



# PESTICIDE DETECTIVES

A national assessment of pesticides in  
waterways

Pesticide Use in Australian Homes and  
Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

## Background

The Pesticide Use in Australian Homes and Gardens Survey is an anonymous survey investigating the types, purposes and frequencies of pesticide use in Australia as well as respondent attitudes towards pesticides. 37 individuals participated in the first round of the survey.

## Objectives

The main objectives were to use the responses to:

- Understand types, purposes and frequencies of pesticide use in Australian homes and gardens
- Inform the public of the brand names of pesticides used in Australian homes and gardens
- Understand knowledge about and attitudes towards pesticides
- Understand disposal in and around homes

## Summary of Findings:

### Use of Products Inside Homes

The majority of respondents (65%) used sprays or aerosols and (46%) products to remove or prevent mould and or fungus inside their homes in the last 12 months. Of the respondents, prior to completing the survey:

-11% did not know that **Paint to prevent mould/fungus** contained pesticides.

-11% did not know that **Paint to prevent mould/fungus + mould cleaning products** - contained pesticides.

-19% of respondents did not know that **Paint to prevent mould/fungus + mould cleaning products + wood preservatives** - contained pesticides.

### Pesticide Use at Work

**14 % of respondents** (and/or members of their households) used pesticides at work in the last 12 months.

### Use of Products Outside Homes

Sixty two percent (62%) of respondents used weedkillers outside their homes, in their gardens and allotments in the last 12 months. Respondents did not know that:

- **Wood preservatives** - **13% of respondents** did not know that wood preservatives for outdoor use contained pesticides prior to completing the survey.

- **Paint to prevent mould/fungus + mould cleaning products + wood preservatives** - **10% of respondents** did not know that paint to prevent mould/fungus, mould cleaning products and wood preservatives contained pesticides prior to completing the survey.



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

- **Mould/algae cleaning products for pools + outdoor furniture + weed killers + fungal treatments for plants + wood preservatives - 10% of respondents** did not know that mould/algae cleaning products for pools and outdoor furniture, weed killers, fungal treatments for plants and wood preservatives contained pesticides prior to completing the survey.

## Products applied on humans

Insect repellent is the most common product applied with **73% of respondents** reporting the use of insect repellent products on themselves and on their children in the last 12 months. Respondents did not know:

- **Anti-fungal products - 10% of respondents** did not know that anti-fungal products contained pesticides prior to completing the survey.

- **Anti-fungal + anti-parasitic products** - 8% of respondents did not know that anti-fungal and anti-parasitic products contained pesticides prior to completing the survey.

- **Anti-fungal, anti-parasitic + insect repellent products** - 8% of respondents did not know that anti-fungal, anti-parasitic and insect repellent products contained pesticides prior to completing the survey.

- **Insect repellent** - 5% of respondents did not know that insect repellent contained pesticides prior to completing the survey.

## Products applied on pets and animals

Worming treatments are the most common products applied by 59% of respondents on animals they own or their pets over a 12-month period.

## Attitudes and behaviours towards pesticides

The majority of respondents purchased their products for indoor, outdoor and human use from supermarkets, chemists and general stores. 43% of respondents purchased products for their animals and pets from specialist stores.

## Where do respondents store their products

The majority of respondents stored their **products for indoor use on high shelves, in cupboards, kitchens and, utility room**. The majority of respondents stored their **products for outdoor use on high shelves, in cupboards, and garden sheds and garages**. The majority of respondents stored their **products for use on themselves and their children on high shelves, in cupboards, and in bathrooms and** the majority of respondents stored **their products for use on animals and pets on high shelves, in cupboards, and in kitchens**.

## Where do respondents dispose of their excess products?



# PESTICIDE DETECTIVES

A national assessment of pesticides in  
waterways

Pesticide Use in Australian Homes and  
Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

Up to **51% of respondents** disposed of their excess products with their **domestic rubbish**. **19% of respondents** stored their excess products for outdoor use and 19% of respondents disposed of their products for indoor use by other means. Some respondent used all of their products. Some respondents did not know where to dispose small quantities of excess products and stockpiled it in their garages. Excess products for use on animals were returned to a pharmacist. Some disposed of their products at the EPA chemical collection centre while others kept them without disposal.

## When applying indoor products:

**41% of respondents** read instructions, **52%** follow instructions, **59%** wash hands after application, **55%** cover unprotected food and drinks, **45%** ventilate the area, **41%** never use gloves or masks or other personal protective equipment, **71%** keep children away during application and **62%** keep pets away during application.

## When applying outdoor products:

**68% of respondents** read instructions, **74%** follow instructions, **82%** wash hands after application, **32%** use gloves or masks or other personal protective equipment, **83%** keep children away during application and **77%** keep pets away during application.

## When applying products to animals and pets:

**78% of respondents** read instructions, **81%** follow instructions, **86%** wash hands after application, **56%** never use gloves or masks or other personal protective equipment, **50%** keep children away during application and **46%** never keep treated pets off beds.

## When reading pesticide labels:

**82% of respondents** always follow the label when the product is unfamiliar, **59%** always follow the label exactly, **59%** understand all contents of the label, and **42%** often feel that the label provides all the information that is needed.

## General attitude to treating pest problems:

**41% of respondents** apply products for indoor and outdoor use when the problem becomes unmanageable, **43%** apply products on themselves when the problem becomes unmanageable and **30%** use products on animals and pets preventatively before the problem occurs.

**43% of respondents** disagreed that pesticides that are available for use by the public are more dangerous than other household/gardening chemicals. **43% of respondents** agreed that exposure is to be expected if you use pesticides in the home or garden. **5% and 19% of respondents strongly agreed and agreed respectively** that when using pesticides, accidents have occurred. **49% strongly disagreed** that pesticides that can harm human health are not available for use by the public. **65% strongly disagreed** that pesticides available for use to the public are safe to use, even if the guidelines are not adhered to.



