Topics to Cover

• Introduction to CCE-PSEP
• Background on pesticides
• Who can apply pesticides at schools
• School pesticide regulations
Cornell Cooperative Extension
Pesticide Safety Education Program

Wood Preservation

CCE-PSEP Distance Learning Center
A partnership between the
Cornell Cooperative Extension Pesticide Safety Education Program (CCE-PSEP)
and the NYS Integrated Pest Management Program

A Pesticide Applicator Certification Training Manual
for Wood Treaters

Changing the paradigm for preventive pest management: The service technician must have a clear understanding of the work to be performed, the ability to recognize a problem, and the knowledge and experience to recommend and/or solve pest issues.
What Is a Pest?

- Any living thing that has an undesirable impact on something that is important to us
What Is a Pest?

- Insect
- Weed
- Plant Pathogen
- Rodent
- Bacteria
- Virus
What Is a Pesticide?

- Insecticide
- Herbicide
- Fungicide
- Rodenticide
- Surface Sanitizer
- Disinfectant

Photo credit: Dr. Margery Daughtrey
Hazard vs. Risk
Hazard (or Toxicity)
CAN it cause harm?
Inherent, immutable
<table>
<thead>
<tr>
<th>Hazard (or Toxicity)</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN it cause harm?</td>
<td>WILL it cause harm?</td>
</tr>
<tr>
<td>Inherent, immutable</td>
<td>Can be managed</td>
</tr>
</tbody>
</table>
Risk = Hazard × Exposure
Tylenol Extra Strength

For Adults

Acetaminophen
Pain Reliever-Fever Reducer

Do Not Use With Other Medicines Containing Acetaminophen

NDC 50580-449-09

To Open: 1. Line-Up Arrows
2. Push-Off Cap

Cornell Cooperative Extension
Pesticide Safety Education Program
Drug Facts

Active ingredient (in each caplet)   Purpose
Acetaminophen 500 mg................Pain reliever/fever reducer

Uses
- temporarily relieves minor aches and pains due to:
  - the common cold
  - backache
  - toothache
  - premenstrual and menstrual cramps
  - temporarily reduces fever
- headache
- minor pain of arthritis
- muscular aches
Warnings

Liver warning: This product contains acetaminophen. Severe liver damage may occur if you take
■ more than 4,000 mg of acetaminophen in 24 hours
■ with other drugs containing acetaminophen
■ 3 or more alcoholic drinks every day while using this product

Allergy alert: acetaminophen may cause severe skin reactions. Symptoms may include:
■ skin reddening  ■ blisters  ■ rash
If a skin reaction occurs, stop use and seek medical help right away.
**Directions**
- do not take more than directed (see overdose warning)

| Adults and children 12 years and over | take 2 caplets every 6 hours while symptoms last unless directed by a doctor  
do not take more than 6 caplets in 24 hours  
do not use for more than 10 days unless directed by a doctor |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children under 12 years</td>
<td>ask a doctor</td>
</tr>
</tbody>
</table>
Effect of Following Label Directions on Hazard, Exposure, and Risk

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Follow Label</th>
<th>Ignore Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard</td>
<td>Unchanged</td>
<td>Unchanged</td>
</tr>
</tbody>
</table>
## Effect of Following Label Directions on Hazard, Exposure, and Risk

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>Hazard</td>
<td>Unchanged</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Odds of Overexposure</td>
<td>Lower</td>
<td>Higher</td>
</tr>
</tbody>
</table>

*Source: Cornell Cooperative Extension Pesticide Safety Education Program*
<table>
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<td>Hazard</td>
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<tr>
<td>Odds of Overexposure</td>
<td>Lower</td>
<td>Higher</td>
</tr>
<tr>
<td>Risk</td>
<td>Very low</td>
<td>Much higher</td>
</tr>
</tbody>
</table>
Risk = Hazard x Exposure
Risk = Hazard x Exposure

Least Toxic ≠ Least Risk
Grouping Pesticides by Registration Status

- Registered
- Exempt from registration
- Home remedies
Registered Pesticides

ACTIVE INGREDIENT
Propiconazole ... (CAS No. 60207-90-1) ..... 1.55%
OTHER INGREDIENTS ...................... 98.45%
TOTAL ................................ 100.00%
EPA Est. No. 4-NY-1 EPA Reg. No. 100-773-4

S.C. Johnson & Son, Inc. Racine, WI 53403-2236 USA.
All Rights Reserved EPA Reg. No. 4822-537
EPA Est. No. 4822-WI-1 Made in Germany 1089737
Registered Pesticides

