

Pesticides 101

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Maine Board of
Pesticides Control

Licensing Requirements
for Pesticide Applicators
in the State of Maine

Maine Board of Pesticides Control
www.thinkfirstspraylast.org
207-287-2731
pesticides@maine.gov



Who needs a commercial license?

- Anyone who applies any pesticide...
 - for any type of compensation
 - in areas open to the public
 - as a government employee, including school employees
 - also includes application of restricted use pesticides for other than agricultural purposes (e.g., termite control)



No endorsement intended or implied



Certification & Licensing for Commercial Applicators

You must become certified to be eligible for a license

Certification = passing exams

- Core exam
- Category Exam—in this case 7C3

Must score at least 80%

This will certify you to apply for a Commercial Operator Applicator license



Certification & Licensing for Commercial Applicators

Every school system wishing to use powered application equipment must have at least one Commercial Master Applicator

Certification = passing exams

- Written Regulations Exam
- Verbal Exam with a BPC staff member

Must score at least 80%

This will certify you to apply for a Commercial Master Applicator license

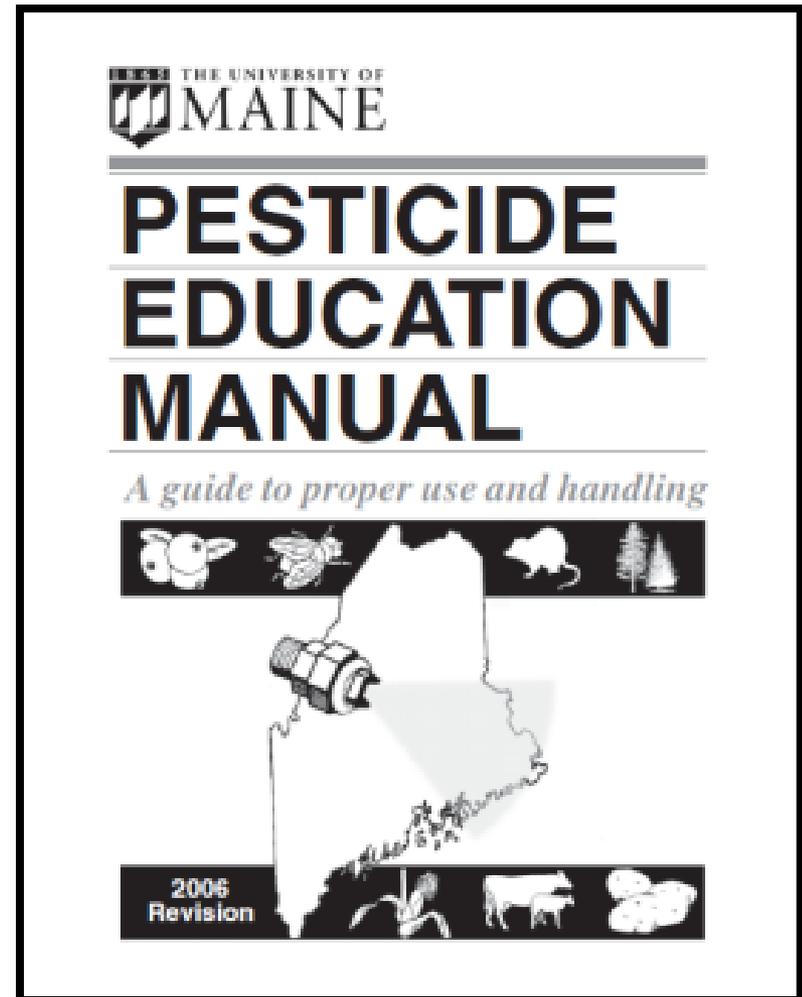


How do you comply?

- Exams are normally given in Augusta
- BPC will also do our best to accommodate school staff by offering exams for a group of employees at convenient locations if they cannot come to Augusta
 - Must send in a paper application with the \$15 fee to sign up for exam or create a profile and pay online – MePERLS
 - **We are currently only accepting paper applications currently**



- Must pass each written, closed-book exam (80% passing grade)
- The core exam is based on the Pesticide Education Manual available from the Cooperative Extension, Pest Management Office
1-800-287-0279



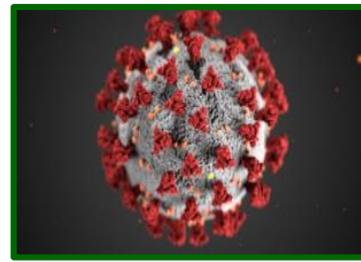
Expiration and recertification

- All Commercial Licenses expire on December 31st of the third year after issuance (12/31/20-12/31/23)
- Licensed applicators must earn continuing education (recertification) credits during their 3-year licensure period
- Commercial Operator applicators must earn 6 credits during the 3-year period
- Commercial Master applicators must earn 9 credits during the 3-year period
- Excess credits are not carried over into the next certification period



What is a pest?

- Bacteria, viruses (germs)
- Fungi, plant diseases
- Weeds
- Insects, mites, etc.
- Vertebrates



COVID-19



Potato Blight



Virginia Creeper



Carpenter Ants

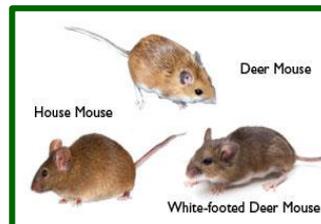
White Tail Deer



Starling



Mice



Squirrels



Skunks



Before using lethal methods to control pest wildlife contact the Maine Warden Service or District Wildlife Biologist



What is a pesticide?

- Any substance or mixture of substances intended for:
 - preventing,
 - destroying,
 - repelling, or
 - mitigating any pest
- Includes plant growth regulators, defoliants and desiccants
- Does not include:
 - fertilizers or nutrients
 - most beneficial organisms (eg insects, nematodes)
 - Does not include traps or mechanical means



What is a pesticide?

Examples:

Herbicides

Insecticides

Fungicides

Rodenticides

Bactericides

Virucides

Miticides

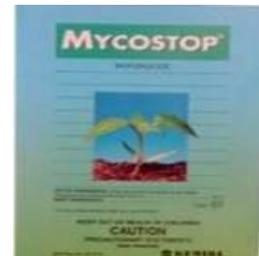
Slimecides

Plant growth regulators



These are pesticides

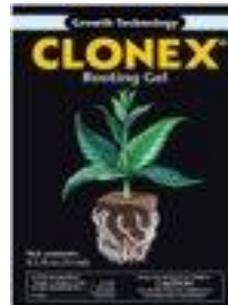
- Disinfectants and Sanitizers (*including bleaches and peroxides*)
- Fungicides (mold, mildew and plant disease control products)
- Insecticides and Herbicides (weed-killers)
- Rat & Mouse poison baits



No endorsement intended or implied

These are pesticides

- Deer and rabbit repellents
- Insect and tick repellents
- Plant growth regulators



No endorsement intended or implied

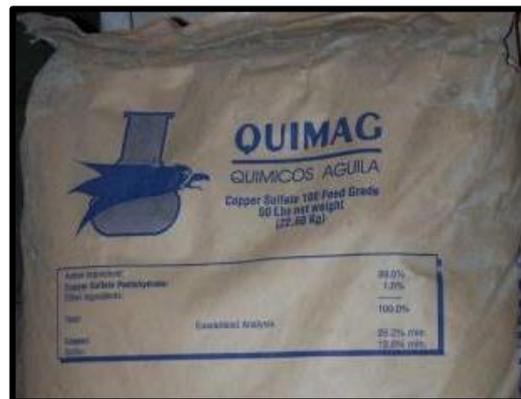
Natural, Organic and 'Green' Pesticides ARE Pesticides

- *Including products derived from plants, bacteria, fungi, or minerals*
- Examples: Dipel, Mycotrol, Thymol, Cedarcide, Safer's Soap, Neem, Diatomaceous Earth



What about using products that are not labeled as pesticides?

- Household products and mixtures are NOT allowed for pest control
- Many of the materials used seem “safe” because we eat them or use them on our skin
- Exposure routes may be different
- What we eat may not be safe to breathe



CHEF: ALLERGY ALERT

I have a severe allergy to FISH.

Even trace amounts of fish (bass, flounder, cod, etc.) can cause a life threatening reaction. Avoid cross contamination by cleaning all utensils, pans, cooking surfaces and cutting boards. Please verify safe cooking oils, marinades, sauces, seasonings, and ingredients are used in my meal.

Thank you for a safe dining experience. www.AllergyFreeTable.com

What are the benefits?



- Protect food supply

- Nuisance or public health pest control



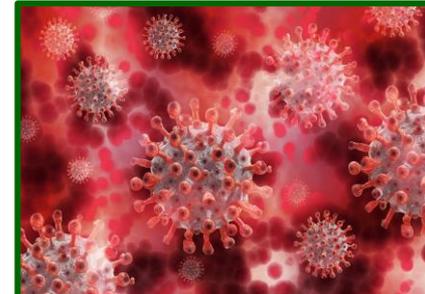
Browntail Moth



Mosquito



Deer Tick



Covid 19

What is IPM?

Integrated Pest Management is a science-based approach that combines a variety of techniques. By studying their life cycles and how pests interact with the environment, IPM professionals can manage pests with the most current methods to improve management, lower costs, and reduce risks to people and the environment.

IPM tools include:

- Alter surroundings
- Add beneficial insects/organisms
- Grow plants that resist pests
- Disrupt development of pest
- Prevention of pest problem developing
- Disrupt insect behaviors
- Use pesticides

1 IDENTIFY/MONITOR

Determine the causal agent and its abundance (contact your local extension agent for help).

2 EVALUATE

The results from monitoring will help to answer the questions: Is the pest causing damage? Do we need to act? As pest numbers increase toward the economic threshold further treatments may be necessary.

3 PREVENT

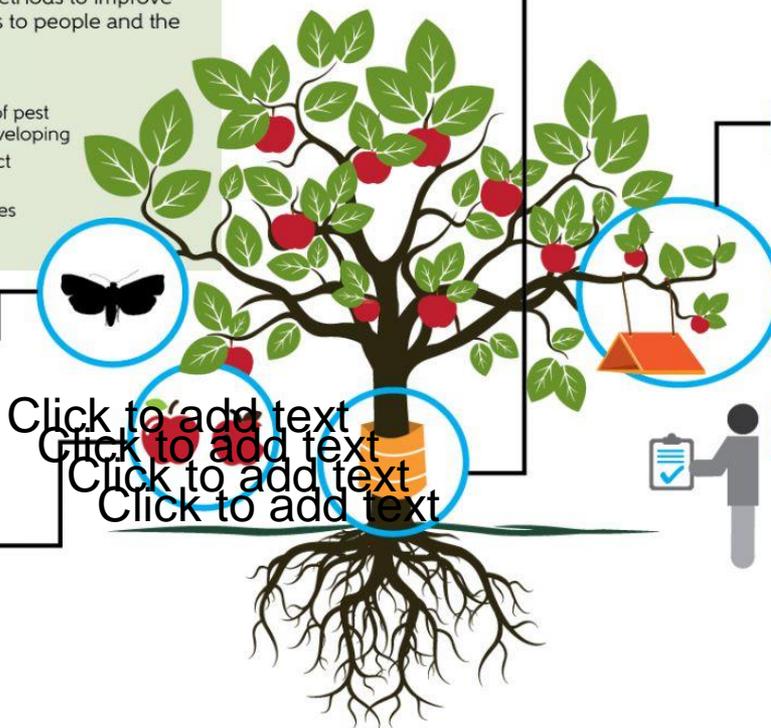
Some pest problems can be prevented by using resistant plants, planting early, rotating crops, using barriers against climbing pests, sanitation, and sealing cracks in buildings.

4 ACTION

IPM uses multiple tools to reduce pests below an economically damaging level. A careful selection of preventive and curative treatments will reduce reliance on any one tactic and increase likelihood of success.

5 MONITOR

Continue to monitor the pest population. If it remains low or decreases, further treatments may not be necessary, but if it increases and exceeds the action threshold, another IPM tool should be used.



WHERE CAN YOU PRACTICE IPM?



Buildings and Homes:

Inspect, identify pests, keep pests out, clean to deny pests food and water, vacuum, trap, or use low-risk pesticides.



Farms:

Check for pests/pest damage regularly, identify accurately, choose pest-resistant plant varieties, encourage/introduce beneficial insects, time planting to avoid pests, and if needed use low-risk pesticides.



Managed Natural Systems:

Identify the pest and use management options that have minimal risks to pollinators, humans, and pets.



The Entomological Society of America is the largest organization in the world serving the needs of entomologists and other insect scientists. ESA stands as a resource for policymakers and the general public who seek to understand the importance and diversity of earth's most diverse life form— insects. Learn more at www.entsoc.org.