# PESTICIDE DETECTIVES

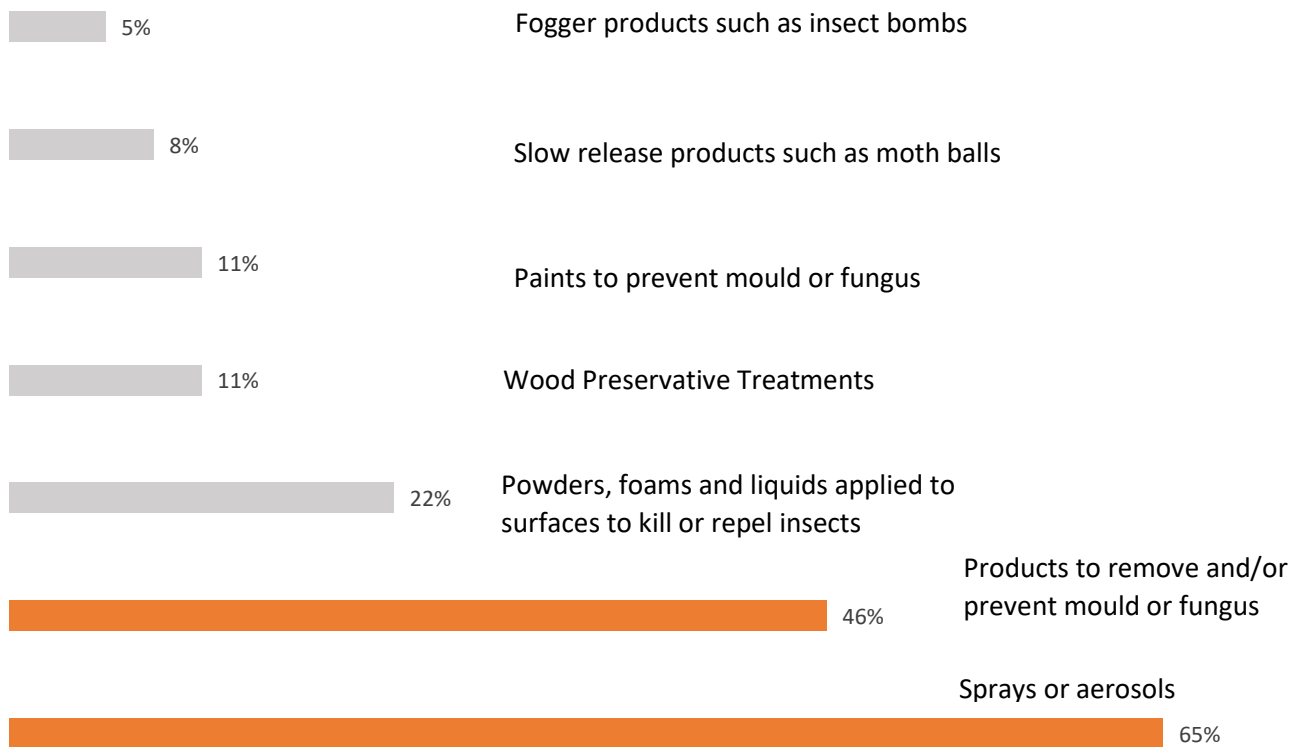
A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

## 1. PESTICIDE USE INSIDE HOMES (NOT APPLIED TO A PERSON OR PET) IN THE LAST 12 MONTHS

**Sprays or aerosols and products to remove and or prevent mould and/or fungus** were the top 2 types of products used in the homes of 37 respondents (%) in the last 12 months (not applied to a person or pet).

Total no of respondents = 37





# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

**65%** of respondents used sprays or aerosols in their houses over a 12-month period. [Mortein Insect Spray](#) was most commonly used, followed by [RAID Insect Spray](#). Majority of respondents used up to 2 to 11 applications of sprays and aerosols over a 12-month period. Other products used include, [Atlas Fast Knockdown Flying Insect Spray](#), and [Baygon Flying Insect](#).

Types of products and frequency of use selected by respondents include:

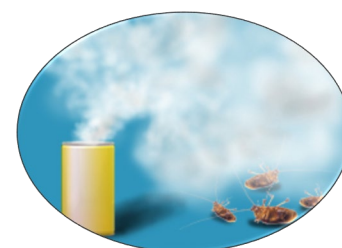
SPRAYS/AEROSOLS	1 application	2 - 11 applications	12 or more applications
<a href="#">Mortein Insect Spray</a>	4	8	2
<a href="#">RAID Insect Spray</a>	1	7	0
<a href="#">ALDI Atlas High Performance Surface and Cockroach Spray</a>	0	2	0
<a href="#">Black &amp; Gold Fly Insect Spray</a>	1	1	0
<a href="#">First Force Insect Spray</a>	0	1	0
<a href="#">HOVEX Vapourguard Insect Spray</a>	0	1	0
<a href="#">Pea Beu Insect Killer</a>	0	2	0
Others	3	2	0



**5%** of respondents applied fogger products inside their houses in a 12-month period.

Types of products and frequency of use selected by respondents include:

BOMBS/FOGGERS	1 application
<a href="#">Mortein Kill and Protect Control Bomb</a>	1
<a href="#">Raid Exterminator Flea and Cockroach Bomb</a>	1



**8%** of respondents used slow release products over a 12-month period. Hovex Moth products were commonly used. Other products used include Naphthalene balls and [Orphea strips](#).

Types of products and frequency of use selected by respondents include:

SLOW RELEASE PRODUCTS	1 application	2 - 11 applications	12 or more applications
<a href="#">Hovex Vapor Guard Moth Killer Clothing</a>	0	1	0
<a href="#">Hovex Insect Control Moth Balls</a>	0	1	0
Other	2	2	1





## PESTICIDE DETECTIVES

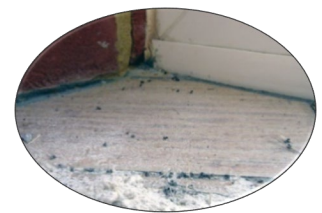
A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

**22%** of respondents used powders, foams and liquids on surfaces to kill or repel insects in their houses over a 12-month period. None of the respondents applied their products 12 times or more. Other products used include [Ant-Rid Indoor Ant Liquid](#) and [Atlas Permethrin Ant Killer Powder](#).

Types of products and frequency of use selected by respondents include:

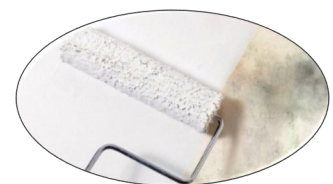
POWDERS, FOAMS AND LIQUIDS	1 application	2 - 11 applications
<a href="#">Hovex Ant &amp; Wasp Dust Killer</a>	0	1
<a href="#">Mortein Kill and Protect Cockroach Baits</a>	0	2
Other	2	2



**11%** of respondents used paints to prevent mould/fungus in their houses over a 12-month period. None of the respondents applied their products 12 times or more.

Types of products and frequency of use selected by respondents include:

PAINTS TO PREVENT MOULD.FUNGUS	1 application	2 - 11 applications
<a href="#">Dulux Precision 1L White Stain and Mould Blocker</a>	1	0
<a href="#">Dulux White Ceiling +PLUS</a>	3	1
<a href="#">Kitchen and Bathroom Paint</a>	3	1
<a href="#">Zinsser 1L Bulls Eye 1-2-3 Undercoat Primer Sealer Stain Blocker</a>	1	0
Other	3	0





# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

**46%** of respondents used products to remove and/or prevent mould and/or fungus. A wide range of products were listed as being used in houses.

**Other products used include:**

[White King tablets](#), [Plain brand bleach](#), [White King bleach](#), [clove oil](#), [white vinegar](#), [Easy Off BAM soap scum and shine](#), [Domestos products](#).