• Must also be registered by the NYSDEC
• Search by product name and EPA Reg. No. at www.dec.ny.gov/nyspad/products
The Standard for Registered Pesticides

The product will not cause unreasonable adverse effects to people and the environment when used according to label directions.
Exposure Limit: Reference Dose

- Maximum amount of pesticide active ingredient you can be exposed to on a daily basis over your lifetime without adverse effect
Reference Dose: Possible Exposures

- Diet
- Drinking water
- Residential (which includes personal use as well as exposure from entering a treated area)
Reference Dose

- Must be set low enough to protect children

<table>
<thead>
<tr>
<th>Lifestage</th>
<th>Post-application Exposure Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 1 to &lt;2 year old</td>
<td>Hand-to-Mouth$^2$</td>
</tr>
<tr>
<td></td>
<td>Object-to-Mouth$^3$</td>
</tr>
<tr>
<td></td>
<td>Incidental Soil Ingestion$^4$</td>
</tr>
</tbody>
</table>
The Pesticide Label
The Pesticide Label: Mitigating Risk

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION
Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wear long-sleeved shirt, long pants, shoes plus socks and household latex or rubber gloves when applying this product. For overhead applications, also wear a hat and eye protection.

ENVIRONMENTAL HAZARDS
BEE CAUTION: MAY KILL HONEYBEES AND OTHER BEES. This product is highly toxic to honeybees and other bees. Do not apply to plants in bloom.
The Label is the Law

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
The Label is the Law

**DIRECTIONS FOR USE**
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**KEEP OUT OF REACH OF CHILDREN**
Do not allow children to handle this product.
Remove pest strips placed near food or in occupied areas.
Pesticides Exempt from Registration

- 25(b) or so-called “minimum-risk” pesticides do NOT undergo testing for health and environmental risk assessments.

**EPA Statement:**
This product has not been registered with the United States Environmental Protection Agency. **Tree World** represents that this product qualifies for exemption from registration under the Federal Insecticide, Fungicide and Rodenticide Act.

In the United States,*dried blood* is an EPA exempted product/minimum risk pesticide and is exempt from the Federal Insecticide, Fungicide, and Rodenticide Act requirements, specifically under Section 25(b) (c.f. Federal Register, 61(45), Mar. 6, 1996) and is therefore not subject to federal registration.
Home Remedies

9 Best Home Remedies to Get Rid of Brown Stink Bugs Infestation

by John A

Cornell Cooperative Extension
Pesticide Safety Education Program
# Home Remedies

<table>
<thead>
<tr>
<th>Claim</th>
</tr>
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<tbody>
<tr>
<td>Chemical-free</td>
</tr>
<tr>
<td>Pesticide-free</td>
</tr>
<tr>
<td>Nontoxic</td>
</tr>
<tr>
<td>All-natural</td>
</tr>
<tr>
<td>Effective</td>
</tr>
<tr>
<td>Safe</td>
</tr>
</tbody>
</table>
# Home Remedies

<table>
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<tr>
<th>Claim</th>
<th>Reality</th>
</tr>
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<tbody>
<tr>
<td>Chemical-free</td>
<td>Everything is made of chemicals</td>
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<td>Pesticide-free</td>
<td>A chemical that controls pests is a pesticide</td>
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<tr>
<td>Nontoxic</td>
<td>Chemicals must be toxic to kill things</td>
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<tr>
<td>All-natural</td>
<td>Most use man-made products</td>
</tr>
<tr>
<td>Effective</td>
<td>Untested</td>
</tr>
<tr>
<td>Safe</td>
<td>Untested; often NOT safe</td>
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### Home Remedies: Illegal to Use in NYS

<table>
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Cornell Cooperative Extension
Pesticide Safety Education Program
Who Can Apply Pesticides on School Property?
Types of Pesticide Applications

Residential
Types of Pesticide Applications

- Residential
- Private
Types of Pesticide Applications

Residential                             Private              Commercial
Pesticide Product Classification

• General-use: Can be purchased by anyone
Pesticide Product Classification

• Restricted-use: Can be purchased only by certified applicator

RESTRICTED USE PESTICIDE
Toxic to fish and aquatic organisms.
For retail sale to and use only by certified applicators or persons under their direct supervision
and only for those uses covered by the Certified Applicator’s Certification.

Lunge™
insecticide
Pesticide Product Classification

- Restricted-use: Can be purchased only by certified applicator
Pesticide Application Categories

• Commercial Categories
  – 3A: Ornamental & Turf
  – 3B: Turf only
  – 7A: Structural & Rodent (structure-invading rodents)
  – 7F: Food Processing (e.g., kitchen, cafeteria)
  – 7G: Cooling Towers

• Private Categories
  – 23: Vegetable
  – 25: Greenhouse
Certification and Training

• Required for applications of any pesticide on school property EXCEPT:
  – General-use disinfectants and sanitizers used other than for cooling tower treatments
Who Can Apply Pesticides on School Property?