Identify and Monitor



Protect Beneficial Insects

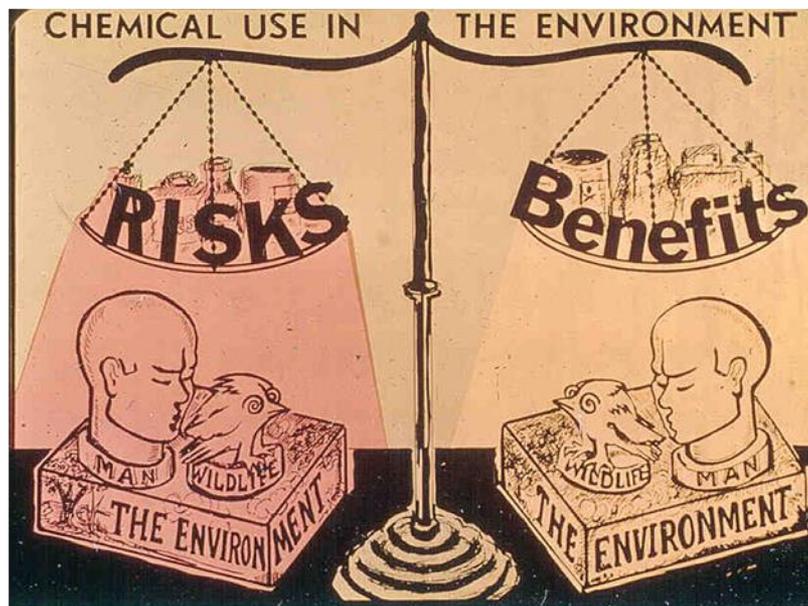
- Learn to recognize beneficial insects
- Minimize insecticide usage
- Use spot treatments with selective products when possible



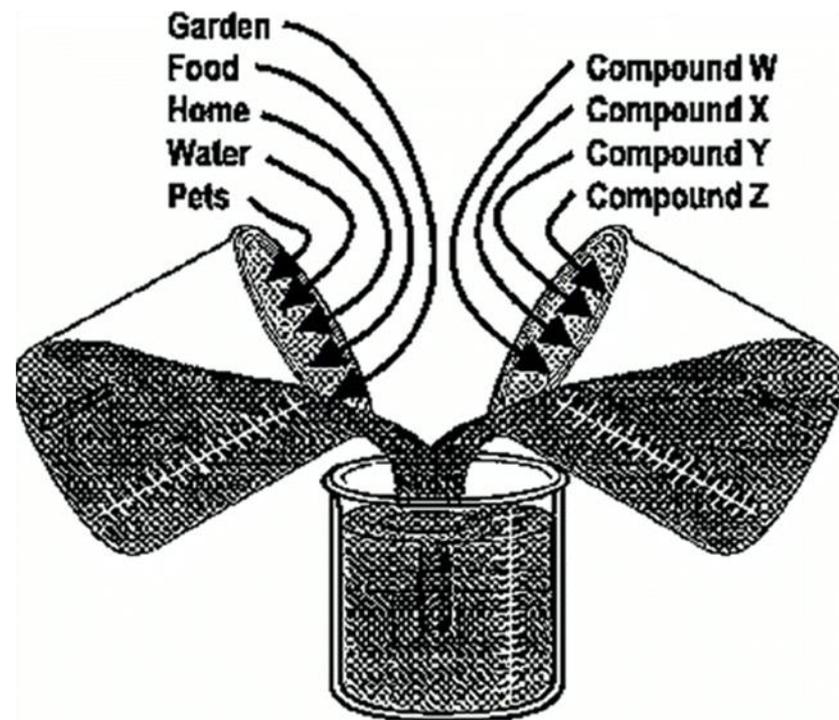
When do we need to make a pesticide application ?



Risk assessment



Prior to 1996 FQPA



After 1996 FQPA

Risk Assessment

RISK = TOXICITY X EXPOSURE

RESTRICTED USE PESTICIDE

ACUTE TOXICITY and GROUND WATER CONTAMINATION

For retail sale and use only by Certified Applicators or persons under the direct supervision of a Certified Applicator and only for those uses covered by the Certified Applicator's certification.



TEMIK[®] brand 15G ALDICARB PESTICIDE

For Control of Certain Insects, Mites, and Nematodes.

ACTIVE INGREDIENT: Aldicarb (purity 98.5% minimum, impurities to 0.4% maximum) 18%

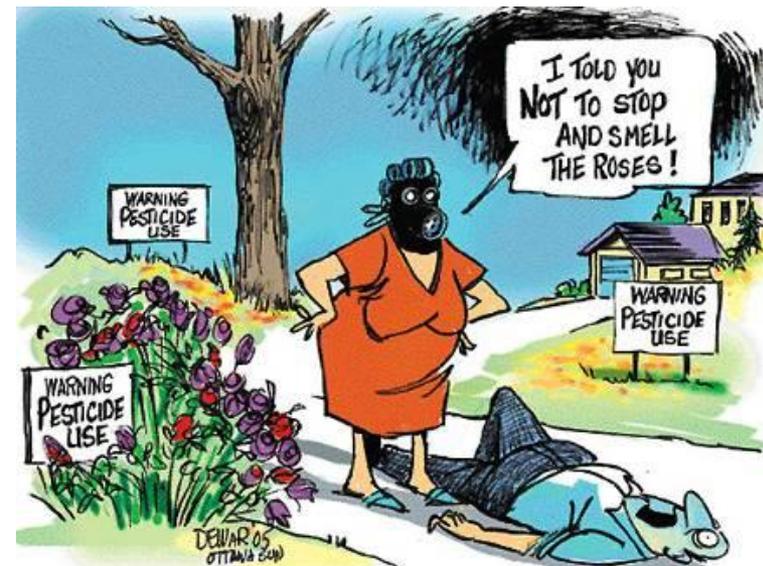
INERT INGREDIENTS 82%

EPA Reg. No. 264-333

EPA Est. No. 204-GA-01



KEEP OUT OF REACH OF CHILDREN
DANGER POISON
PELIGRO



One way to quickly assess the acute risk?

Signal Words

Danger

Warning

Caution

Fiberlock

IAQ

2000

DISINFECTANT, CLEANER, *VIRUCIDE,
DEODORIZER, FUNGICIDE, MILDEWSTAT

ACTIVE INGREDIENTS
 Alkyl (60% C₁₂, 10% C₁₀, 5% C₈, 5% C₆)
 dimethyl benzyl ammonium chlorides..... 2.25%
 Alkyl (68% C₁₂, 32% C₁₀)
 dimethyl ethylbenzyl ammonium chlorides..... 2.25%
 INERT INGREDIENTS 95.50%
 Total..... 100.00%

NET CONTENTS: 1 Gallon
EPA REG. NO. 1039-02-70884 EPA Lic. No. 8323-PA-01

KEEP OUT OF REACH OF CHILDREN
See side panel for additional
DANGER: precautionary statements

E.B. Stone

Insect Soap

Concentrate • Multi-Purpose Insecticide

Controls aphids, earwigs, grasshoppers, lacebugs, mealy-bugs, mites, scale insects, tent caterpillars, thrips, whitefly and other listed pests.
Can be used right up until day of harvest

Active Ingredients: By Wt.
 Potassium Salts of Fatty Acids 47.00%
 Other Ingredients 53.00%
 Total 100.00%

KEEP OUT OF REACH OF CHILDREN
WARNING
See back panel for first aid statements

Net Contents
16 FL. OZ.
(473 ml)

with
thick
paste
action

Biological Insecticide

DiPel® DF

Dry Flowable

FOR ORGANIC PRODUCTION

ACTIVE INGREDIENT:
 Bacillus thuringiensis, strain ABTS-351,
 fermentation solids, spores, and insecticidal toxins..... 54%
 OTHER INGREDIENTS 46%
 TOTAL..... 100%

Potency: 32,000 Cabbage Looper Units (CLU) per mg (14.5 billion CLU per pound).

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No. 73049-39
EPA Est. No. 33752-1A-001 List No. 12046

KEEP OUT OF REACH OF CHILDREN
CAUTION

SIGNAL WORDS

CAUTION - Slightly Toxic

WARNING – Moderately Toxic

DANGER – Highly Toxic

What are the human risks?

□ Acute

- Rash
- Nausea
- Eye ticks
- Stomach cramps
- Death

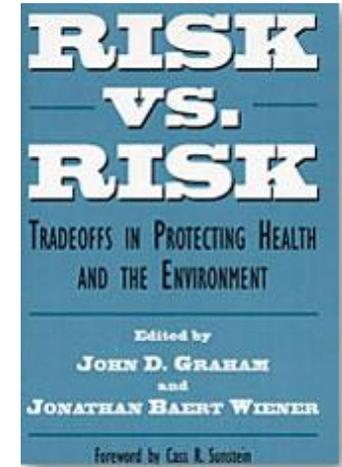
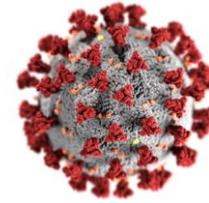


□ Chronic

- Cancer
- Birth defects
- Allergies
- Organ damage
- Endocrine effects
- Nerve disorders

Risk vs. Risk

- West Nile Virus, EEE Malaria, COVID-19
- Potato Late Blight Disease
- Lyme Disease



All pesticides have risks!!!

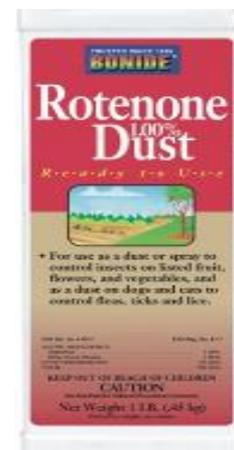
- Organic \neq Safe



- Synthetic \neq Highly toxic



- Natural \neq Safe



No endorsement intended or implied

All substances are poisons;
there is none which is not a
poison. The right DOSE
differentiates a poison from a
remedy.”

–Paracelsus (1493-1541)



Even too much water can kill —
over 1.5 liters/hour

Woman dies after water-drinking contest

Water intoxication eyed in 'Hold Your Wee for a Wii' contest death

Associated Press

Updated: 10:24 p.m. ET Jan 13, 2007

SACRAMENTO, Calif. - A woman who competed in a radio station's contest to see how much water she could drink without going to the bathroom died of water intoxication, the coroner's office said Saturday.

Jennifer Strange, 28, was found dead Friday in her suburban Rancho Cordova home hours after taking part in the "Hold Your Wee for a Wii" contest in which KDND 107.9 promised a Nintendo Wii video game system for the winner.

"She said to one of our supervisors that she was on her way home and her head was hurting her real bad," said Laura Rios, one of Strange's co-workers at Radiological Associates of Sacramento. "She was crying and that was the last that anyone had heard from her."

NBC VIDEO



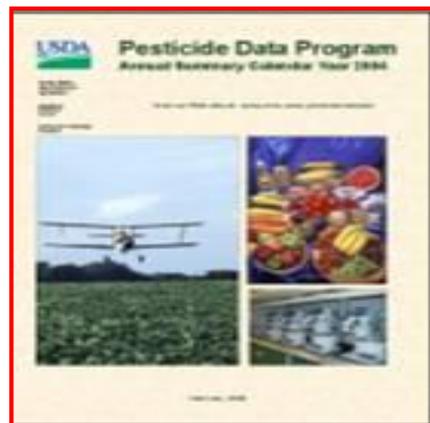
Launch

Woman in water drinking contest dies
Jan. 15: Sacramento Bee reporter Christina Jewett talks to MSNBC-TV's Contessa Brewer about the death of a woman who had competed in a radio station contest.

MSNBC

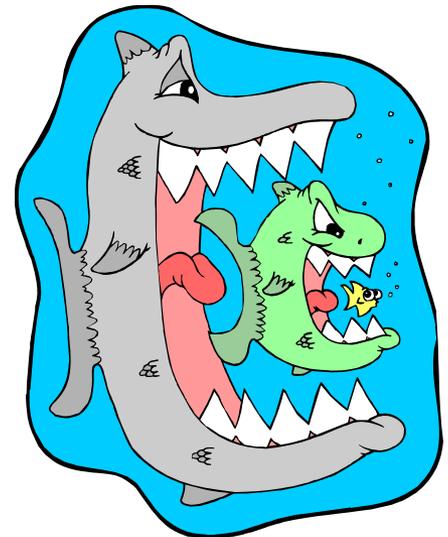
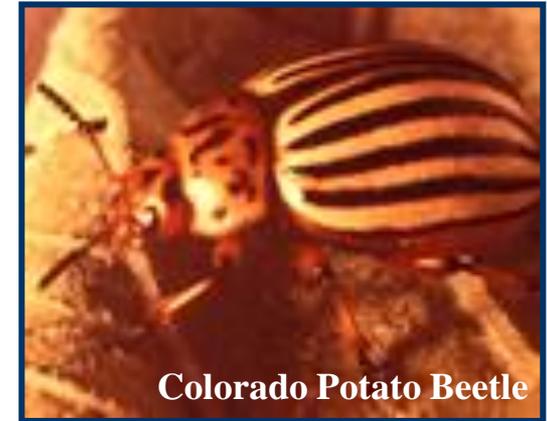
What are the risks?

- Wildlife effects
- Water contamination
- Our food



Concerns with pesticide dependence past, present and future

- **Pest resistance**
- **Environmental persistence**
- **Bioaccumulation:** when a chemical accumulates in animal tissues
- **Biomagnification:** when an organism accumulates residues at higher concentrations than the organisms they consume



Concerns with pesticide dependence past, present and future

- **Misuse**
- **Secondary pest outbreaks**
- **Non-target/Beneficial organism effects**
- **Pest Resurgence**

Statesman Journal: Firm Fined For Bee Die-Offs

statesman_journal | Dec. 19, 2013 11 a.m. | Updated: Dec. 20, 2013 9:49 a.m.

CONTRIBUTED BY:

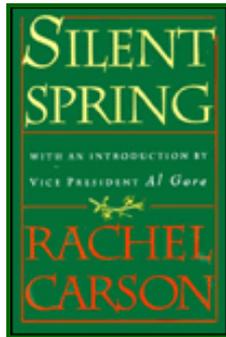
Tracy Loew

Massive bumblebee die-offs last summer were caused by improper pesticide applications, an Oregon Department of Agriculture investigation has concluded.

ODA has issued six civil penalties totaling \$2,886 in connection with three incidents, in Wilsonville, downtown Portland, and West Linn.