Types of products and frequency of use selected by respondents include:

PRODUCTS TO REMOVE/OR PREVENT MOULD/FUNGUS	1 application	2 - 11 applications	12 or more applications
<a href="#">Selleys Rapid Mould Killer</a>	0	1	0
<a href="#">Ajax Professional Mould Power Cleaner</a>	0	1	0
<a href="#">Dettol Glen 20 Disinfectant Spray</a>	1	5	1
<a href="#">White King Multipurpose Bathroom Power Gel</a>	2	5	1
Other Products	11	18	0

**11%** of respondents used wood preservative treatments inside their homes. Of these, only 2 respondents listed their products below one of which was [Osmo](#) products.

Types of products and frequency of use selected by respondents include:

WOOD PRESERVATIVE TREATMENTS	1 application
<a href="#">Intergrain TSS Mould Preventer</a>	1
Other	1

## OTHER TYPES OF PESTICIDES USED INSIDE HOMES

**27%** of respondents reported using other types of pesticides inside their homes in the last 12 months.

These included Camphor wood containers, rat poison baits, Malaceb anti-fungal wash, Mortein Powerguard Cockroach Baits, Raid ant baits, Ratsak 50 g box (2 – 12 applications per year) , and other types of mouse and rat baits.



## PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

### PROFESSIONAL APPLICATION OF PRODUCTS OUTSIDE HOMES

**5%** of respondents reported using a professional to apply pesticide products inside their houses in the last 12 months. This included paint applications and rat baits in the roof.

### Awareness of pesticides in products used inside homes.

**38%** of respondents were aware that the products that were listed in the survey contained pesticides prior to completing the survey. Of those that were not aware:

Paints to prevent mould, mould cleaning products and wood preservatives

**19%** of respondents did not know that paint to prevent mould/fungus, mould cleaning products and wood preservatives contained pesticides prior to completing the survey.

Paints to prevent mould/fungus

**11%** did not know that paint to prevent mould/fungus contained pesticides prior to completing the survey.

Paints to prevent mould and mould cleaning products

**11%** did not know that paint to prevent mould/fungus and mould cleaning products contained pesticides prior to completing the survey.

Wood preservative products

**11%** did not know that paint to prevent mould/fungus and mould cleaning products contained pesticides prior to completing the survey.

Total no. of respondents: 37

In addition, 5% of respondents did not know that mould cleaning products contained pesticides, 3% of respondents did not know that insect repellent and slow release insect repellent contained pesticides and another 3% of respondents did not know that paint to prevent mould and wood preservatives contained pesticides prior to completing the survey.





# PESTICIDE DETECTIVES

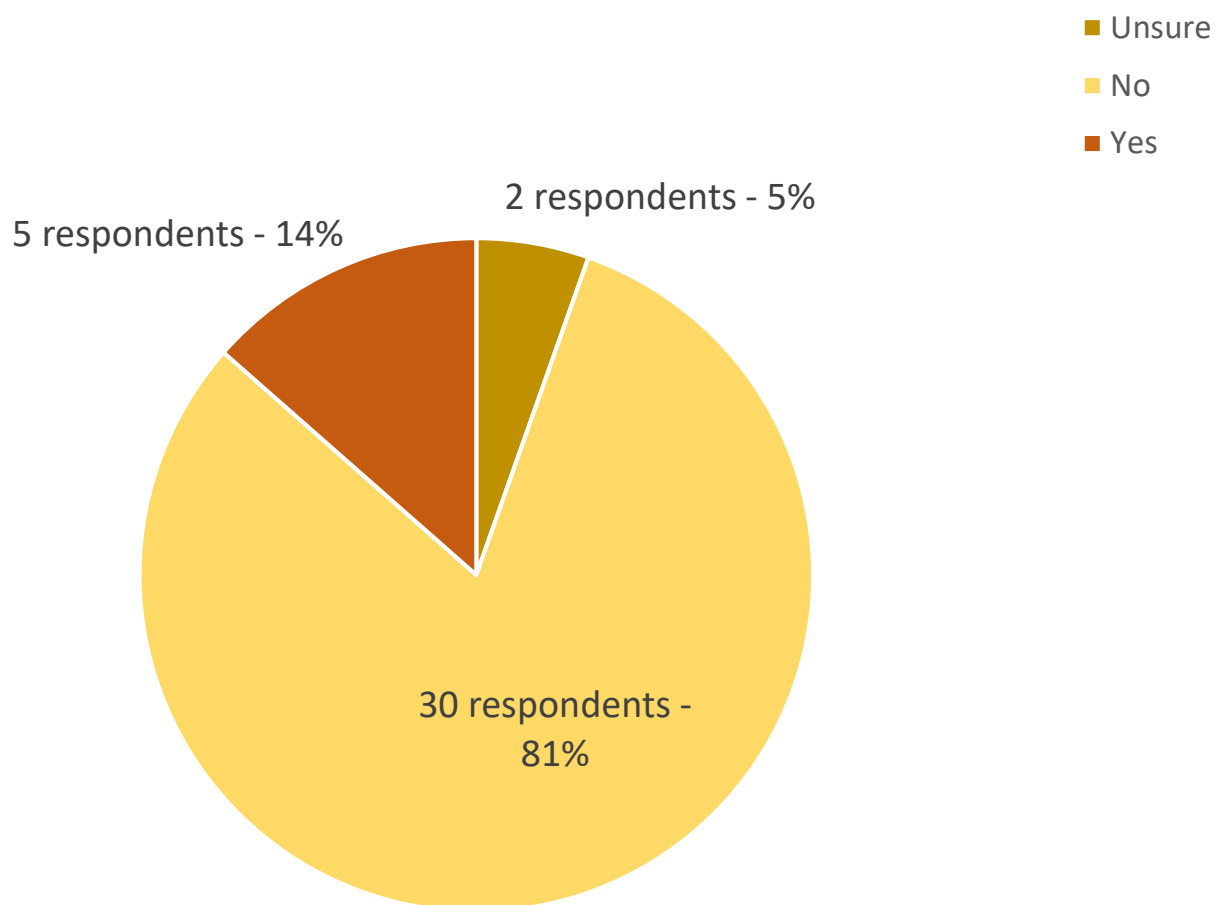
A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

## Pesticide Use at Work

**14 %** of respondents (and/or members of their households) used pesticides at work.

No. of respondents: 37





# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

## 2. Pesticide Use Outside Homes (In gardens and allotments)

**Weedkillers** were the most common products used outside homes by **62%** of respondents.

Total no. of respondents: 37





# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

## Products to kill or repel insects on plants

**27%** of respondents used products to kill or repel insects on plants. Of these, the most common product was [Yates Pyrethrum Insect Pest Killer](#) which was applied 2-11 times by 4 respondents over 12 months outside homes. Other products used include [Neem Oil](#), [White oil/pest oil](#), Homemade chilli and garlic spray, [Eco oil](#), and products containing [Carbaryl](#).

