


# Applying Herbicides Safely and Legally

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## Herbicides vs Pesticides

Herbicides

Pesticides . . .  
Fungicides  
Insecticides  
Rodenticides  
. . . Others




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*Notes page*


**?** T/F All pesticides are insecticides.

*Wrong!*

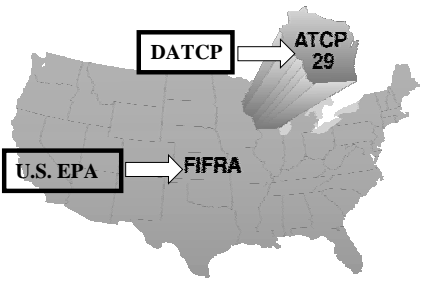


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## Wisconsin Pesticide Laws & Regulations





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## Individual Landowner




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### Two Types of Applicators

PRIVATE






COMMERCIAL

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### What am I?


<u>Individual</u>	<u>Applicator Type</u>
→ Farmer	Private
→ NC Landowner	Commercial
→ Volunteer	Commercial
→ Custom	Commercial

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*Notes page*


### When is Certification Legally Required?

- Apply restricted-use pesticides (RUP)
- Apply any pesticide on a for-hire basis
- Apply any pesticide in schools or on school property
- Apply any pesticide to waters of the state (DNR permit condition; some exceptions)
- Label requirement (e.g. Habitat) or state special rule (e.g. metam sodium)

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### Do I need to be a certified applicator?

<u>Individual</u>	<u>Applicator Type</u>	<u>Certify?</u>
→ Farmer	Private	Maybe
→ NC Landowner	Commercial	Maybe
→ Volunteer	Commercial	Maybe
→ Custom	Commercial	YES


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### Volunteers

- Outside the regulations for certification

BUT . . .

- Many organizations, volunteer groups, municipalities have "in-house" certification policy



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Pest Control Categories


1.1 Field & Vegetable Crops	6.0 Right-of-Way
1.2 Fruit Crops	7.1 Structural Pest Control
1.3 Livestock & Poultry	7.2 Space & Commodity Fumigation
2.0 Forestry	7.3 Termite Control
3.0 Turf & Landscape	7.4 Wood Preservation
3.1 Greenhouse & Nursery	7.5 Sewer Root Control
4.0 Seed Treatment	11.0 Companion Animals
5.0 Aquatic Pest Control	24.0 Mixer & Loader
5.1 Antifouling Paints	

Pest Control Subcategories

9.9 Aerial Application	25.0 Soil Fumigation	26.0 Chemigation
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**Pest Control Categories**

1.1 Field & Vegetable Crops  
3.0 Turf & Landscape  
5.0 Aquatic Pest Control

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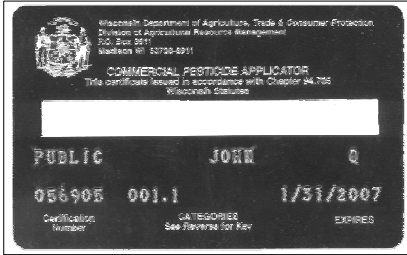
**What About Supervision?**


- ➔ Most commercial applicators
  - Certification trumps supervision (eliminated)
- ➔ For commercial applicators where certification is not required
  - Nothing legally stopping you from supervising others

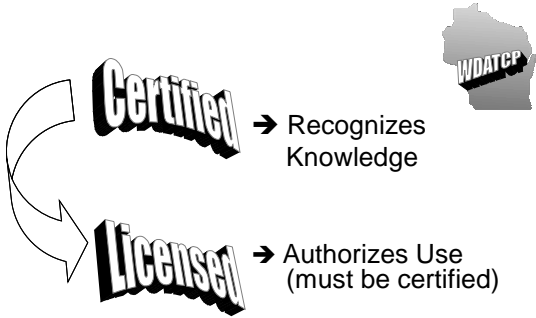
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**Commercial Certification: 5 Years**





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**Commercial License: 1 Year**