- Certified applicator
- Certified technician
- Trained apprentice under direct supervision of certified applicator
Contracting with a Pest Control Company
### Business Registration Details

**101 PEST CONTROL LLC**

- **Registration #:** 17678
- **Address:** 6 TIOGA TER, ALBANY, NY 12208, USA
- **County:** ALBANY (Region 4)

**Category** | **Description**
--- | ---
3a | Ornamental and Turf
7a | Structural & Rodent Control
7c | Termite Control

**Contact:** (518) 488-8811

*Expiration: 06/30/2023*
Staff as Applicators
Agency Registration

- Public school districts and BOCES must register with NYSDEC as an agency if applying pesticides EXCEPT:
  - If only apply general-use sanitizers and disinfectants other than for cooling tower treatments
- Public school districts and BOCES are fee exempt
Agency Registration

- Must employ at least one:
  - Certified applicator (for Private or for Commercial Category 7: Structural)
  - Certified applicator or technician (for Commercial Category 3: Ornamental & Turf)
Certified Commercial Applicator

- Can use or supervise the use of any pesticide within their category(ies) of certification
- Can supervise the use of pesticides by technicians and apprentices
- Supervised individuals must have the same employer as the supervising certified applicator
Certified Commercial Applicator: Eligibility Requirements

• 1 year as technician plus 12 hours category-specific recertification training; OR
• 2 years as technician; OR
• 3 years as apprentice in relevant category; OR
• Certification in state with which NY has reciprocity
Certified Commercial Applicator: Eligibility Requirements

- Pass Core and Category exam(s)
Certified Commercial Technician

- Can use any general-use pesticide within their category of certification
- Can use restricted-use pesticides under the direct supervision of certified commercial applicator; must be able to contact applicator within 30 minutes
- CANNOT supervise the use of pesticides by other technicians or apprentices
Certified Commercial Technician: Eligibility Requirements

- 2 years as an apprentice; OR
- Degree or other education deemed sufficient by the NYSDEC; OR
- Completed a 30-hour eligibility course
Certified Commercial Technician: Eligibility Requirements

• Pass Core and Category exam
Commercial Apprentice

• Can use most pesticides under the direct supervision of a certified commercial applicator

• Supervising applicator must be on site and within voice contact when apprentice applies any pesticide on school property (indoors or out)

• CANNOT supervise the use of pesticides by anyone
Commercial Apprentice: Training Requirements

• Prior to making any application, apprentice must receive pesticide safety training from certified applicator

• Apprentices working for pest control company must receive additional training
Certified Private Applicator

• Can use or supervise the use of any pesticide within the Private category

• Can supervise the use of pesticides within the Private category by individuals employed by the same agency as the certified applicator

• Supervising applicator must be on site and within voice contact when supervised person applies any pesticide on school property (indoors or out)
Certified Private Applicator: Eligibility Requirements

- 1 year of experience in past 3; OR
- 1 year as commercial applicator in corresponding commercial category; OR
- Degree or other education deemed sufficient by the NYSDEC; OR
- Completed 30-hour eligibility course
Certified Private Applicator: Eligibility Requirements

- Pass Core and Category exam
## Applicator Fees and Recertification

<table>
<thead>
<tr>
<th></th>
<th>Commercial Applicator</th>
<th>Commercial Technician</th>
<th>Apprentice</th>
<th>Private Applicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exam Fee</strong></td>
<td>$100/exam</td>
<td>$100/exam</td>
<td>n/a</td>
<td>$100/exam</td>
</tr>
<tr>
<td><strong>License Fee</strong></td>
<td>$450/3 yr + $150/added category</td>
<td>$450/3 yr</td>
<td>None</td>
<td>$25/ 5 yr</td>
</tr>
<tr>
<td><strong>Recertification training</strong></td>
<td>10-12 credits every 3 yrs</td>
<td>None</td>
<td>n/a</td>
<td>10 credits every 5 yrs</td>
</tr>
</tbody>
</table>
Recertification Courses

- [www.dec.ny.gov/nyspad](http://www.dec.ny.gov/nyspad)
Course

Title: 
Category: 3A- Ornamental and Turf
Sponsor: Choose One
Distance Learning: No
Start: From: 06/16/2022 To: 
Course Type: Recertification
Open to Public: Yes