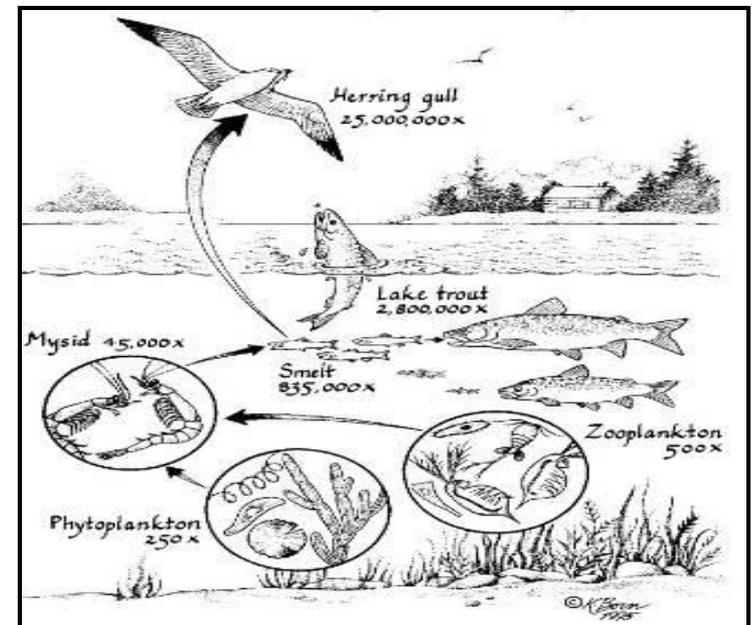
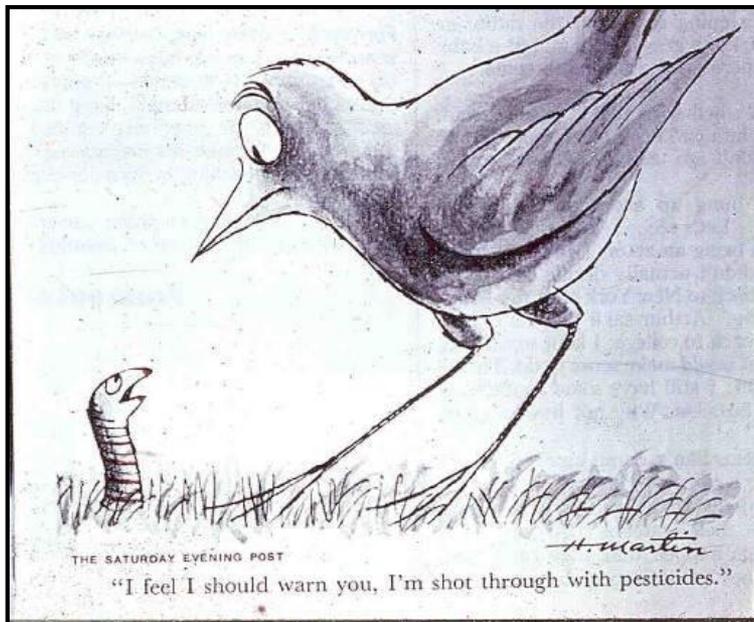


Remember “Silent Spring”



“Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is something infinitely healing in the repeated refrains of nature -- the assurance that dawn comes after night, and spring after winter.”

— Rachel Carson, [Silent Spring](#)



*Biomagnification of chlorinated hydrocarbons like DDT or Dieldrin

Fiberlock



2000

DISINFECTANT, CLEANER, *VIRUCIDE,
DEODORIZER, FUNGICIDE, MILDEWSTAT

NET CONTENTS: 1 Gallon
EPA REG. NO. 1839-95-73884 EPA Est. No. 8325-PA-01

ACTIVE INGREDIENTS

Alkyl (60% C ₁₂ , 30% C ₁₄ , 5% C ₁₂ , 5% C ₁₄) dimethyl benzyl ammonium chlorides.....	2.25%
Alkyl (68% C ₁₂ , 32% C ₁₄) dimethyl ethylbenzyl ammonium chlorides.....	2.25%
INERT INGREDIENTS	95.50%
Total.....	100.00%

KEEP OUT OF REACH OF CHILDREN
DANGER: See side panels for additional
precautionary statements



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. KEEP OUT OF REACH OF CHILDREN. CORROSIVE.
Causes irreversible eye damage and skin burns. Do not get
in eyes, on skin or on clothing. Wear goggles or face shield,
rubber gloves, and protective clothing. Harmful if swallowed.
Remove contaminated clothing and wash before reuse.
Wash hands before eating, drinking, chewing gum, using
tobacco or using the toilet.

Pesticide Registration

- To be legal for use in Maine, all pesticides must be registered by **both**:
 - EPA*
 - BPC



*Some “reduced risk” pesticides have been deregulated by the EPA

EPA exempt pesticides 25b

- Some pesticides have been deregulated by EPA
 - Exempt from Federal registration
 - Must be registered by State of Maine
 - Exempt from toxicity testing and FQPA
 - NOT risk free



Active ingredients in some of these products:

- Clove oil
- Peppermint oil
- Thyme oil
- Sodium lauryl sulfate
- Dried blood

No endorsement intended or implied



EPA exempt pesticides 25b

Claims Regarding Control of Microorganisms

The label cannot bear claims to control or reduce microorganisms, such as bacteria or viruses, that pose a threat to human health. For example, minimum risk products may not claim to:

- "Sterilize"
- "Disinfect."
- "Sanitize."
- "Kill germs."

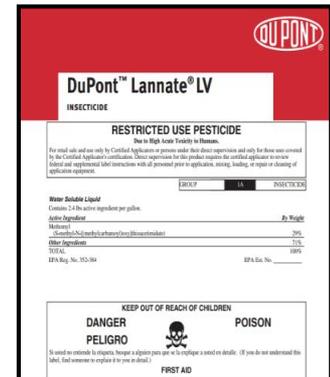
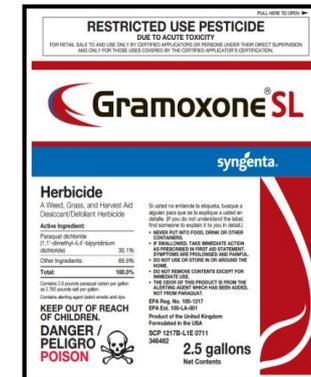
What does registration mean?

- Not a safety guarantee
- Reasonable certainty of no harm, **but not risk free**
- Must read and follow the label to manage the risk



Pesticide Classifications

- General Use – Lower risk, available over-the-counter
- Restricted Use – Higher risk, only available at licensed dealerships for purchase by licensed applicators
- State Restricted – Aquatic Herbicide Pesticides



No endorsement intended or implied

Pesticide Registration - Pesticide Labeling

- Labels are legal documents that provide directions for pesticide mixing, application, storage & disposal
- Users must comply with all instructions on the pesticide label & labeling
- FIFRA 2ee



The keys to proper pesticide use

- Read and follow the label & SDS
- Do your homework
- If you are a commercial applicator
 - only use products approved for the site
 - do not use products designed homeowner use

Germicidal CleanerQ
CLEANER, DISINFECTANT, DETERGENT, VIRUCIDE*, FUNGICIDE

ACTIVE INGREDIENTS	
Octyl decyl dimethyl ammonium chloride	0.814%
Dioctyl dimethyl ammonium chloride	0.407%
Didecyl dimethyl ammonium chloride	0.407%
Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride	1.085%
INERT INGREDIENTS	97.287%
Total	100.000%

EPA Reg. No. 1839-168-8722 EPA Est. No. 86091-WI-1_a, 88120-WI-1_b
(Subscript on Lot Code corresponds to manufacturing location.)

KEEP OUT OF REACH OF CHILDREN
DANGER

This product for use in:

- Hospitals, nursing homes, medical and dental offices and clinics.
- Restaurants and bars, cafeterias, institutional kitchens, fast food operations and food storage areas.
- Institutional facilities, laboratories, factories, business and office buildings, restrooms, hotels and motels and transportation terminals.
- Institutions, schools and colleges, churches, classrooms, athletic facilities and locker rooms.
- Food processing plants.
- Veterinary clinics, kennels, breeding and grooming establishments, zoos, pet shops, and other animal care facilities.
- Automotive garages, boats, ships, buses, trains, taxis and airplanes.

Read the label before...

- Buying the pesticide
- Storing the pesticide
- Mixing and applying the pesticide
- Disposing of unused pesticide and empty containers



Label “Rules of Thumb”

- The site or crop must be stated on the label **Schools**
- The target pest does not need to be listed – **Covid - 19**
- Any application method may be used, unless prohibited by the label - **Fogger**
- Applications may be made at a rate less than that stated on the label, not more! **Read the Label**
- Tank mixtures are OK, unless the label says otherwise

RESIDENTIAL, COMMERCIAL & HOSPITAL DISINFECTANT

VitalOxide®

*Kills Harmful Bacteria on hard and soft surfaces
Inhibits & keeps mold and mildew from growing for up to 4 weeks*

Sanitizes Hard and Soft Surfaces **Tough on germs, easy on surfaces**
100% Biodegradable Surfactant **Sanitizes hard non-porous surfaces in 60 seconds**

7 in 1 Cleaner Technology
Disinfects as it cleans

 LISTED #141392
No rinse required for
food contact surfaces (D-2)

AREAS OF USE INCLUDE: Homes, vehicles, schools, daycare, gyms, locker rooms, sports gear, hospitals, nursing homes, laundry rooms, veterinary, ambulances, laboratories, restaurants, boats, ships, federally inspected meat & poultry processing plants, farms, animal pens and poultry houses, egg processing premises, hatcheries, swine premise sanitation, refrigerated storage units, HVAC and AC systems, airplanes, trains, trucks, buses & automobiles. Use as a mold inhibitor on hard non-porous surfaces and soft surfaces, botanical facilities, commercial greenhouses customer/public areas, floral shops, garden centers, herbal dispensaries, horticultural facilities, plant growing chambers, plant growing facilities plant growing rooms, plant holding areas, greenhouse equipment, greenhouse films, plant display racks, plant grow shelves.

VITAL OXIDE KILLS:
Hard Surface Sanitization No Rinse Required: 60 sec contact time: Escherichia coli (ATCC 11229), Staphylococcus aureus (ATCC 6538) Sanitize Soft Surfaces: 5 minute contact time: Staphylococcus aureus (ATCC 6538), Enterobacter aerogenes (ATCC 13048) Carpet Sanitization: 60 Minute contact time: Enterobacter aerogenes (ATCC 13048), Staphylococcus aureus (ATCC 6538) Fungicide: 10 Minute contact time: Trichophyton rebrum (ATCC MYA), Trichophyton mentagrophytes (ATCC 9633) Mildewcide: 10 Minute contact time: Aspergillus niger (ATCC 6275) Disinfection Bacteria: 10 minute contact time: Pseudomonas aeruginosa (ATCC 15442), Acinetobacter baumannii (ATCC 19606), Staphylococcus aureus MRSA (ATCC 33562), Listeria monocytogenes (ATCC 15313), Legionella pneumophila (ATCC 33150), Staphylococcus aureus (ATCC 6538), Klebsiella pneumoniae (NDM-1) (ATCC BAA-2148), Escherichia coli (ATCC 11229), Bordetella bronchiseptica (ATCC 10580), Mycobacterium bovis- BCG, Disinfection Virus 5 minute contact time: Rotavirus, Strain WA**, Hepatitis C Virus Bovine Viral Diarrhea Virus**, Hepatitis B Virus Duck Hepatitis**, Norovirus Felino Calicivirus**, Murine Norovirus (MNV-1)**, Swine Influenza (H1N1)**, Respiratory Syncytial virus, ATCC VR-26**, Human Immunodeficiency Virus (HIV Type 1) Strain HTLV-IIIb**, Influenza B Virus (Strain B/Taiwan/2/82) (ATCC VR-1735)**, Hepatitis A Virus (ATCC VR-1541)**, Hantavirus (Prospect Hill Virus)**, Canine Distemper Virus**, Strain Snyder Hill, (ATCC VRI)** Disinfection Virus 10 minute contact time: Adenovirus 1, Strain Adenooid 71, (ATCC VR-1), Canine Parvovirus, Strain Cornell-780916, (ATCC VR-2016)**, Canine adenovirus 1, Strain Utrecht, (ATCC VR-293)**, Feline Herpesvirus 1, Strain C-27, (ATCC VR-636)**, Feline coronavirus, Strain WSU 79-1683, (ATCC VR-989)**, Canine coronavirus, Strain 1-71, (ATCC VR-609)**

ACTIVE INGREDIENTS:

Chlorine Dioxide.....	0.200%
Alkyl (60% C14, 30% C16, 5% C12, 5% C18)	
dimethyl benzyl ammonium chloride.....	0.125%
Alkyl (68% C12, 32% C14) dimethyl	
ethylbenzyl ammonium chloride.....	0.125%
OTHER INGREDIENTS.....	99.550%
Total.....	100.000%

NET CONTENTS: 128 FL. OZ. (3.78 L)
KEEP OUT OF REACH OF CHILDREN

No endorsement intended or implied

Pesticide

Label

Exercise



Remember, READ THE LABEL

It's the Law

Fiberlock



2000

DISINFECTANT, CLEANER, *VIRUCIDE,
DEODORIZER, FUNGICIDE, MILDEWSTAT

ACTIVE INGREDIENTS

Alkyl (60% C₁₄, 30% C₁₆, 5% C₁₂, 5% C₁₈)
dimethyl benzyl ammonium chlorides..... 2.25%
Alkyl (68% C₁₂, 32% C₁₄)
dimethyl ethylbenzyl ammonium chlorides..... 2.25%

INERT INGREDIENTS 95.50%

Total..... 100.00%

NET CONTENTS: 1 Gallon
EPA REG. NO. 1839-95-73884 EPA Est. No. 8325-PA-01

KEEP OUT OF REACH OF CHILDREN
DANGER: See side panels for additional
precautionary statements

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue

rinsing eye. Call a poison control center or doctor for treatment advice. **If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice. **If swallowed:** Call poison control center or doctor

immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance then give

artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.



IAQ 2000 is a moderate risk pesticide.

1. True
2. False



IAQ 2000 is a moderate risk pesticide.