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**Labels and labeling**



*Information on the container*



*The label and other information*


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**Identifying Information**

Ingredient statement

Active ingredient  
 thioapyr-sodium 3,5-dithio-2-pyridylmethyl ester 81.8%  
 Inert ingredients 18.2%  
 Total 100.0%

Contains petroleum distillates  
 Acid Equivalent:  
 thioapyr - 44.3% - 4 lb/gal




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**Safety Information**

Signal word

- ◆ **Danger:** highly toxic
- ◆ **Warning:** moderately toxic
- ◆ **Caution:** slightly toxic to relatively non toxic




Precautionary Statements  
 Hazards to Humans and Domestic Animals  
 Keep Out of Reach of Children  
**CAUTION PRECAUTION**

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*Notes page*

**Use Information**

Follow the label: which one??



← Old?



→ New? ↴

Use the label that came with the product


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**Pesticides and Personal Safety**

Hazard = Toxicity x Exposure

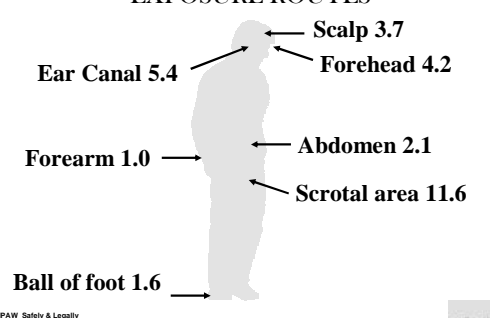
~ EXPOSURE ROUTES ~

→ **Dermal exposure**



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~ EXPOSURE ROUTES ~



- Scalp 3.7
- Forehead 4.2
- Ear Canal 5.4
- Abdomen 2.1
- Forearm 1.0
- Scrotal area 11.6
- Ball of foot 1.6

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~ EXPOSURE ROUTES ~




➔ Inhalation

➔ Oral

➔ Eye





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First aid


**4. FIRST AID:**

**EYES:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**SKIN:** Wash skin with plenty of water.

**INGESTION:** Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

**INHALATION:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.



**First Aid**  
If on skin: Flush skin with plenty of water. Get medical attention if irritation persists.  
If swallowed: Do not induce vomiting. Call a physician.

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*Notes page*

Common exposure situations

- ◆ Not wearing personal protective equipment
- ◆ Wearing contaminated work clothes
- ◆ Splashing pesticide onto yourself
- ◆ Not washing yourself after handling pesticides
- ◆ Entering sites immediately after treatment


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~ PERSONAL PROTECTIVE EQUIPMENT ~



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~ WORK CLOTHES ~



➔ Long-sleeved shirt

➔ Long trousers

➔ Shoes and socks

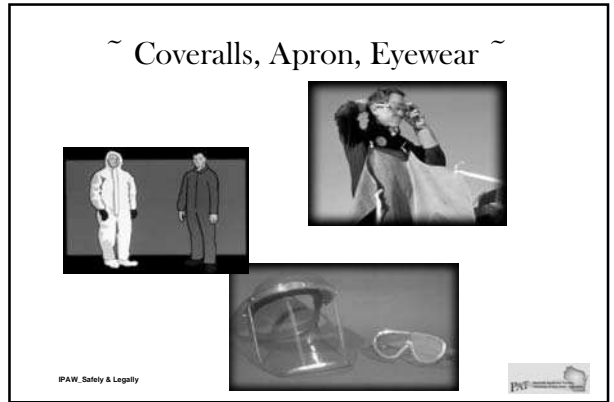
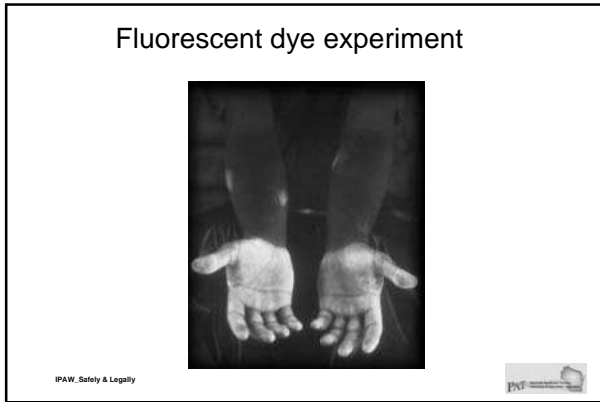
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Chemical-resistant gloves