Types of products and frequency of use selected by respondents include:

PRODUCTS TO KILL OR REPEL INSECTS ON PLANTS	1 application	2-11 applications	12 or more applications
<a href="#">Yates Pyrethrum Insect Pest Killer</a>	2	4	1
<a href="#">Hortico Insect Killer Ready To Spray Tomatoes &amp; Vegetables</a>	1	0	0
<a href="#">Yates Tomato and Vegetable Dust</a>	1	1	0
<a href="#">Sharp Shooter Complete Bug and Insect Spray</a>	1	0	0
<a href="#">Yates Baythroid</a>	1	0	0
<a href="#">David Grays Malathion Garden Spray</a>	2	0	0
Other Products	3	4	0

**22%** of respondents used products to kill or repel insects (not on plants). A variety of products were used.

These include [Mortein/Raid Surface Spray for Ant Control](#), [Atlas Permethrin Ant Killer Powder](#), [Bayer Ant and Wasp Dust](#).

Types of products and frequency of use selected by respondents include:

PRODUCTS TO KILL OR REPEL INSECTS (NOT ON PLANTS)	1 application	2-11 applications	12 or more applications
<a href="#">Antex Granules (Ant Killer Sand)</a>	2	0	0
<a href="#">MSA Wasp Killer</a>	2	0	0
Other Products	3	1	1

**22%** of respondents used products to kill slugs and snails. [Hortico Snail and Slug Pellets](#) were most commonly used.

Types of products and frequency of use selected by respondents include:

PRODUCTS TO KILL SLUGS AND SNAILS	1 application	2-11 applications	12 or more applications
<a href="#">Eradicate Snail and Slug Bait</a>	1	0	0
<a href="#">Baysol Snail and Slug Bait</a>	1	0	0
<a href="#">Hortico Snail And Slug Pellets</a>	3	3	1
Other Products	0	1	0



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

**62%** of respondents used weedkillers. Most commonly used product was [ROUNDUP Weedkiller](#). Other products used include Generic Glyphosate Bindii, [Grow choice Glymount 450](#), [Weedmaster Duo](#), Generic Glyphosate 360, [Apparent Double Down 700](#), [Metsulfuron](#), [Yates Weed & Feed](#), [SAFEpine Oil](#), [Starane Advanced Brush Off](#).

Types of products and frequency of use selected by respondents include:

WEEDKILLERS	1 application	2-11 applications	12 or more applications
<a href="#">ROUNDUP Herbicide By Monsanto</a>	2	4	0
<a href="#">ROUNDUP Weedkiller</a>	3	3	1
<a href="#">Brunnings 1 hour Fast Action Weed Kill</a>	0	1	0
<a href="#">HORTICO Weed Killer 360</a>	3	3	1
Other Products	2	6	0

WEEDKILLERS CONTAINING OTHER PESTICIDES	1 application	2-11 applications	12 or more applications
<a href="#">Yates Buffalo Pro Lawn Weedkiller</a>	0	1	0
<a href="#">Yates Tree &amp; Blackberry Killer</a>	1	1	0
Other Products	3	3	0

**22%** of respondents used products to kill fungus on plants. Products include [Eco Organic Eco-Fungicide](#).

Types of products and frequency of use selected by respondents include:

PRODUCTS TO KILL FUNGUS (E.G. BLACK SPOT) ON PLANTS	1 application	2-11 applications	12 or more applications
<a href="#">Richgro Mancozeb plus Sulphur Fungicide</a>	1	2	0
Other Products	4	2	0

**14%** of respondents used wood preservative treatments. These include [Osmo](#) mould resistant wood lacquer, [Linseed Oil with Beeswax](#) and [Diggers Eco In-Ground Timber Protecta](#).

Types of products and frequency of use selected by respondents include:

WOOD PRESERVATIVE TREATMENTS (OUTDOORS)	1 application	2-11 applications	12 or more applications
Other Products	1	0	1



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

**8%** of respondents used cleaning products on their patios, paths, and garden furniture. Products used include [Koh household cleaner](#) and [White King bleach](#).

Types of products and frequency of use selected by respondents include:

PATIO/PATH/GARDEN FURNITURE CLEANING PRODUCTS	1 application	2-11 applications	12 or more applications
<a href="#">Wet and Forget Moss and Mould Remover</a>	1	1	0
Other Products	1	1	0

**16%** of respondents used products to eliminate algae from water. Products used include [Calcium Hypochlorite](#) and [Splosht](#).

Types of products and frequency of use selected by respondents include:

PRODUCTS TO ELIMINATE ALGAE FROM WATER	1 application	2-11 applications	12 or more applications
<a href="#">AQUAPRO Pond Algae Block</a>	1	1	0
<a href="#">AQUAPRO Bionatural Barley Straw Solution</a>	1	0	0
<a href="#">Pool Drops Liquid Algicide Plus</a>	0	1	0

**24%** of respondents used products to kill animals such as rats and mice. Products used include [Pindone](#).

Types of products and frequency of use selected by respondents include:

PRODUCTS TO KILL ANIMALS SUCH AS RATS AND MICE	1 application	2-11 applications	12 or more applications
<a href="#">RATSAK Fast Action Bait Stations</a>	1	5	0
<a href="#">The Big Cheese Rat &amp; Mouse Killer Bait</a>	0	2	0
<a href="#">Mortein Kills Rats and Mice</a>	1	0	0
Other products	1	2	0



## PESTICIDE DETECTIVES

A national assessment of pesticides in  
waterways

Pesticide Use in Australian Homes and  
Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

### OTHER TYPES OF PESTICIDES USED OUTSIDE HOMES

**19%** of respondents reported using other types of pesticides outside their homes in the last 12 months.

These include [Dipel](#), [lime sulphur](#), [copper oxychloride](#), [White oil](#), Yeast autolysate with lorsban, and Bayer Ant and wasp dust.

### PROFESSIONAL APPLICATION OF PRODUCTS OUTSIDE HOMES

Only **5%** of respondents reported using a professional to apply pesticide products outside their houses in the last 12 months. This included an application to kill rats and treating an elm tree with Imidacloprid.



## PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.pesticidedetectives.com.au](http://www.pesticidedetectives.com.au)

### Awareness of pesticides in products used outside homes and gardens.

**40%** of respondents were aware that the types of products for use outside homes contained pesticides prior to completing the survey. Of those that were not aware:

1 type of product

Wood preservative treatments for outdoor use

**13%** of respondents did not know that wood preservatives for outdoor use contained pesticides prior to completing the survey.

4 types of products

Mould/algae cleaning products, fungal treatments for plants, weed killers and wood preservative treatments

**10%** of respondents did not know that mould/algae cleaning products for pools and outdoor furniture, weed killers, fungal treatments for plants and wood preservatives contained pesticides prior to completing the survey.