1. True
2. **False**

Danger + Poison = **High Toxicity**

Fiberlock



2000

DISINFECTANT, CLEANER, *VIRUCIDE,
DEODORIZER, FUNGICIDE, MILDEWSTAT

ACTIVE INGREDIENTS

Alkyl (60% C₁₄, 30% C₁₂, 5% C₁₂, 5% C₁₄)
dimethyl benzyl ammonium chlorides..... 2.25%

Alkyl (68% C₁₂, 32% C₁₄)
dimethyl ethylbenzyl ammonium chlorides..... 2.25%

INERT INGREDIENTS 95.50%

Total..... 100.00%

NET CONTENTS: 1 Gallon
EPA REG. NO. 1839-95-73884 EPA Est. No. 8325-PA-01

KEEP OUT OF REACH OF CHILDREN
DANGER: See side panels for additional
precautionary statements

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.



What should be done if someone swallows IAQ 2000

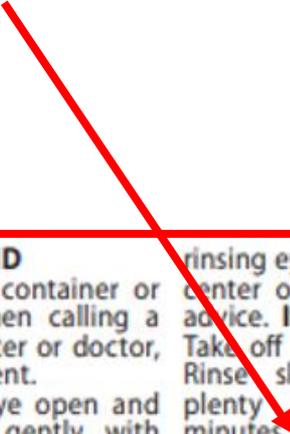
1. Call Poison Control
2. Give victim sips of water
3. Do not induce vomiting
4. Check the label for first aid instructions



What should be done if someone swallows IAQ 2000

1. **Call Poison Control**
2. **Give victim sips of water**
3. **Do not induce vomiting**
4. **Check the label for first aid instructions**

What should be done if someone swallows IAQ 2000?



FIRST AID
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NOTE TO PHYSICIAN:
Probable mucosal damage may contraindicate the use of gastric lavage.



IAQ 2000 is a _____?

1. Virucide
2. Miticide
3. Rodenticide



IAQ 2000 is a _____?

1. Virucide

2. Miticide

3. Rodenticide

Fiberlock



2000

DISINFECTANT, CLEANER, *VIRUCIDE,
DEODORIZER, FUNGICIDE, MILDEWSTAT

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The Environmental Protection Agency Reg No. for IAQ 2000 is _____?

1. 1839-95-73884
2. 8320-1-C4
3. 287-2731

Fiberlock



2000

DISINFECTANT, CLEANER, *VIRUCIDE,
DEODORIZER, FUNGICIDE, MILDEWSTAT

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IAQ 2000 is formulated to disinfect porous surfaces ____?

1. True
2. False



IAQ 2000 is formulated to disinfect porous surfaces ____?

1. True
2. **False**

Use Fiberlock IAQ 2000 to clean and disinfect non-porous personal protective safety equipment, protective headgear, hard hats, half mask respirators, full face breathing apparatus, gas masks, goggles, spectacles, face shields, silicone rubber or PVC hearing protectors and vinyl covered ear muffs.



When using IAQ 2000 to disinfect non-porous surfaces, how many ounces per gallon is recommended ____?

1. 1 ounce
2. 2 ounces
3. 8 ounces



When using IAQ 2000 to disinfect non-porous surfaces, how many ounces per gallon is recommended ____?

1. 1 ounce
2. **2 ounces**
3. 8 ounces

DISINFECTION - To disinfect inanimate, hard, non-porous surfaces add 2 ounces of this product per gallon of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid.



When using IAQ 2000 to disinfect inanimate, hard, non-porous areas, the surfaces should remain wet for ____?

1. 1 Hour
2. **10 Minutes**
3. 45 Seconds



When using IAQ 2000 to disinfect inanimate, hard, non-porous areas, the surfaces should remain wet for ____?

1. 1 Hour
2. **10 Minutes**
3. 45 Seconds

DISINFECTION - To disinfect inanimate, hard, non-porous surfaces add 2 ounces of this product per gallon of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid.



IAQ 2000 can be used to treat Coronavirus?

1. True
2. False



IAQ 2000 can be used to treat Coronavirus?

1. **True**
2. False

***VIRUCIDAL ACTIVITY** – This product, when used on environmental, inanimate, hard, non-porous surfaces at 2 ounces per gallon of water, exhibits effective virucidal activity against Influenza A2/Japan (representative of the common flu virus), Herpes Simplex Type 1, Adenovirus Type 2, Vaccinia virus (representative of the Pox virus group), Human Coronavirus (ATCC VR-740, Strain 229E), Human Immunodeficiency Virus Type I (HIV-1), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Norovirus (Norwalk Virus), Bovine Viral Diarrhea Virus (BVDV), Feline calicivirus



IAQ 2000 can be used to treat pathogenic fungi?

1. True
2. False



IAQ 2000 can be used to treat pathogenic fungi?

1. True
2. False

FUNGICIDAL ACTIVITY - At the 2 ounces per gallon dilution, this product is also fungicidal against the pathogenic fungi, Trichophyton mentagrophytes, when used as directed on hard surfaces found in bathrooms, shower stalls, locker rooms, exercise facilities or other clean, hard, non-porous, surfaces commonly contacted by bare feet. Follow the Disinfection directions.



Safety Data Sheet

- **Identification:** for the product and supplier
- **Hazards:** physical (fire and reactivity) and health
- **Prevention:** steps you can take to work safely, reduce or prevent exposure, or in an emergency
- **Response:** appropriate responses in various situations (e.g., first-aid, fire, accidental release)

Safety Data Sheet

SDS Date: August, 2016

Safety Data Sheet Per GHS Standard Format

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: IAQ 2000 No. 8320
General Use: Disinfectant, Virucide, Fungicide
Product Description: Disinfectant & Cleaner
Chemical Family: Quaternary ammonium chloride blend
EPA Registration Number: 1839-95-73884

Information on the Supplier of the Safety Data Sheet

Manufactured For: Fiberlock Technologies, Inc. 150 Dascomb Road Andover, MA 01810 P: 800-342-3755 F: 978-475-6205	Emergency Telephone Numbers: CHEM TEL: (U.S.): 1-800-255-3924 (Outside the U.S.): 813-248-0585 Poison Control Center (Medical): 800-222-1222
---	---

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: **DANGER**



GHS Label Statements

Hazard Statements:
Causes severe skin burns and eye damage.
Harmful if swallowed.
Toxic to aquatic life.

GHS Classifications

This product is considered hazardous by The 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Health:

Acute Toxicity (Oral), Category 5
Skin Corrosion, Category 1C
Eye Corrosion, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 1

Pesticide Exposure

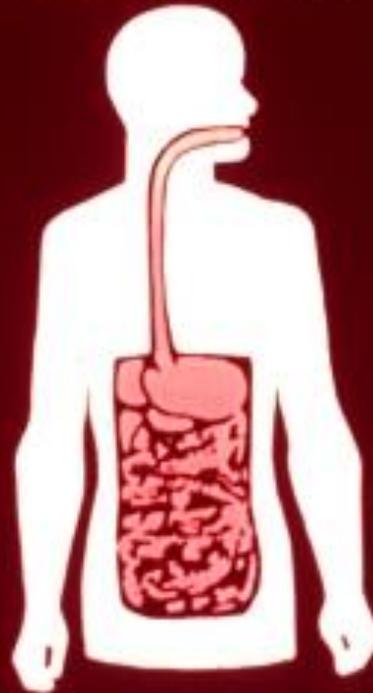
PESTICIDES and the HUMAN BODY

Routes of Entry

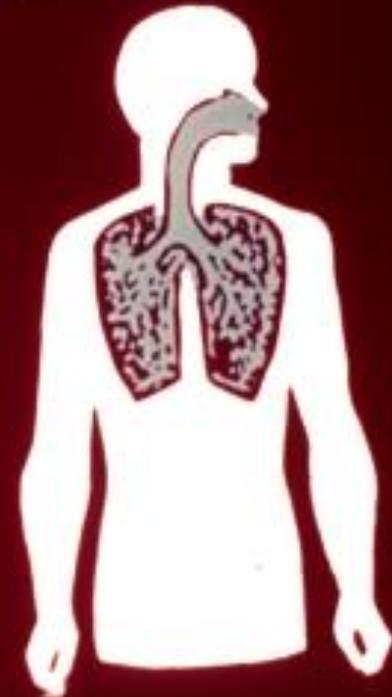
**DERMAL
EXPOSURE**



**ORAL
INGESTION**

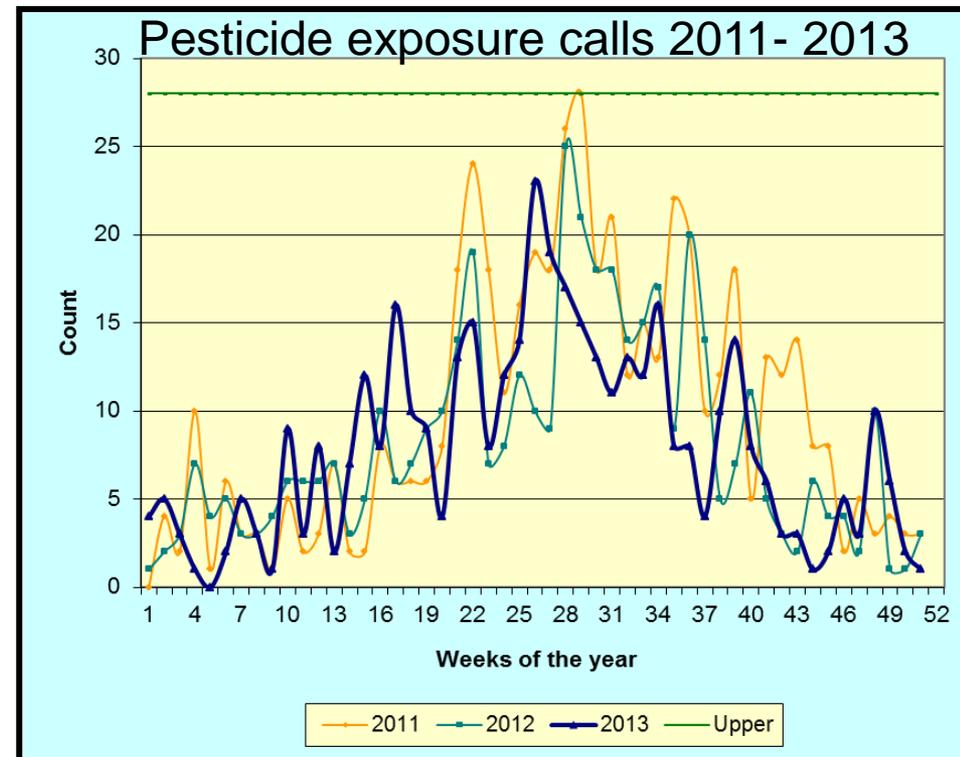


**RESPIRATORY
EXPOSURE**



Pesticide Exposure Deaths

- Majority are suicides
- Many happen when children get into improperly stored products
- Most exposures to children under 1 are due to rodenticides
- Very few occupational



Untrained use can lead to tragedy

It starts here.

The Province



↑ NEWS SPORTS ENTERTAINMENT OPINION BUSINESS HEALTH LIFE TECHNOLOGY TRAVEL

Fort McMurray mother trying to kill bed bugs poisoned her children: fire department

Infant dead, four other children in critical condition after possible pesticide poisoning

BY OTIENA ELLWAND AND MARTY KLINKENBERG, EDMONTON JOURNAL FEBRUARY 23, 2015

Log In [Tweet](#) 19 [g+1](#) 5 [Pint](#) [ShareThis](#)

STORY PHOTOS (2)



MORE ON THIS STORY

- Five children hospitalized in possible poisoning in Fort McMurray
- Don't let the bedbugs bite: Infestation comes with stigma and shame

STORY TOOLS

[E-mail this Article](#)

[Print this Article](#)

Font: [A](#) [A](#) [A](#) [A](#)

SPOTLIGHTS

A pesticide used in a unit in this apartment building killed an infant and left several other children in critical condition.

Photograph by: Bradley Karp, MyMcMurray.com

True Stories

- In 2008, an 8-year old boy drank paraquat that had been put in a **Dr. Pepper bottle**, which he found on a windowsill in the garage.
- **He died in the hospital 16 days later.**
- His older brother had used the product on weeds around the house and put it in the bottle in the garage.
- The older brother obtained the product from a family friend who was a **Certified Private Applicator**.

Father dies after accidentally drinking from Lucozade bottle filled with weedkiller

By DAILY MAIL REPORTER
UPDATED: 10:40 EST, 9 December 2010



[View comments](#)

A father has died after getting up in the night to quench his thirst and drinking from a Lucozade bottle which had been used to store weedkiller.

Phillip Ward, 36, found the bottle in the kitchen after returning 'very drunk' from a day out.

The bottle had been left by Mr Ward's father, Michael Ward, who had been using it in the garden the day before.

Phillip didn't realise it contained deadly paraquat weedkiller.