Location

State: Choose One
Region: Choose One
County: Jefferson
Only Outside US

Search
Showing 1 - 1 out of 1 Courses

July 22, 2022
TREE PEST IMPACTS ON COMMUNITY FOREST HEALTH
Watertown, NY
Region 6
TREE PEST IMPACTS ON COMMUNITY FOREST HEALTH

Date: July 22, 2022
Location: Watertown, NY
County: JEFFERSON
Course ID: NY-22-420072
Sponsor: NYSDEC AND NYS URBAN FORESTRY COUNCIL
Open to the Public: Yes

Contact: CHRISTINA MCLAUGHLIN
(518) 626-1066
NYSDEC Lands and Forests
625 BROADWAY
ALBANY, NY 12223
USA
E-mail: [email]

Categories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Forest</td>
<td>0.75</td>
</tr>
<tr>
<td>3a</td>
<td>Ornamental and Turf</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Cornell Cooperative Extension
Pesticide Safety Education Program
Safe Playing Fields Act and School Neighbor Notification Law

- Define “school” to include public/private/parochial schools and BOCES
- On top of pesticide regulations already discussed
Safe Playing Fields Act (NYSED Law Section 409-k)

• No school shall apply pesticide to any turf, playgrounds, or athletic or playing fields EXCEPT:
  – Emergency application
  – Certain pesticides allowed

- Not indicated in the law
- Guidance from NYSDEC, NYSDOH, NYSED, and OCFS says “emergency” does NOT include:
  - Routine or repetitive pest problems
  - Pests which can be managed with allowed pesticides or alternative practices
  - Applications for purely aesthetic purposes
Safe Playing Field Act: Emergency Application Approval

- Public school/BOCES: School board
- Private/parochial school:
  - State/County Dept of Health if public health issue
  - Dept of Environmental Conservation if environmental issue
School Neighbor Notification Law (NYSED Law Section 409-h)

• Prior notification of pesticide application to staff and persons in parental relation who request it

• Provide information about such notice to all staff and persons in parental relation

• Applies to any pesticide applied to school property (inside or out) EXCEPT:
  – Emergency application
  – Certain pesticides
School Neighbor Notification: Notice to All Staff/Parents

• Provide at beginning of school year (and to a new student’s parents within 1 week of student enrolling during school year):
  – Pesticides might be applied during school year
  – How to be put on list to receive 48-hour written notification of applications
  – Contact name and phone number for more information
School Neighbor Notification: Notice to All Staff/Parents

• Provide within 2 school days of end of winter and spring recess and within 10 days of end of school year:
  – Reminder about notification list and contact
  – Date, location, product of all applications that required 48-hour notification since last notice
  – How to obtain further information on label warnings pertinent to protecting people and the environment
School Neighbor Notification: 48-Hour Written Notice

- To people on list who work at or have child at relevant facility
- Date and location of application
- Product name and EPA Registration Number
- Resources for obtaining more information about the products
- Name and number of school contact
- Copy publicly posted in facility
School Neighbor Notification: Emergency Application

- Necessary to protect against imminent threat to human health
- Before application, applicator must make good-faith effort to provide written notice
- After application, applicator must notify DOH, including justification
School Neighbor Notification Law: Emergency Application Approval

• Responsible party not stipulated in law or regulation

• Guidance from the State is lacking
Exempt Pesticides under the Two NYSED Laws

• Lists differ between 409-k (Safe Playing Fields) and 409-h (School Neighbor Notification)

• Reasons for exemptions also differ
  – 409-k: exempt = allowed for use
  – 409-h: exempt = 48-hour notification not required

• Applicator certification and training requirements still apply
## Pesticides Exempt from 409-k AND 409-h

<table>
<thead>
<tr>
<th>Exempted Pesticide</th>
<th>409-k</th>
<th>409-h</th>
</tr>
</thead>
<tbody>
<tr>
<td>25(b) products (i.e., exempt from registration)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Boric acid and disodium octaborate tetrahydrate</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Antimicrobials (sanitizers, disinfectants)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Directed-spray aerosols (≤18 fl oz) when used to protect people from imminent threat of stinging/biting insects and spiders</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
### Pesticides Exempt from 409-k OR 409-h

<table>
<thead>
<tr>
<th>Exempted Pesticide</th>
<th>409-k</th>
<th>409-h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horticultural soaps/oils w/o synthetic pesticides</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Non-volatile insect or rodent bait in tamper-resistant container</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Non-volatile insect or rodent bait in tamper-resistant bait stations or in areas inaccessible to children</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Silica gels and other nonvolatile, ready-to-use insecticidal pastes, foams, and gels in areas inaccessible to children</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Reduced-risk pesticides</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Any pesticide if facility unoccupied for 72 hr after</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>