3 types of products

Mould/algae cleaning products, fungal treatments for plants and wood preservative treatments

**10%** of respondents did not know that paint to prevent mould/fungus, mould cleaning products and wood preservatives contained pesticides prior to completing the survey.

**Total no. of respondents: 30**

**In addition, respondents who did not know about pesticides in their products prior to the survey include:**

Mould/algae cleaning products and fungal treatments for plants - 3% of respondents

Mould/algae cleaning products, wood preservatives and rat/mouse killers - 3% of respondents

Fungal treatments for plants and mould/algae cleaning products – 3% of respondents

Weed killers, fungal treatments for plants and mould/algae cleaning products – 3% of respondents

Wood preservative treatments and rat/mouse killers – 3% of respondents

Fungal treatments for plants, mould/algae cleaning products and rat/mouse killers - 3% of respondents

Mould/algae cleaning products, rat/mouse killers, wood preservatives and weedkillers - 3% of respondents

Fungal treatments for plants, mould/algae cleaning products, rat/mouse killers, and wood preservatives - 3% of respondents

Weedkillers - 3% of respondents



# PESTICIDE DETECTIVES

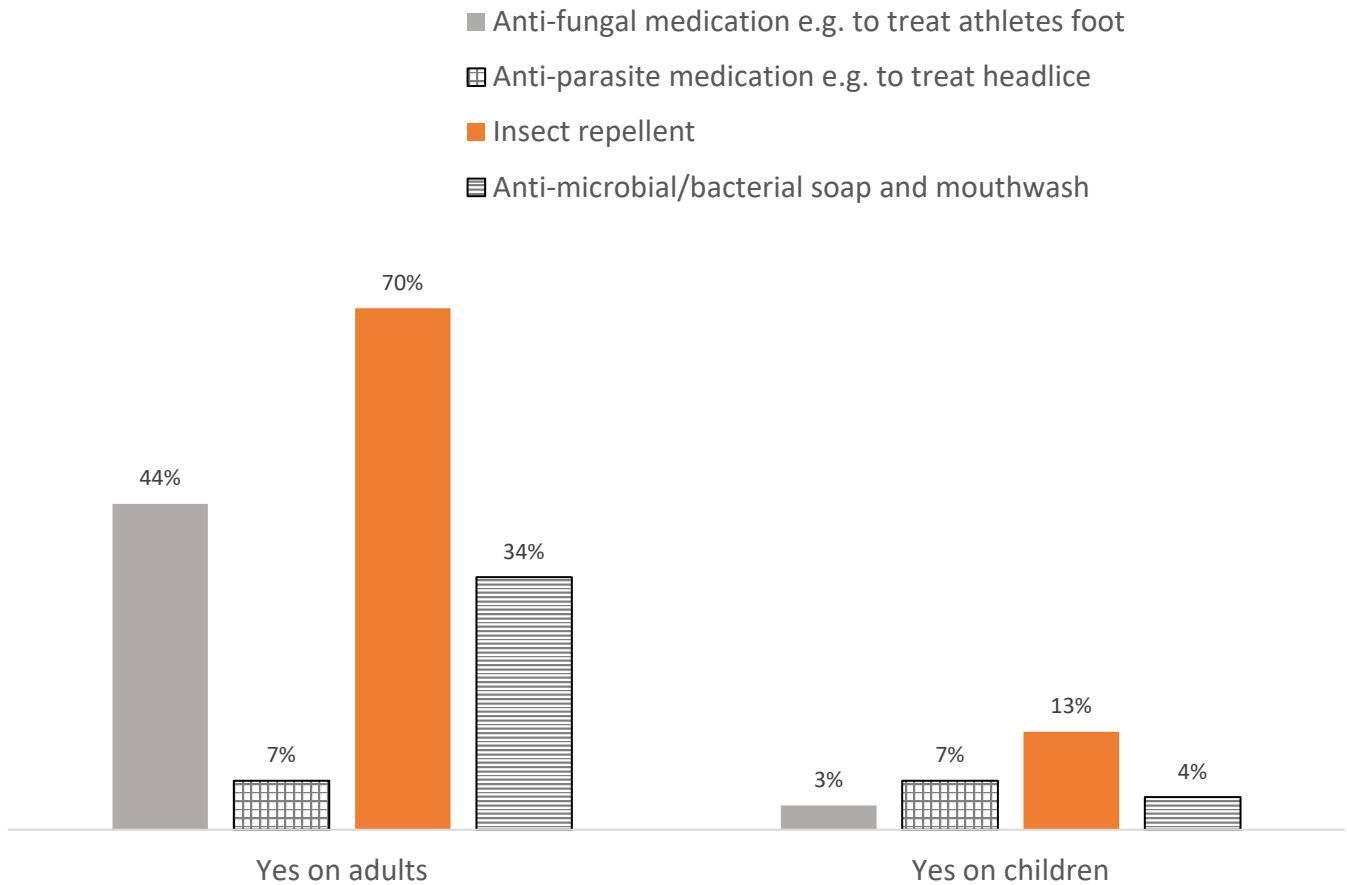
A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide Detectives](http://www.rmit.edu.au/pesticide Detectives)

## 3. Products applied on humans

**Insect repellent** is the most common product applied with **70%** of respondents reporting the use of insect repellent products on themselves and on their children.

No. of respondents: 91





# PESTICIDE DETECTIVES

A national assessment of pesticides in  
waterways

Pesticide Use in Australian Homes and  
Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)



**Insect repellent products** were used by **70%** of respondents and **13%** of their children over a 12-month period.

[Off! Tropical Strength Insect Repellent](#) was mostly commonly used and most frequently applied between 2 to 11 applications over a 12-month period. Other products used include: [Repel tropical strength personal insect spray](#), [Aeroguard tropical strength insect repellent \(aerosol\)](#), [Jason 'Quit Bugging Me' insect repellent](#), [Bushman Plus 20% Deet.](#), [Off! Family Care Insect Repellent](#), [Repellex Tropical Strength Personal Insect Repellent Spray](#), and [Vanilla Mozi](#).

Types of products and frequency of use selected by respondents include:

Insect Repellent	1 application	2-11 applications	12 or more applications
<a href="#">Off! Tropical Strength Insect Repellent</a>	6	19	3
<a href="#">Aeroguard Tropical Strength Roll on</a>	4	14	1
<a href="#">Bushman Insect Repellent 80% Deet Heavy Duty</a>	6	10	4
<a href="#">Rid Insect Repellent Tropical Strength Plus Antiseptic Spray</a>	0	13	3
<a href="#">Cancer Council Repel Sunscreen Plus Insect Repellent Lotion</a>	1	2	0
Other products	6	14	6

**Anti-fungal products** were used by **44%** of respondents and **3%** of their children. [Canesten Cream](#) was mostly commonly used and most frequently applied between 2 to 11 applications over a 12-month period. Other products used include [ketoconazole oral medication](#) (prescription), [SolvEasy Tinea spray](#), [Nizoral 1%](#), [Resolve Tinea Cream](#), [Hydrozol Cream](#), [Coaltar Shampoo](#), [Daktarin](#), [Daktagold Cream](#), [Excilor](#), [Kenacomb Ointment](#), [Clonea Clotrimazole Cream](#), and [Terbinafine](#).