© Alamy
Royal Derby Hospital: Where Phillip Ward died 24 hours after drinking weedkiller

U.S. & Maine Reported Poisonings & Exposures

- Pesticides account for 10.3% of all reported poisonings in the USA in 2012
- Insecticides, herbicides, fungicides, etc. accounted for 3.3% (US)
- Disinfectants & pool chemicals accounted for 7% (US)
- 32% of those pesticide related poisonings were in children under 6 and rodenticides are the class of pesticides most likely to be the cause



No endorsement intended or implied



In an emergency call for help and have a copy of the label handy

PRECAUTIONARY STATEMENTS*(continued)*
**HAZARDS TO HUMANS
AND DOMESTIC ANIMALS**

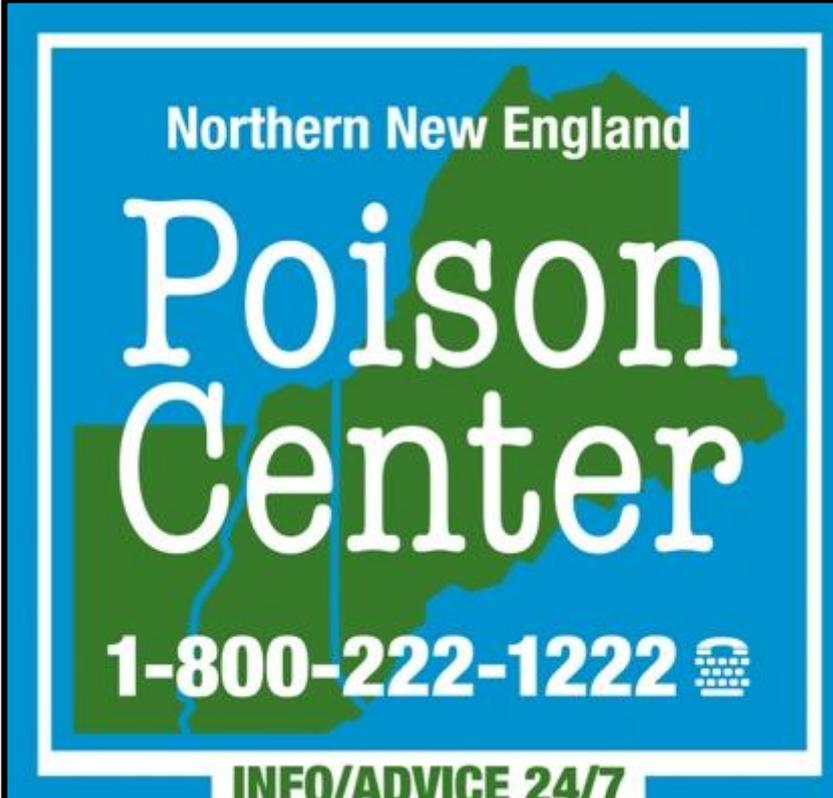
POISONING SYMPTOMS — Methomyl poisoning produces effects associated with anticholinesterase activity which may include weakness, blurred vision, headache, nausea, abdominal cramps, discomfort in the chest, constriction of pupils, sweating, slow pulse, muscle tremors. If poisoning symptoms appear, refer to First Aid section on front panel of DuPont™ LANNATE® LV label and seek medical attention at once.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

TREATMENT — Atropine sulfate should be used for treatment. Administer repeated doses, 1.2 to 2.0 mg. intravenously every 10 to 30 minutes until full atropinization is achieved. Maintain atropinization until the patient recovers. Artificial respiration or oxygen may be necessary. Allow no further exposure to any cholinesterase inhibitor until recovery is assured.

Do not use 2-PAM for exposure to LANNATE® LV alone. However, for exposure to combinations of LANNATE® LV and organophosphorous insecticides, 2-PAM may be used as required to supplement the atropine sulfate treatment. Do not use morphine.

For medical emergencies involving this product, call toll free 1-800-441-3637.



Northern New England
**Poison
Center**
1-800-222-1222 
INFO/ADVICE 24/7

The back of your license has

EMERGENCY PHONE NUMBERS

State of Maine
Maine Department of Agriculture, Conservation and Forestry
BOARD OF PESTICIDES CONTROL

License Number: COA-7928

JOHN T PIETROSKI

DEPT OF ACF-BOARD OF PESTICIDES CONTROL

Commercial Operator

Categories: 2

EXPIRATION DATE: 12/31/2021

BOARD OF PESTICIDES CONTROL

28 State House Station
Augusta, Maine 04333-0028
www.thinkfirstspray1st.org
207-287-2731

EMERGENCY PHONE NUMBERS:

Poison Center	1-800-222-1222
National Pesticides Info Center	1-800-858-7378
Board of Pesticides Control	1-207-287-2731
DEP Spill Response Number	1-800-482-0777

Mild Poisoning

- Fatigue
- Rashes
- Headache
- Dizziness
- Blurred Vision
- Excessive Sweating
- Nausea and Vomiting
- Stomach Cramps
- Diarrhea



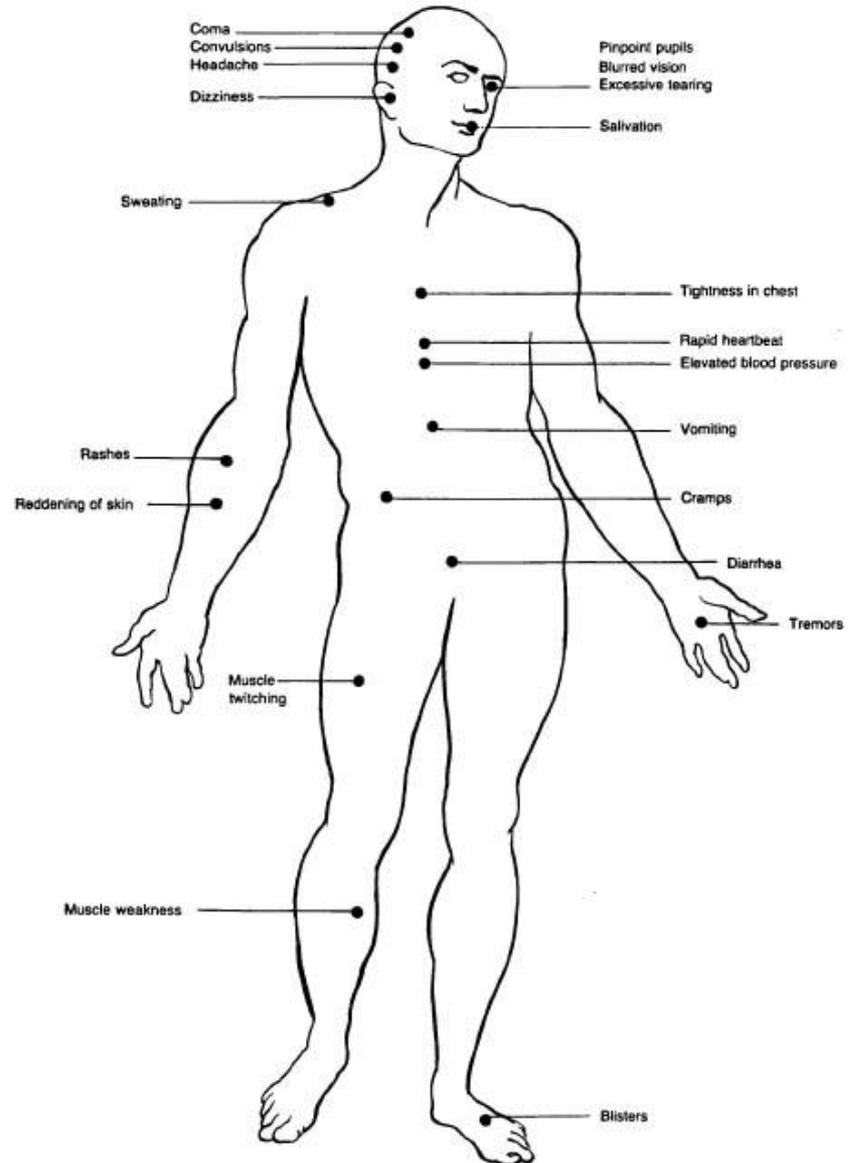
- Be careful not confuse pesticide exposure symptoms with the flu
- If pesticides splash in your eyes always rinse with clean water for at least 15 minutes

Moderate Poisoning

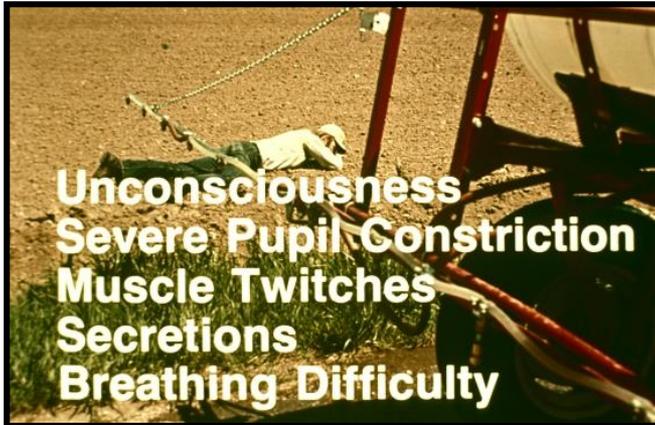
- Unable to Walk
- Weakness
- Chest Discomfort
- Muscle Twitches
- Constriction of Pupils



Symptoms of pesticide poisoning



Severe Poisoning



The Salt Lake Tribune

WWW.SLTRIB.COM

OCT 28, 2014

Exterminator owner: 'I would have told the family ... to get out'

By Erin Alberty And Judy Fahys

The Salt Lake Tribune

Published February 10, 2010 8:46 pm

Pesticide » Bugman operator says use of chemical that may have killed 2 girls wasn't authorized.

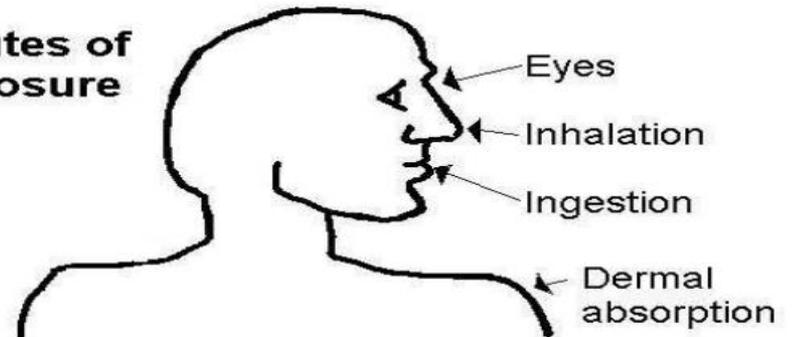


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This is an archived article that was published on sltrib.com in 2010, and information in the article may be outdated. It is provided only for personal research purposes and may not be reprinted.

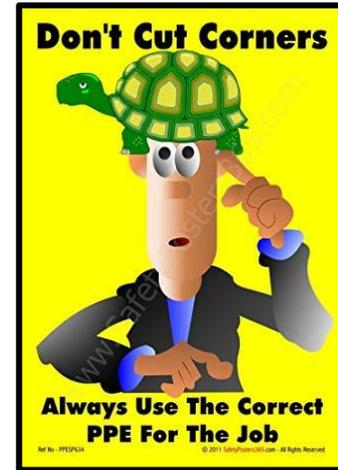
Bountiful » The owner of the company that placed a pesticide believed to have killed two Layton girls said Wednesday he would have warned the family to leave their home had he known what his employee had done.

Routes of exposure



Exposure Reduction

- Avoidance
- Personal protective equipment
- Good hygiene
- Worker monitoring
- Follow label and regulations



Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are barrier laminate or viton. For more information, follow instructions in Supplement Three of PR Notice 93-7. If you want more options, follow the instructions for category H on an EPA chemical resistance category selections chart.

Loaders, applicators and all other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

The label is a legal document—the label is the law!

Reduce exposure by using targeted materials

- Enclosed baits & gels
- Spot treatments
- Broadcast treatments

Best

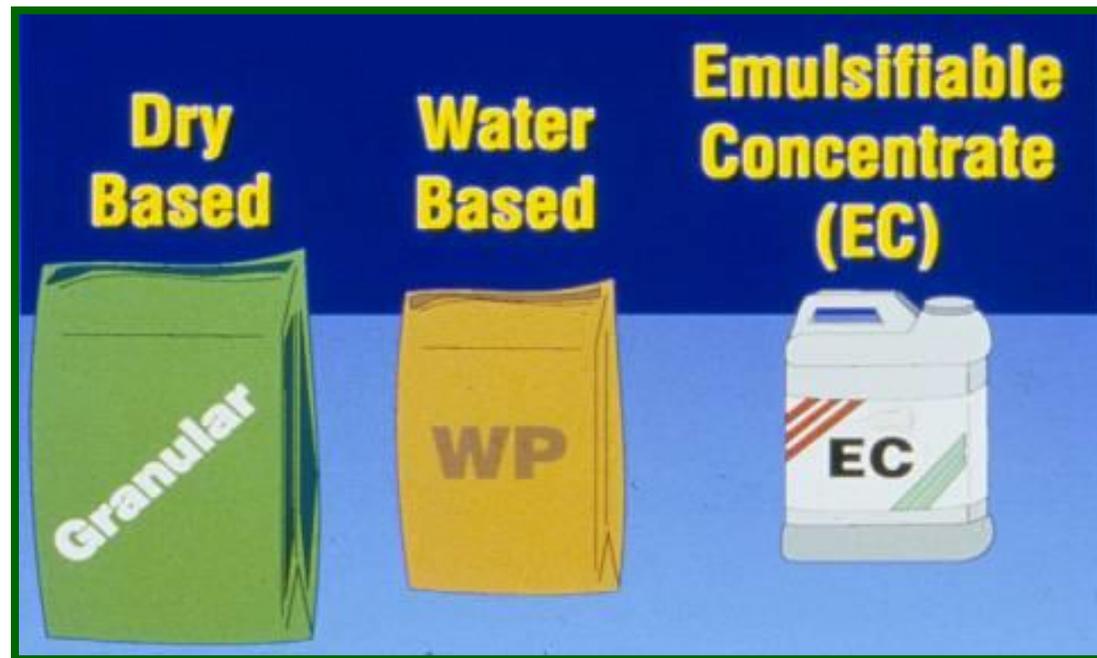


Worst

Greater dermal absorption

- Warm, moist areas: groin, armpits, head, neck
- Pesticide formulations affect absorption

Least absorbed  Most absorbed



Unless otherwise noted on the label EC's should always be added to a tank mix last



Please choose the two pesticide formulation types with the lowest exposure potential

	Formulation Type	Percent Active Ingredient
1.	Granular	3 - 15%
2.	Ready to Use Baits, Gels or Liquids	1 - 15%
3.	Dust	5 - 10%
4.	Aerosol	1 - 5%
5.	Wettable Powder	50 - 85%
6.	Liquid Concentrate	40 - 90%

Note: Granular pesticides can be very hazardous to birds

How is risk reduced?



