if they act in a manner or in circumstances that accord with generally accepted practices.

Detailed and specific guidance on the different enforcement options are available in the [Public Health Act 2016 Handbook for local government](#).

These Guidelines may be used to clarify the application of the general public health duty and provide industry specific information on what might constitute ‘reasonable and practical steps’ to prevent harm to public health.

5. Guidelines for best practice

There are no known strategies to remove *Legionella longbeachae* and other pathogenic organisms from garden soils.⁵ Preventative strategies for Legionnaires’ disease are limited to educating the community on the safe use of garden soils.

5.1 Precautionary actions

The following precautionary behavioural actions should be promoted by retailers for handling garden soil^{2,3}

- Use a P1 or P2 face mask to avoid inhalation of dust and aerosols
- Wear gloves, appropriate shoes and long sleeves
- Wash hands thoroughly with soap and water immediately after handling l garden soil, even if gloves were worn
- Avoid transferring garden soil from hands to mouth (e.g. don’t place hands near the face or mouth after handling products)
- Open bags carefully keeping the face well away from the opening of the bag to avoid inhaling airborne particles
- Handle garden soil in a well-ventilated area outside
- Store garden soil away from direct sunshine in a cool and dry location
- Water garden soil lightly with a low-pressure hose to keep it damp and avoid dust release while in use
- Read and follow the manufacturer’s safety instructions and warnings written on the bag or invoice.



6. Advice for industry

Manufacturers and suppliers should demonstrate due diligence by providing appropriate and accurate information on the handling risks to purchasers. The provision of health warnings and hazardous information labels on commercial garden soil is an effective method in raising awareness to members of the public.

The following Australian Standards are voluntary standards for manufacturers and suppliers of garden soils which set out general requirements to ensure soil products are safe for use, consistently meet minimum quality standards and are not contaminated by chemical, physical, plant and animal pathogens:

- AS 4454:2012 - Composts, soil conditioners and mulches ⁶
- AS 4419:2018 - Soils for landscaping and garden use ⁷

If there are changes to these standards the most recent version can be used alongside this Guideline. Australian Standards can be accessed online from [Standards Australia](https://www.standardsaustralia.org.au/).

6.1 Packaged commercial garden soil

Packaged commercial garden soil should have a health warning and hazardous information printed on or affixed in a prominent position to the exterior surface of the package.

There is specific advice for health warning labels set out in AS 4419:2018 such as font type, colour, formatting, font size and information messaging.

In general, the writing should be:

- clear and legible
- of an appropriate font size that can be easily read
- a contrasting colour to the other information on the package.

AS 4419:2018 provides example wording and formatting of a health warning label and a hazardous information label. Health warning labels should provide precautionary behavioural measures the consumer can take to safely handle the product (e.g. use of PPE and hand washing). The hazardous information label may include detail on risk, safety, first aid, disposal and manufacturer.

6.2 Unpackaged commercial garden soil

A health warning notice should be made clearly visible to any person entering or exiting the place where unpackaged garden soil is sold. The notice should be written with a font that is easy to read.

A health warning and hazardous information should be printed in a prominent position on an information sheet or provided on an invoice given to the purchaser of unpackaged garden soil. Health warnings may also be made available online.

7. Other requirements

7.1 In the workplace

The [Code of Practice Prevention and control of Legionnaires' disease](#) by WorkSafe WA provides information on the safe handling of garden soils to reduce exposure in the workplace setting.



8. References

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