Types of products and frequency of use selected by respondents include:

Anti-fungal medication/products to treat athletes foot, fungal nail infection, and thrush	1 application	2-11 applications	12 or more applications
<a href="#">Canesten Cream</a>	7	16	1
<a href="#">Lamisil Cream</a>	2	6	0
<a href="#">Head &amp; Shoulders Selenium Sulfide Persistent Dandruff Shampoo</a>	1	1	3
<a href="#">Canesten Clotrimazole Thrush Treatment</a>	1	1	0
<a href="#">Nilstat Oral Drops</a>	0	2	0
Other Products	2	0	1



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

**Anti-parasite products** were used by **7%** of respondents and **7%** of their children over a 12-month period. Other products used include [NYDA](#) and [Vermox](#).

Types of products and frequency of use selected by respondents include:

Anti-parasite medication/products e.g. to treat headlice, scabies	1 application	2-11 applications	12 or more applications
<a href="#">Pyrenel Foam</a>	1	1	0
<a href="#">Benzemul Application for the Treatment Of Scabies &amp; Body Lice</a>	0	0	1
<a href="#">Lyclear Scabies Cream</a>	1	0	1
Other products	2	3	2

**Anti-microbial soap and mouthwash products** were used by **34%** of respondents and **4%** of their children over a 12-month period. Other products used include: [pHisohex](#), [Ti tree oil](#), [Listerine](#), [Colgate "Plax"](#), [Coles](#) and Aldi antibacterial hand wash, [J&J microshield](#) [Palmolive antibacterial liquid hand wash](#), [Dettol hand wash](#), Pears coal tar soap, and [Betadine](#).

Types of products and frequency of use selected by respondents include:

Anti-microbial/bacterial soup/mouthwash	1 application	2-11 applications	12 or more applications
<a href="#">Biotène Dry Mouth Oral Rinse</a>	1	2	0
<a href="#">Dettol Sapoderm Hygienic Soap</a>	1	4	1
Other Products	4	5	9

## OTHER TYPES OF PRODUCTS APPLIED ON HUMANS

**7%** of respondents reported using other types of products on themselves. These include: [Tea tree oil](#), [Near Feet Foot Spray](#) and [Isocol antiseptic solution](#).



# PESTICIDE DETECTIVES

A national assessment of pesticides in  
waterways

Pesticide Use in Australian Homes and  
Gardens Survey Results 2020  
[www.rmit.edu.au/pesticidedetectives](http://www.rmit.edu.au/pesticidedetectives)

## Awareness of pesticides in products applied on humans

**60%** of respondents were aware that the products applied on themselves or their children contained pesticides prior to completing the survey. Of those that were not aware:

1 type of product Insect repellent	<b>3%</b> of respondents did not know that insect repellent contained pesticides prior to completing the survey.
1 type of product Anti-fungal products	<b>21%</b> of respondents did not know that anti-fungal products contained pesticides prior to completing the survey.
2 types of products Anti-fungal and anti-parasitic products	<b>7%</b> of respondents did not know that anti-fungal and anti-parasitic products contained pesticides prior to completing the survey.
2 types of products Anti-fungal and insect repellent	<b>2%</b> of respondents did not know that anti-fungal and anti-parasitic products contained pesticides prior to completing the survey.
3 types of products Anti-fungal, anti-parasitic and insect repellent	<b>7%</b> of respondents did not know that anti-fungal, anti-parasitic and insect repellent products contained pesticides prior to completing the survey.

No. of respondents: 91



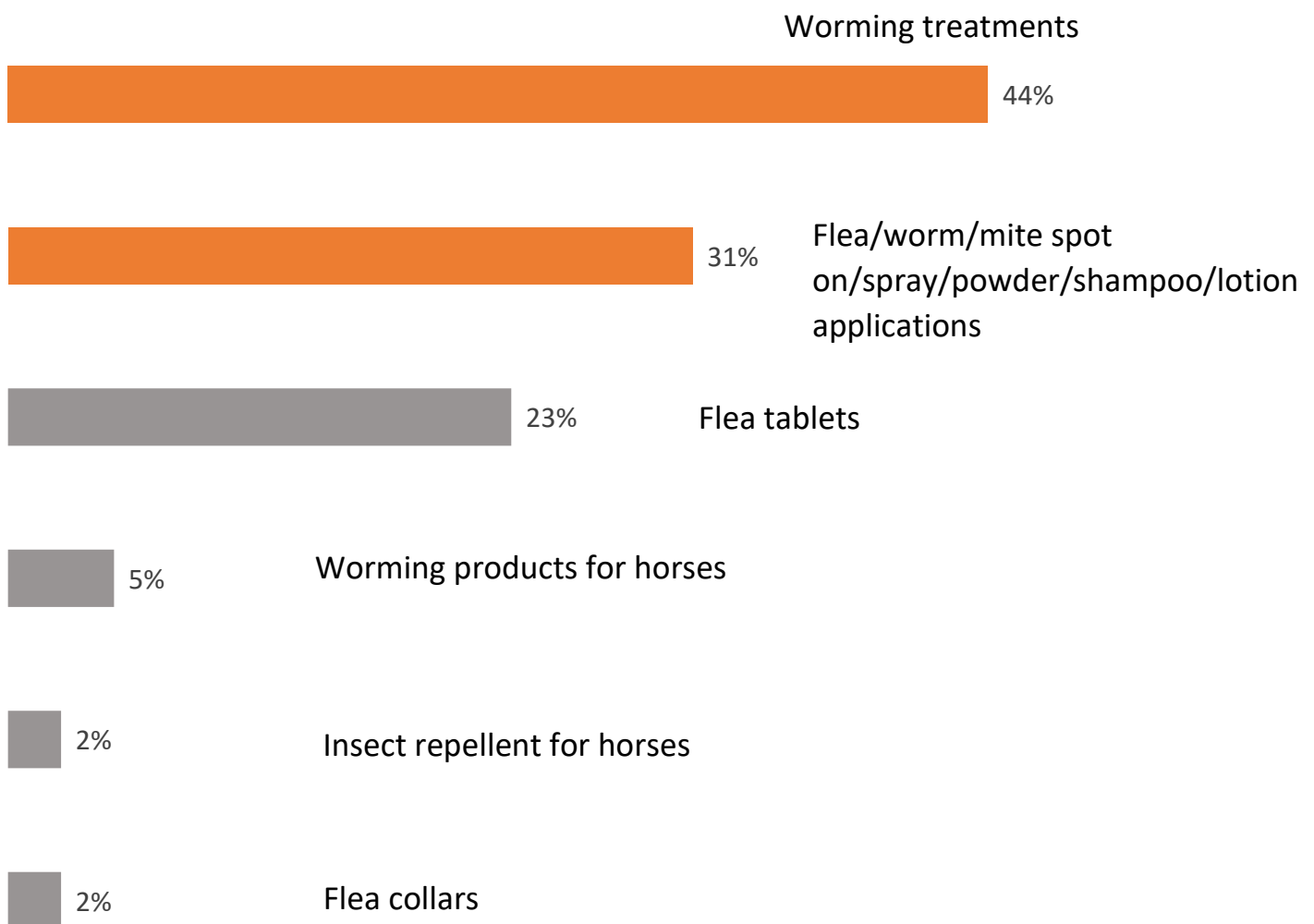
# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticidedetectives](http://www.rmit.edu.au/pesticidedetectives)

## 4. Products applied on animals and pets

**Worming** treatments are the most common products applied by **44%** of respondents on animals they own or their pets over a 12-month period.





# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

[Drontal Allwormer chewable](#) was used most frequently, from 2 to 11 applications and most commonly on their pets and animals.

Types of products and frequency of use selected by respondents include:

Worming treatments	1 application	2-11 applications	12 or more applications
<a href="#">Drontal Allwormer chewable</a>	2	10	1
<a href="#">Sentinel Spectrum tasty chews</a>	0	4	3
<a href="#">Profender Allwormer</a>	3	2	1
Other products	4	10	2

A range of flea/tick/mite spot on solution/spray/shampoo applications were used on pets and animals.

Types of products and frequency of use selected by respondents include:

Flea/tick/worm/mite products	1 application	2-11 applications	12 or more applications
<a href="#">Advocate spot on</a>	2	8	1
<a href="#">Advantix spot on</a>	3	5	0
<a href="#">Revolution</a>	0	3	0
<a href="#">FIDOS Flea shampoo</a>	0	1	0
Other products	10	4	1

\*One respondent applied [Kiltix tick collar](#) once in the last 12 months and another respondent applied [Virbac Preventic Tick Collar](#) 2 to 11 times in the last 12 months.



# PESTICIDE DETECTIVES

A national assessment of pesticides in  
waterways

Pesticide Use in Australian Homes and  
Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

A range of flea tablets were used on pets and animals. Of these, Bravecto Chewable tablets were most common.

Types of products and frequency of use selected by respondents include:

Flea tablets	1 application	2-11 applications	12 or more applications
<a href="#">CAPSTAR Tablets</a>	3	0	0
<a href="#">Bravecto Chewable tablets</a>	1	4	0
<a href="#">COMFORTIS chewable tablets for fleas</a>	1	3	0
Other products	3	3	1

Other products used by respondents include, "Ich" treatment for fish containing "[Malachite Green](#)", [Surolan](#) (anti-fungal treatment), Horse worming paste, [Kilverm poultry wormer](#), [Pestene lice and mite powder](#), chillies, [Malaseb shampoo](#), Moxydectin worming product, [Nexgard Spectra](#) (fleas, ticks, mites, worms).

---

## PROFESSIONAL APPLICATION OF PRODUCTS ON ANIMALS AND PETS

No. of respondents : 91

**11%** of respondents reporting that a professional applied pesticide products on their pets and/or animals. One respondent was unsure.



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticidedetectives](http://www.rmit.edu.au/pesticidedetectives)

## Attitudes and behaviours towards pesticides

### Where do respondents buy their products from?

Majority of respondents purchased their indoor/outdoor and products for human use from supermarkets, chemists and general stores.

**40%** of respondents purchased products for their animals and pets from specialist stores. One respondent listed that herbicides were borrowed from the workplace.

**A: Supermarkets/chemists/general stores (E.g. Bunnings, Safeway, Chemist Warehouse)**

**B: Specialist stores (E.g. garden centre, pet store, vet hospital)**

**C: Internet and "other"**

**D: Internet**

**E: Do not use these products**

**F: Supermarkets/chemists/general stores (E.g. Bunnings, Safeway, Chemist Warehouse), Specialist stores (E.g. garden centre, pet store, vet hospital), and "other".**

No of respondents: 91

	A	A and B	B	C	D	A and D	B and D	E	F
<b>Products for indoor use</b>	76%	2%	0	0	0	2%	0%	18%	4%
<b>Products for outdoor use</b>	53%	7%	19%	1%	1%	0%	0%	19%	0%
<b>Products for use on humans</b>	78%	3%	3%	0	2%	2%	0%	10%	10%
<b>Products for use on animals</b>	9%	4%	40%	0	8%	0%	4%	35%	0%



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

## Where do respondents store their products?

**Products for indoor use** - Majority of respondents stored their **on high shelves, in cupboards, kitchens and, utility rooms.**

**Products for outdoor use** - Majority of respondents stored their products **on high shelves, in cupboards, and garden sheds and garages.**

**Products for use on humans** - Majority of respondents stored their products **on high shelves, in cupboards, and in bathrooms.**

**Products for use on animals** - Majority of respondents stored their products **on high shelves, in cupboards, and in kitchens.**

Other places where products were stored include **in the laundry room, hallway cupboard, locked shipping container and on the window ledge in the laundry.**

<b>A: High shelf/cupboard</b>	<b>F: Garage</b>
<b>B: Kitchen</b>	<b>G: Locked cupboard/container</b>
<b>C: Utility</b>	<b>H: Kitchen/bathroom</b>
<b>D: Bathroom</b>	<b>I: Other</b>
<b>E: Garden shed</b>	<b>J: Do not use these products</b>

No of respondents: 91

	A	B	C	D	E	F	G	J	B and D
<b>Products for indoor use</b>	32%	24%	7%	2%	2%	1%	2%	13%	1%
<b>Products for outdoor use</b>	13%	2%	3%	0%	32%	21%	3%	15%	0%
<b>Products for use on humans</b>	26%	8%	4%	44%	1%	0%	2%	9%	0%
<b>Products for use on animals</b>	21%	14%	9%	2%	1%	3%	4%	35%	0%

	B, C, I	A and D	A and I	A and C	C and D	A and F	A and D	B, C and D	B,C,D and F	G, A and B	Various other combinations
<b>Indoor Products</b>	1%	2%	1%	1%	1%	1%	2%	1%	1%	1%	4%
<b>Outdoor Products</b>	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	9%
<b>Products for humans</b>	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	4%
<b>Products for animals</b>	0%	1%	0%	2%	2%	0%	0%	0%	0%	0%	6%





# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticidedetectives](http://www.rmit.edu.au/pesticidedetectives)

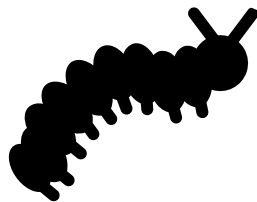
Percentage of respondents who store products that have not been used in the past year.