PPE—It's not just a recommendation, it's federal law

MAKE SURE SAFETY EQUIPMENT IS **A.O.K.**...

- ✓ **CLEANLINESS**
- ✓ **LEAKS**
- ✓ **TEARS**
- ✓ **BROKEN SEAMS**





Always tuck sleeves into gloves
when making applications over
your head



TIGHT FACIAL SEAL IS IMPORTANT



Pressure check before each use!

- **Positive pressure check:**
Put hand over exhalation valve and exhale gently. If there is pressure in the mask, it's a good fit



Pressure check before each use!

- **Negative pressure check:** Cover cartridges with hands, inhale gently, and hold breath for 10 seconds. If the facepiece exhibits no leakage, the respirator fits properly
- **Facial hair does not allow a respirator to seal!**
- **Filters must always be changed according to the manufacturer's instructions**





Limitations of Personal Protective Gear

- Must be kept clean
- Respirator filters must be changed according to manufacturer's directions
- Rubber suits: heat exhaustion
- Not adequate against individual sensitivities
- Fumigant gases penetrate rubber

NORTH

***5500 & 7700 Series
Half Mask Air
Purifying
Respirator
Operating and
Maintenance
Instruction Manual***

4.1 SERVICE LIFE

The service life of this respirator will vary depending on the work environment.

4.1.1 CARTRIDGES

When you are using a gas or vapor cartridge respirator which does not have End-Of-Service-Life Indicators, you must establish a change out schedule that will result in cartridges being changed before the end of their useful service life. North provides EZ GUIDE™ software for assisting the user in establishing a change out schedule.

If the respirator has End-Of-Service-Life Indicators, the cartridges must be changed when the color of either one of the indicators match the color standard indicated on the cartridge.

4.1.2 PARTICULATE FILTERS

When you are using a particulate filter respirator, or a gas or vapor respirator with filters attached, the filters should be replaced when breathing becomes difficult.

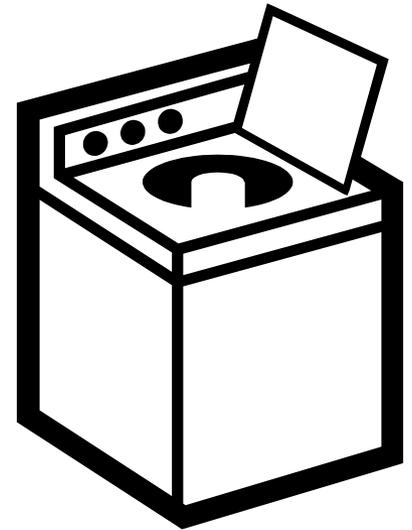
Any "R" class filter if used in an oil environment must be replaced after a total of 8 hours use, or sooner, regardless of breathing resistance.

5 TO TAKE OFF THE RESPIRATOR

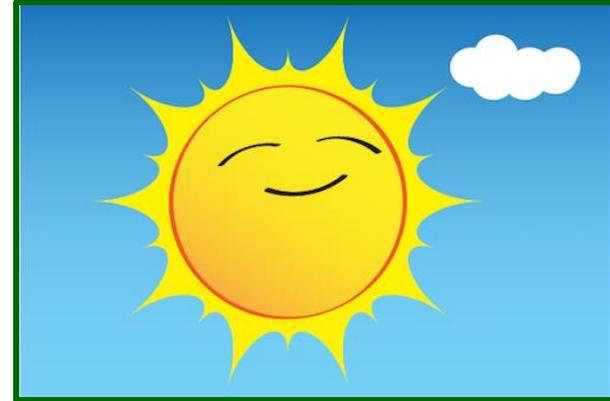
- 1) Go to an area with uncontaminated breathable air.
- 2) Loosen headbands and remove the facepiece.

Laundrying Pesticide Contaminated Clothing

- Use **hot or warm water** and heavy-duty liquid detergent
- Use 2 cycles for moderate to heavy contamination
- Rinse the washer with an “empty load”



Line dry washed PPE



What are the Laws?

- Federal
EPA: Environmental Protection Agency
- **FIFRA: Federal Insecticide Fungicide Rodenticide Act**
- FFDCFA: Federal Food Drug and Cosmetic Act
- FQPA: Federal Quality Protection Act
- Regulations (WPS, Certification, etc.)



What are the Laws?

- State BPC – Title 7 & Title 22 + Regulations

<http://www.maine.gov/dacf/php/pesticides/laws.shtm>

- Maine has stricter regulations than the EPA
- A product must be registered by both the EPA and the State of Maine to be legal for use in Maine



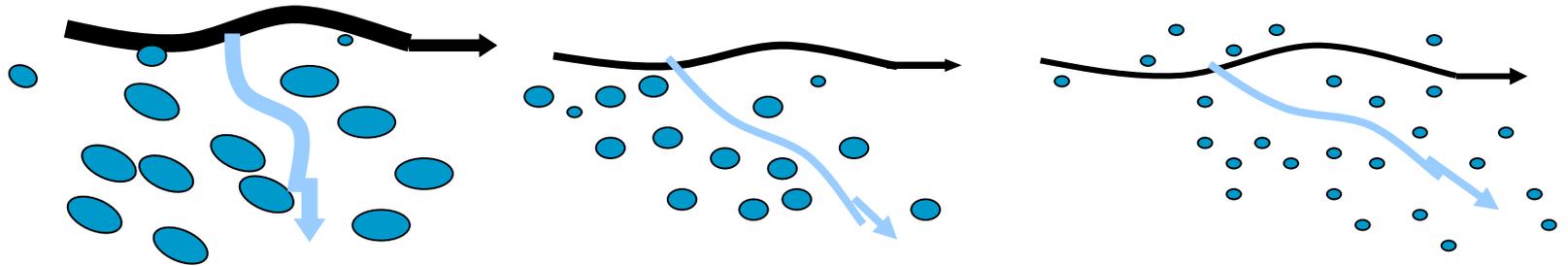
Who is on the Board of Pesticides Control?

- 2 public members (***Deven Morrill & Curtis Bohlen PhD***)
- 1 medical doctor (***Jack Waterman MD***)
- 1 IPM specialist from U-Maine (***John Jemison Jr. PhD***)
- 1 forestry specialist (***Clark Granger PhD***)
- 1 commercial applicator (***Dave Adams***)
- 1 private applicator (grower) (***Bruce Flewelling***)



Equipment Set Up: Droplet Size

The Larger the Spray Droplet Size



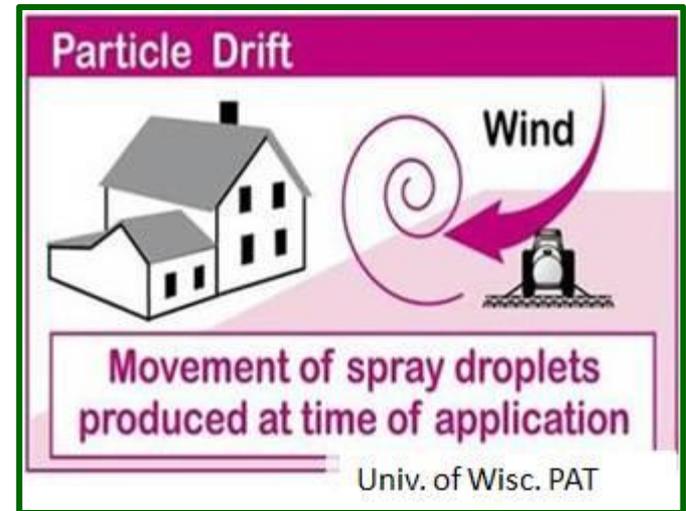
The Less Distance the Droplet Drifts

Pesticide formulations with the smallest droplets are the most hazardous to your lungs



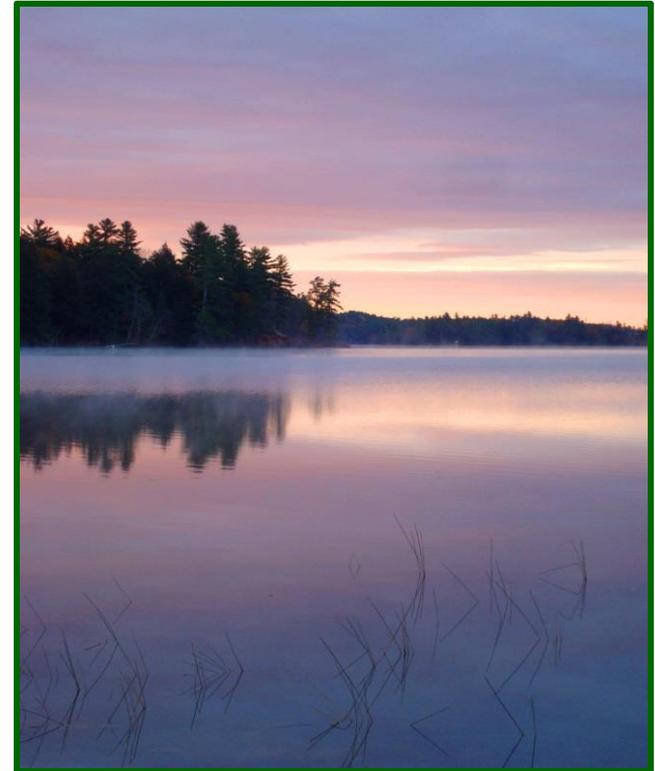
Sensitive Areas

- Before application you must **identify and record all sensitive areas within 500 feet of the target site**
- Sensitive areas include:
 - Homes, businesses, schools and associated grounds
 - Athletic fields
 - Recreational areas
 - Crop or livestock areas
 - Water bodies, wetlands, etc.
 - Sensitive areas likely to be occupied (SALOs)



Residue Standard

- Prima facie evidence of violation – 1% or greater residue on SALOs
- Standards of harm
 - Drift onto organic or conventional crops
 - Residues detected on persons or vehicles using public roads
 - Documented human illness from drift
- Enforcement considerations
 - Standard of care exercised
 - Degree of harm
 - Risk of adverse effects from the pesticide used



Must not spray when the wind exceeds 15 mph



Ideal application conditions are between 2 & 10 mph

Notification requirements

- For any outdoor ground application, neighbors may request to be notified of applications **within 500 feet of a sensitive area on their property**
- For any outdoor aerial application, neighbors may request to be notified of applications within 1000 feet of a sensitive area on their property
- For non-agricultural applications, anyone can pay a \$20 (fee can be waived) to be **listed on a notification registry that triggers automatic notice of applications within 250 feet of the listed property**

Board of Pesticides Control

Pesticide Notification—Your Rights & Responsibilities

It's All about Communication!

Maybe your next door neighbors apply [pesticides](#) to their lawn or trees. Or there's a farm or orchard near your home where pesticides might be used for crop protection. You've wondered about the pesticides that are applied outdoors in your vicinity and want to know in advance when these products are used.

You have the right to know, but you also have the responsibility to take the first step in opening communication with your neighbor. [Maine law](#) assures you that right in two ways:

- [Request for Notification](#) (for all outdoor pesticide applications)
- [Maine Pesticide Notification Registry](#) (for most non-agricultural pesticide applications)

Whichever of the two means of notification you choose, you will find that communication between you and your neighbors who use pesticides will help avoid one of the most common issues that arises between neighbors—being surprised when something unexpected occurs. Communication informs the people who use pesticides of your desire to be notified. And, you can then take measures to protect yourself and your family from unintended or incidental exposure by closing windows, taking clothes off the laundry line, or keeping children and pets indoors.

Pesticides are used every day in Maine for control of insects, weeds, and other pests, to protect our food supply, ourselves, and our homes and gardens. Examples of people who use pesticides include homeowners, renters, landscape and lawncare professionals, farmers (conventional and organic), foresters, utilities and rights-of-way managers, and public land managers. Similarly, examples of places where pesticides may be used include businesses, homes, farms, institutions, and public spaces.

Everyone has the right to use pesticides, but with that right comes the responsibility to follow the pesticide application laws, including reading and following label directions, and notifying nearby neighbors who request it.