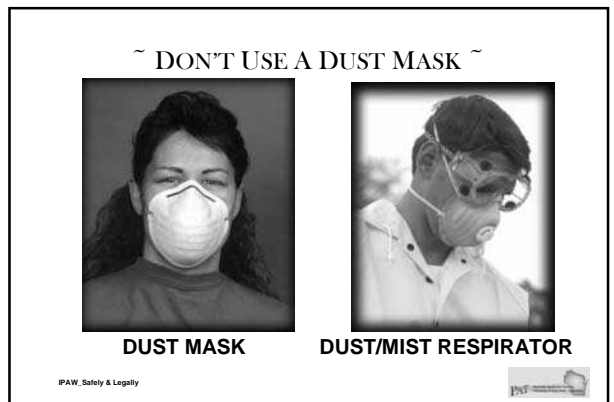
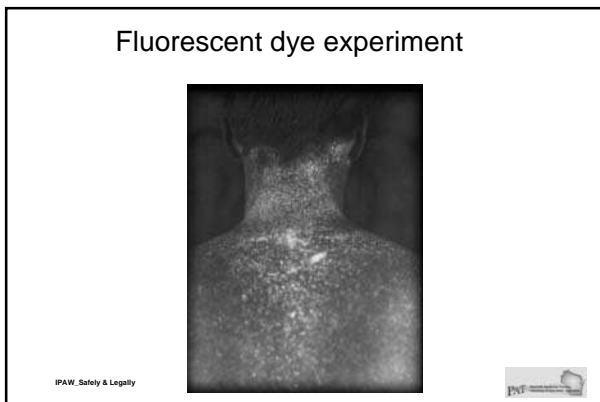
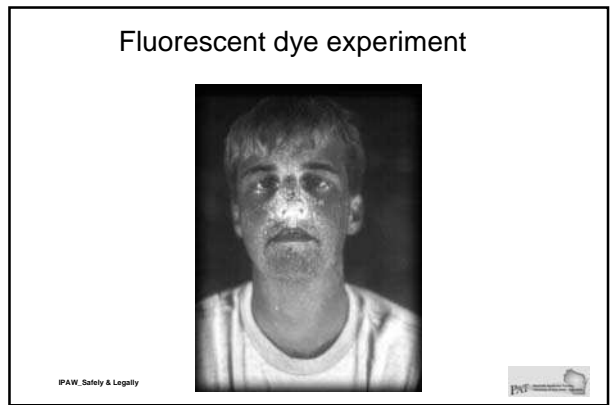
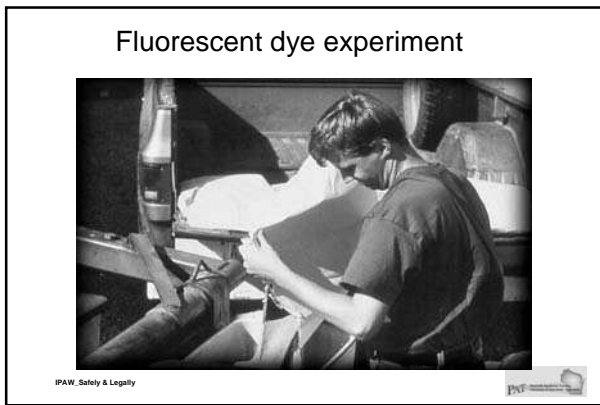


Most handling situations

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### Differences in Respiratory Protection

Respirator Type	Average Particle Count (cubic foot air)
No respirator	1919
Nuisance (dust) mask	1832
Particulate respirator	1226
Chemical cartridge respirator	276

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### ~ RESPIRATORS ~



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### Notes page

### Wash up



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<http://ipcm.wisc.edu/pat>

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