Products for Indoor Use



37%



Products for Outdoor Use



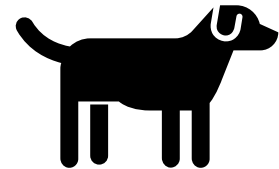
49%



Products for Use on Humans



36%



Products for Use on Animals



20%

of respondents store their products



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

## 3. Where do respondents dispose of their excess products?

Majority of respondents disposed of their excess products with their domestic rubbish. **52%** of respondents disposed of their excess products **for use on humans** with their **domestic rubbish**. Up to **22%** of respondents **stored their excess products** and **21%** of respondents disposed of their products for outdoor use **through their local council**. A small number of respondents disposed of their products down the drain.

Respondents who selected other means used all of their products. Some respondents did not know where to dispose small quantities of excess products and stockpiled them in their garages. Excess products for use on animals were returned to pharmacies, stores or/and vets. Some respondents returned their excess products to their local chemists. Some disposed of their products at the EPA chemical collection centre while others kept them without disposal.

**A: Domestic Rubbish**

**B: Drain**

**C: Local Council**

**D: Stored Excess**

**E: Other**

**F: Do not use these products**

No. of respondents: 91

	A	B	C	D	E	A and B	A and C	F	Various other combinations
<b>Products for indoor use</b>	<b>36%</b>	2%	18%	19%	12%	1%	1%	9%	2%
<b>Products for outdoor use</b>	<b>29%</b>	1%	21%	22%	13%	0%	0%	12%	2%
<b>Products for use on humans</b>	<b>52%</b>	2%	4%	19%	14%	1%	1%	7%	0%
<b>Products for use on animals</b>	<b>30%</b>	1%	8%	16%	12%	0%	0%	32%	1%



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

## 4. When applying indoor products:



**56%** of respondents read instructions, **69%** follow instructions, **67%** wash hands after application, **69%** cover unprotected food and drinks, **65%** ventilate the area, **41%** never use gloves or masks or other personal protective equipment, **70%** keep children away during application and **65%** keep pets away during application.

	Always	Often	Sometimes	Never	Total No. of respondents
<b>Read instructions</b>	<b>56%</b>	22%	20%	2%	<b>81</b>
<b>Follow instructions</b>	<b>69%</b>	21%	10%	0%	<b>81</b>
<b>Wash hands after application</b>	<b>67%</b>	17%	16%	0%	<b>81</b>
<b>Cover unprotected food and drinks</b>	<b>69%</b>	11%	16%	4%	<b>80</b>
<b>Ventilate the area</b>	<b>65%</b>	15%	15%	5%	<b>80</b>
<b>Use gloves or mask or other personal protective equipment</b>	15%	16%	28%	<b>41%</b>	<b>80</b>
<b>Keep children away during application</b>	<b>70%</b>	5%	6%	19%	<b>77</b>
<b>Keep pets away during application</b>	<b>65%</b>	13%	10%	12%	<b>78</b>



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

## 5. When applying outdoor products:



**83% of respondents** read instructions, **84%** follow instructions, **86%** wash hands after application, **46%** use gloves or masks or other personal protective equipment, **80%** keep children away during application and **81%** keep pets away during application.

	Always	Often	Sometimes	Never	Total no. of respondents
Read instructions	83%	12%	4%	1%	78
Follow instructions	84%	15%	0%	1%	76
Wash hands after application	86%	12%	2%	0%	78
Use gloves or mask or other personal protective equipment	46%	29%	19%	6%	78
Keep children away during application	80%	3%	0%	17%	70
Keep pets away during application	81%	8%	3%	8%	73

## 6. When applying products to animals:



**82% of respondents** read instructions, **85%** follow instructions, **84%** wash hands after application, **52%** never use gloves or masks or other personal protective equipment, **54%** keep children away during application and **44%** keep treated pets off beds.

	Always	Often	Sometimes	Never	Total no. of respondents
Read instructions	82%	12%	3%	3%	62
Follow instructions	85%	12%	0%	3%	62
Wash hands after application	84%	10%	3%	3%	63
Use gloves or mask or other personal protective equipment	23%	10%	15%	52%	61
Keep children away during application	54%	9%	7%	30%	57
Keep treated pets off beds	44%	12%	8%	36%	61



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

## 7. When reading pesticide labels:



**93% of respondents** always follow the label when the product is unfamiliar, **69%** always follow the label exactly, only **64%** understand all of the contents of the label, and only **32%** feel that the label always provides all the information that is needed.

	Always	Often	Sometimes	Never	Total no. of respondents
Follow the label when the product is unfamiliar	93%	4%	3%	0%	85
Follow the label exactly	69%	26%	5%	0%	85
Understand all of the label	64%	29%	7%	0%	86
The label provides all the information I need	32%	45%	23%	0%	84

## 8. General attitude to treating pest problems:



**43% of respondents** prefer to use non-chemical methods first before applying products. **44%** apply product for outdoor use and **42%** apply products on themselves when the problem becomes unmanageable and **31%** use products on animals and pets preventatively before the problem occurs.

	Products for indoor use	Products for outdoor use	Products for use on humans	Products for use on animals
Use at the first sign of a problem	8%	8%	13%	12%
Use non-chemical methods first	43%	32%	33%	21%
Use preventatively before problem occurs	3%	5%	8%	31%
Use when problem becomes unmanageable	36%	44%	42%	22%
Would never use pesticides	10%	11%	4%	14%
<b>Total no. of respondents</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>91</b>



# PESTICIDE DETECTIVES

A national assessment of pesticides in waterways

Pesticide Use in Australian Homes and Gardens Survey Results 2020  
[www.rmit.edu.au/pesticide-detectives](http://www.rmit.edu.au/pesticide-detectives)

**38% of respondents** disagreed that pesticides that are available for use by the public are more dangerous than other household/gardening chemicals. **45% of respondents** agreed that exposure is to be expected if you use pesticides in the home or garden. **34% and 14%** of respondents **strongly agreed and agreed respectively** that when using pesticides, a number of accidents have occurred. **51% strongly disagreed** that pesticides that can harm human health are not available for use by the public. **64% strongly disagree** that pesticides available for use to the public are safe to use, even if the guidelines are not adhered to.

	Agree	Strongly Agree	Disagree	Strongly disagree	Neither agree nor disagree	Total no. of respondents
Pesticides available for use by the public are more dangerous than other household/gardening chemicals	34%	18%	38%	4%	6%	91
Exposure is to be expected (e.g. skin contact) if you use pesticides in the home or garden	45%	15%	33%	7%	0%	91
When using pesticides, I have experienced a number of accidents (e.g. spillage)	14%	4%	46%	34%	2%	91
Pesticides that can harm human health are not available for use by the public	4%	5%	37%	51%	3%	91
Pesticides available for use to the public are safe to use, even if the guidelines are not adhered to	2%	2%	32%	64%	0%	91