Spraying too close to water & wetlands is prohibited

Broadcast applications of pesticides are not allowed within 25 feet of the high-water mark



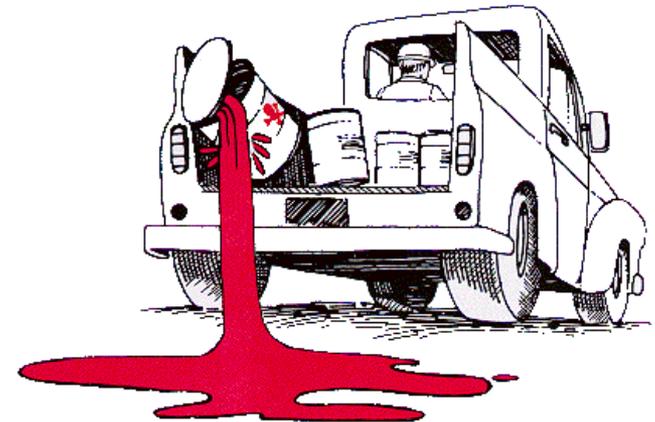
Mixing & Loading Rules

- No mixing or loading within 50 feet of high-water mark.
- Mixing and loading pesticide concentrate is when there is the highest risk of exposure/poisoning.
- Water transfer pumps must not be contaminated with pesticides & must have an anti-siphon device
- Mixing and loading should be done in an area where it cannot leach into groundwater
- Pesticide exposure can also occur while cleaning and maintaining application equipment



Water Quality Protection Rules

- Pesticide containers must be fastened securely to vehicles
- Never transport pesticides in the cab of a truck or inside of a car
- Spills must be cleaned up immediately and contaminated soils must be removed and disposed properly



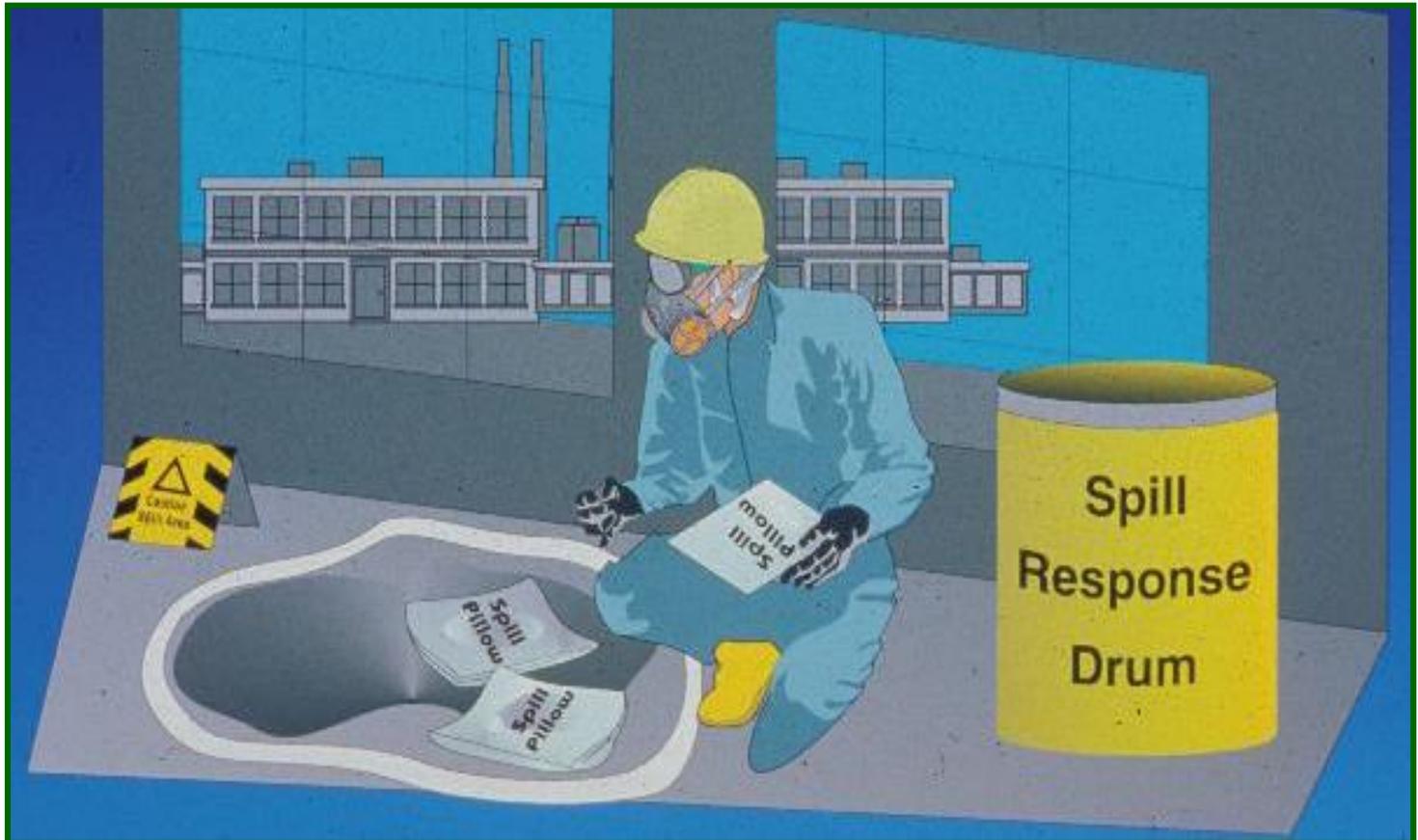
Storage

- Buy *only* what you need
- Lock them up
- **Keep in original containers—
Never store pesticides in other
containers**
- **BPC advises marking original
containers with the purchase
date**
- **Never store in basement!**
- **Do not use wooden shelves**
- It is recommended to post
warning signs



Some Keys to Preventing Spills

- Regular safety checks of transport vehicles
- Safe driving habits
- A thorough understanding of application equipment



Spill Procedures

- **Protect yourself first**
- **Attend to the injured**
- **Contain the spill**
- **Call the BPC & DEP**
- **Absorb standing liquid**
- **Clean up contaminated soil and absorbents**
- **Dispose of wastes properly**

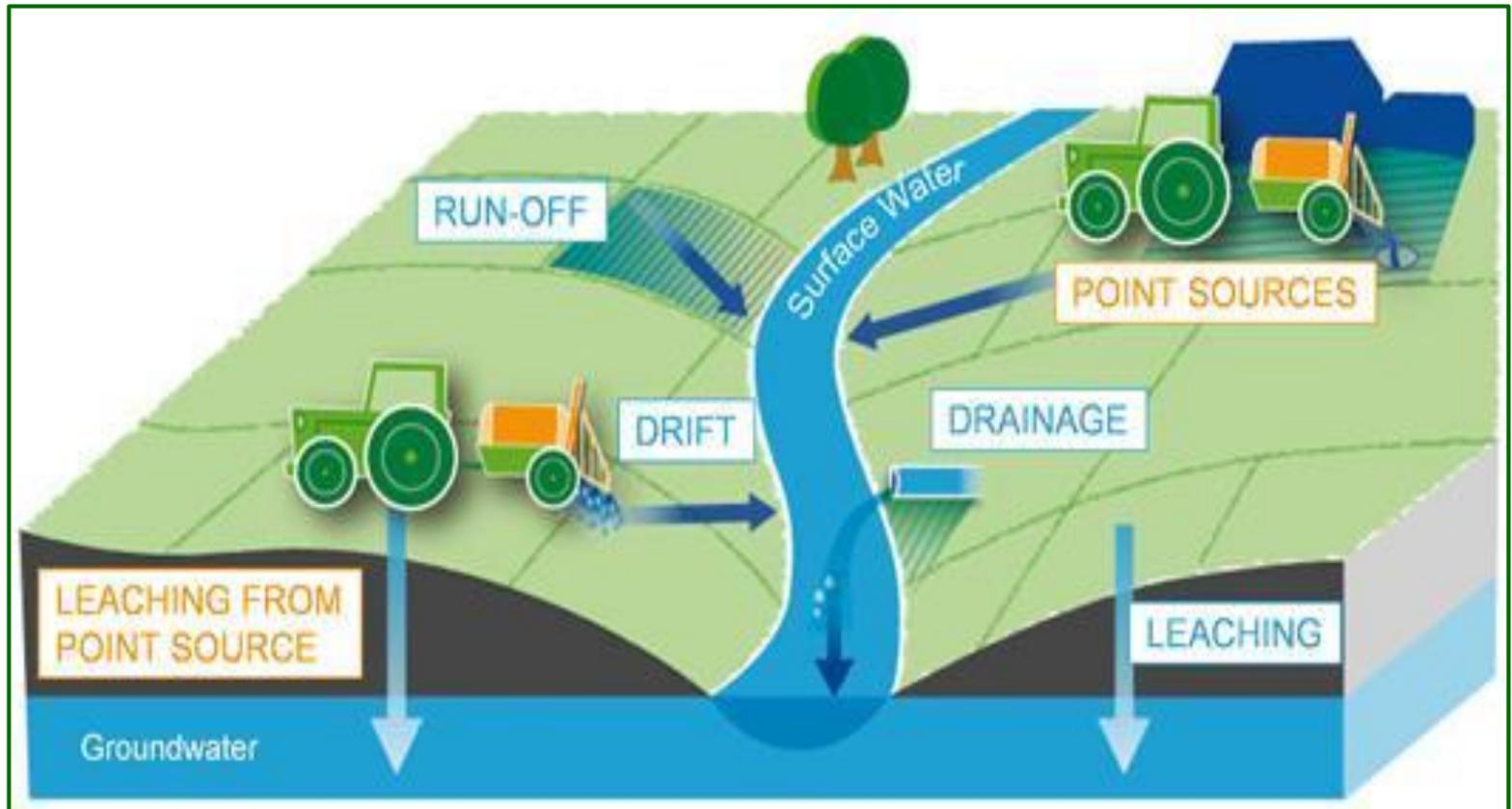


Spill Procedures

Kitty litter is a good choice for cleaning up liquid spills



Pesticides Can Drift or Run Off Into Surface Waters



- Water-soluble pesticides are much more likely to leach into groundwater
- Well over two dozen pesticides have been detected in Maine groundwater



Leaching

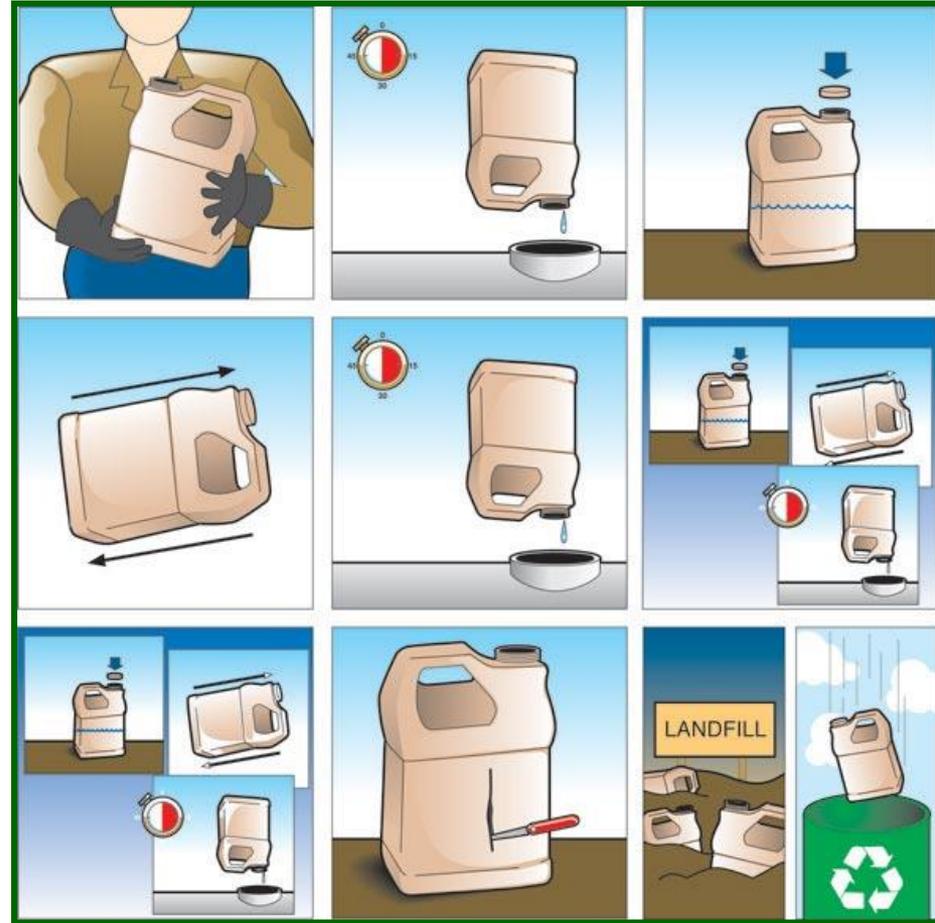
Leaching is the movement of contaminants, such as water-soluble pesticides or fertilizers, carried by water downward through permeable soils. Generally speaking, most pesticides adsorb to soil particles (especially clay), become immobile, and do not leach.

Adsorption – A process that binds **pesticides** to soil particles, often because of the attraction between the chemical and soil particles. Positively charged **pesticide** molecules, for **example**, are attracted to and can bind to negatively charged clay particles.

Absorption – The uptake of **pesticides** into plants and animals. ... Once **absorbed** by plants, **pesticides** may be broken down or they may remain in the plant until tissue decay or harvest.

Containers must be properly rinsed

- Triple rinse containers
- Always add the rinsate to the spray mixture and apply to a labelled site
- Never pour rinsate on the ground or down a drain



Disposal

- Follow label
- Triple rinse containers
- Apply extra mix to labeled site
- Call BPC about obsolete pesticides



4.0

STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination. See individual container label for additional storage conditions, if any.

PESTICIDE DISPOSAL: To avoid wastes, use all material in the container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state and local regulations and procedures.

CONTAINER HANDLING AND DISPOSAL: See base label attached to the container for container handling and disposal instructions and refilling limitations.

Burning or burying pesticide containers is illegal



All Pesticide Applications?

- General, restricted & limited use pesticides
- Powered & non-powered applications
- Granulars, liquids, foggers & aerosols, disinfectants
- Biological & organic pesticides
- All application sites – crops, animals & buildings
- Indoor & outdoor application sites

*If it is applied to control a “pest” and you use it in your business, **You Must Keep a Record***



No endorsement intended or implied

What must be recorded? PESTICIDE KEY

PESTICIDE KEY			
Brand Name	Active Ingredients(s)	Epa Reigistration No.	Restricted Entry Interval and/or Air Concentration Level
Bonide Malathion	Malathion	4-99	Until Dry
Bravo Weather-Stik	50534-188-10	50534-188-10	12 Hours
Tomcat Quick Kill	Bromethalin	12455-143	N/A
Roundup Pro	Glyphosate	524-475	4 hrs
Accord Concentrate	Glyphosate	62719-324	4 hrs
Captan 80WDG	Captan	66222-58	24 Hours

The PESTICIDE KEY needs to be filled in with the Brand Name, Active Ingredients, EPA Registration Numbers, and the Restricted Entry Interval and/or Air Concentration Level.



READ THE LABEL

What must be recorded? CALIBRATION LOG

The SPRAYER CALIBRATION LOG was often found to be missing. Applicators reported doing the calibrations but not recording the data in their logbooks.

SPRAYER CALIBRATION LOG	
Date calibrated:	April 30
Sprayer brand:	Reus 400
Sprayer type:	400 Full
Sprayer model:	400 Full
Nozzle type:	Ceramic
Nozzle spacing:	Top
Nozzle orientation ¹ :	R L R L R L
Nozzle condition ² :	R L R L R L
Boom height ³ :	Bottom 3 2
Pressure:	130
Speed (mph):	2 1/2
Throttle (rpm):	2000
Tractor model:	5603
Tractor gear:	B 2
Calculated volume/acre ⁴ :	50 gallon
Calibration method:	Per Acre

1 - Nozzle orientation is the nozzle angle with reference to the airstream (for aerial and air-blast) or with the ground (for boom sprayers). For aerial and airblast 0° = with the airstream; for boom sprayers, 0° = straight down.
2 - Do all nozzles match (size and number) and does output of each nozzle vary by less than ± 10% from the average nozzle output?
3 - Distance from nozzle to ground.
4 - Acres or square feet.



What must be recorded? **APPLICATOR LOG**

PESTICIDE APPLICATOR LOG							50 Cortland Road							Applicator Name(s): Johnny Appleseed			5.
Company Name: JP's Apple Farm							Macintosh, Maine							License Number (s): PPA - 0000			
Date	Start Time	Finish Time	Address, Town/ Field Location ¹	Size of Treated Area ²	Sensitive Area ³ Yes/No	Site or Crop	Target Pest	Weather Conditions			Pesticide(s) and Diluent Applied ⁴	Rate Description			Application Method		
								Wind Speed & Direction	Temp	Cloud Cover		Time Not-	Undilut-	Mix		Mix Ratio	
5/15/13	4:30 Am	6:30 Am	Orchard 1 Honey Crip	2 acres	NO	Apples	Scab	4 mph NE	59°	Clear	5:00 Am	Captain 8000 G	10 lbs	130 gals	6 lbs/ 165 gal	Airblast	

1 - Be specific, street address, etc. Use abbreviations if needed.
 2 - Acres or other unit of measure you normally use, eg. 1000 sq ft, tree-volume, acre-ft., linear miles, etc.
 3 - If sensitive areas are present, a description or map is required.

NOTES:

4 - Note weather conditions every two hours, more often if conditions change.
 5 - Use the pesticide key at the front of this Logbook to record pesticide brand name, active ingredient, EPA registration number and restricted entry interval or air concentration interval.
 If you make an incorrect entry - DO NOT ERASE - cross out the error and write in the correction

The PESTICIDE APPLICATOR LOG needs to be filled in. The BPC Inspector uses this information to check that the label's directions were followed. This is also the applicator's defense in case of an alleged complaint.

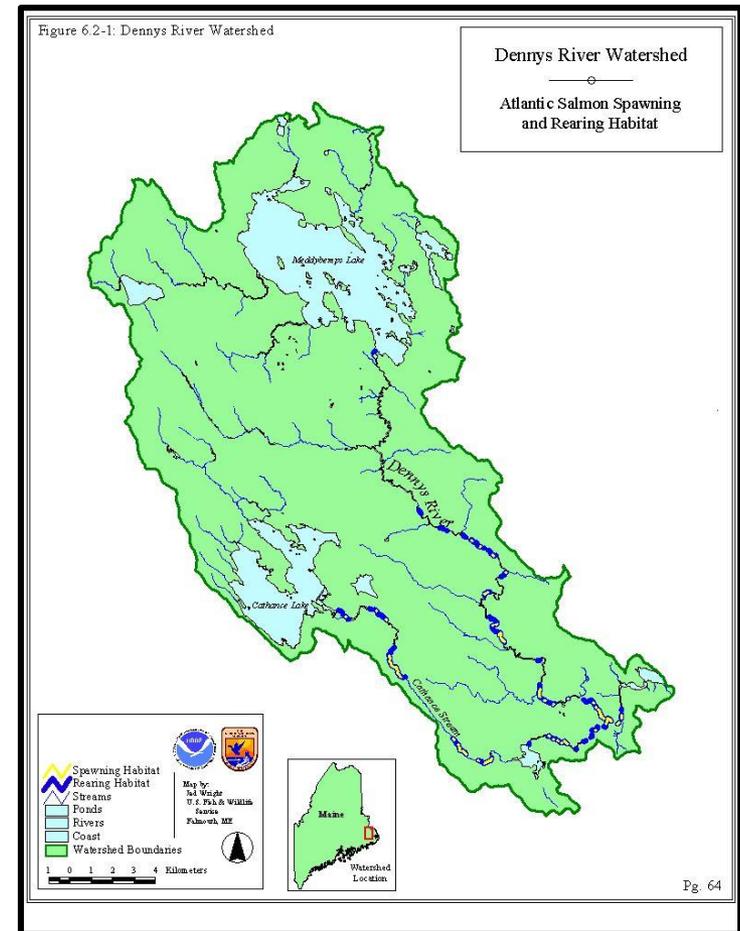
Records

- Application records must be kept on file for *two years*
- Records must be available for inspection upon request
- Commercial applicators are required to send pesticide use reports to the BPC annually

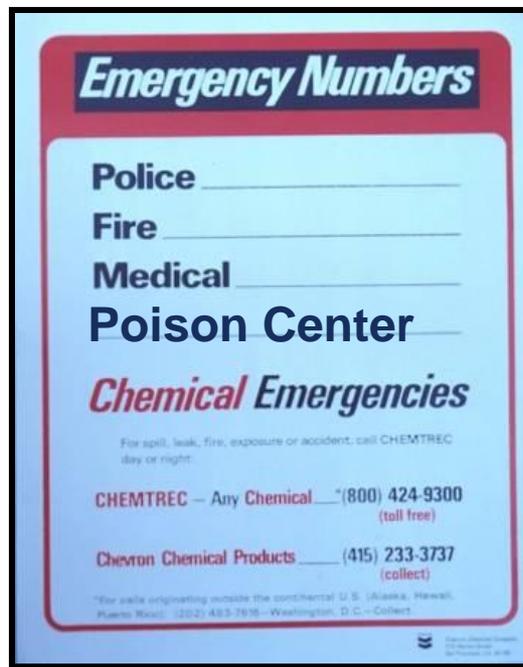


Critical Pesticide Control Area Law

- The Board may restrict or prohibit pesticide use in designated areas
 - Persons may petition the Board
 - Requires medical or ecological proof of need



Post emergency numbers



<p>State of Maine Maine Department of Agriculture, Conservation and Forestry BOARD OF PESTICIDES CONTROL</p> <p>License Number: COA-7928 JOHN T PIETROSKI DEPT OF ACF-BOARD OF PESTICIDES CONTROL Commercial Operator Categories: 2</p> <p>EXPIRATION DATE: 12/31/2021</p>	<p>BOARD OF PESTICIDES CONTROL 28 State House Station Augusta, Maine 04333-0028 www.thinkfirstspraylast.org 207-287-2731</p> <p>EMERGENCY PHONE NUMBERS:</p> <table><tr><td>Poison Center</td><td>1-800-222-1222</td></tr><tr><td>National Pesticides Info Center</td><td>1-800-858-7378</td></tr><tr><td>Board of Pesticides Control</td><td>1-207-287-2731</td></tr><tr><td>DEP Spill Response Number</td><td>1-800-482-0777</td></tr></table>	Poison Center	1-800-222-1222	National Pesticides Info Center	1-800-858-7378	Board of Pesticides Control	1-207-287-2731	DEP Spill Response Number	1-800-482-0777
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DEP Spill Response Number	1-800-482-0777								

Enforcement

- What we like to do the least
- Want to work with applicators
- 1st offense maximum fine \$1,500
- 2nd offense maximum fine \$4,000
- Knowing violation \$7,500 and/or 30 days



The screenshot shows a news article from the Kennebec Journal. At the top, it displays the weather: 56° CLOUDY, High: 60° | Low: 49°, and a link to the TEN DAY FORECAST. The page title is "News". A navigation bar includes links for HOME, NEWS, ELECTIONS, BUSINESS, SPORTS, OPINION, FOOD, LIFESTYLE, and OBITS. The main headline is "Maine marijuana company fined \$18K for using pesticides", dated September 6, 2013, by Michael Shepherd. The article text states that a state investigation found nine pesticides at the company's cultivation facility in Auburn. A sub-headline reads "LOCAL & STATE NEWS Faculty layoffs at USM begin".

For very serious violations

- The Board can suspend or revoke a license



Accidentally applying pesticides to the wrong property is considered a serious violation

The State of Maine is divided into six districts. Five of the districts are covered by a Pesticide Inspector.

Ray Connors
Compliance Manager
raymond.g.connors@maine.gov



District 5 – Aroostook
Keith Brown
keith.r.brown@maine.gov



District 2 – Midcoast
Lucien Saucier
Lucien.saucier@maine.gov



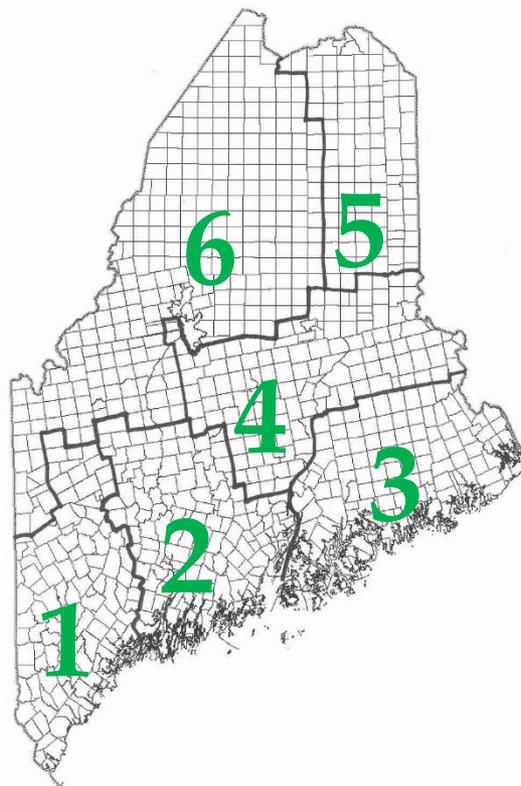
District 4 – Central Maine
Marilyn Tourtelotte
Marilyn.k.toutelotte@maine.gov



District 1 – Southwest
Alexander Peacock
alexander.peacock@maine.gov



District 3 - Downeast
Heidi Nelson
heidi.d.nelson@maine.gov



Board of Pesticides Control- Inspectors 2020

SAFETY IS EVERYONES RESPONSIBILITY



Times are changing



Public safety is always of primary importance

Board of Pesticides Control

Select Language

 **ALERT:** Stay up to date on [Maine's COVID-19 Response](#)

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Agriculture, Conservation and Forestry

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Division of Animal and Plant Health

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[Water Quality Program](#)

[Pesticide Laws, Regulations & Policies](#)

[Publications & Forms](#)



Board of Pesticides Control

Pesticide Certification Exam Information

- We are now contacting and scheduling exam applicants who have not yet been scheduled due to the ongoing COVID-19 emergency.
- Applicants may register for an exam via paper application only.
- To schedule a private and agricultural basic exams please call the BPC office at 207-287-2731.
- Please continue to monitor our website regarding exam applications.
- If you have any questions please contact Board staff at pesticides@maine.gov.

Disinfectants and COVID-19

- **Maine Registered Disinfectants for Use Against COVID-19** - 07/24/2020 ([Excel 58KB](#))
Products on this list include Maine registered disinfectants that meet EPA's criteria for use against SARS-CoV-2, the novel coronavirus that causes the disease COVID-19. The list will be updated often. If you have any questions about products please contact our office at pesticides@maine.gov.
- [EPA accepted pesticides for Coronavirus COVID-19 mitigation](#) (Source: EPA)
This site provides information on EPA's criteria for determining which pesticides are listed for use against SARS-CoV-2.
- [Information on using disinfectants to control the COVID-19 Virus](#) (Source: NPIC)
Find general guidance on using disinfectants effectively. Also find steps to consider to reduce your risk when using disinfectants.
- [Respiratory Protection: Keeping Yourself Safe and Meeting Legal Requirements](#) (Source: NPSEC) - This infographic contains a helpful decision matrix for determining the need for a respirator during pesticide application. It also provides suggestions on which types of respirators will provide equivalent or better protection when a label listed respirator is unavailable.
- [EPA Releases Temporary Guidance on Respiratory Protection for Agricultural Pesticide Handlers During COVID-19](#) (Source: EPA) This temporary guidance outlines approaches to address the unavailability of required respiratory protection and respiratory fit testing that should **first be exhausted before considering any alternative options**.

The next Board of Pesticides Control Meeting is Scheduled to be Held on [July 24, 2020](#).

[NEED CREDITS?](#)

[LOGIN TO BPC ONLINE PORTAL](#)

[LINKS TO USEFUL SITES](#)

[GotPests.org](#) (ID and facts sheets for pests-Maine IPM Council)

[University of Maine Cooperative Extension IPM for Maine Homeowners](#)

[National Pesticide Information Center](#)

2020 Non-Agricultural Pesticide Notification Registry [[PDF](#)] [[Excel](#)]

[CONTACT US](#)

AUGUSTA: 207-287-2731
FAX: 207-287-5576
TTY Users: call Maine Relay 711
[more](#)

email: pesticides@maine.gov

The BPC offices are located on the 3rd floor of the Deering building at 90 Blossom Lane, Augusta

[DRIVING DIRECTIONS & MAPS](#)



www.thinkfirstspraylast