



Pesticides and Schools

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Cornell Cooperative Extension
Pesticide Safety Education Program

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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

Cornell Cooperative Extension Pesticide Safety Education Program

Wood Preservation



*A Pesticide Applicator Certification Training Manual
for Wood Treaters*

Cornell Cooperative Extension Pesticide Safety Education Program

Wood Preservation

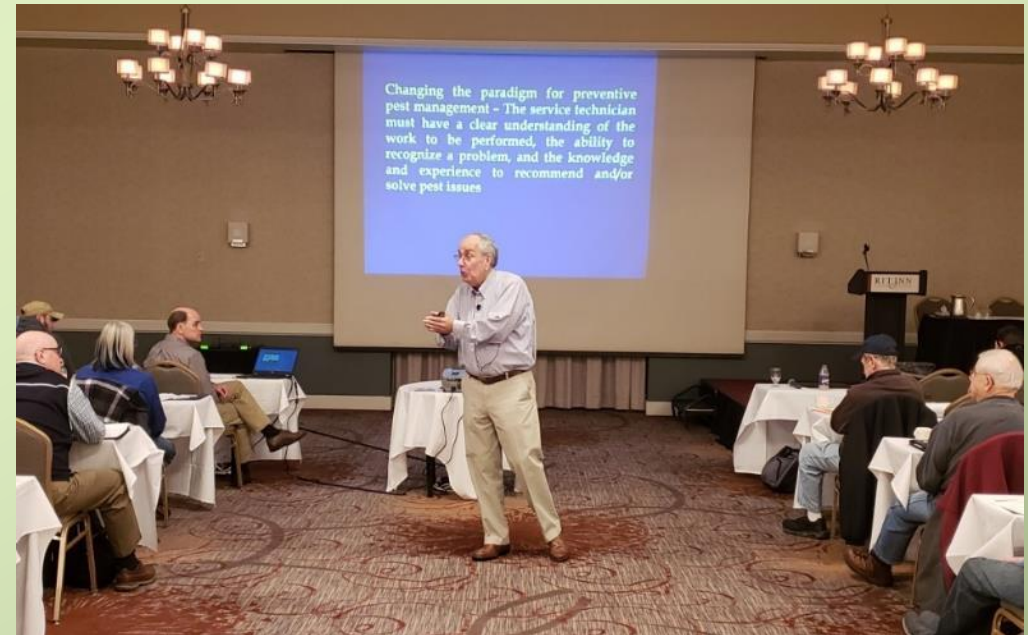


*A Pesticide Applicator Certification Training Manual
for Wood Treaters*

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*

Cornell Cooperative Extension
Pesticide Safety Education Program



**Cornell Cooperative Extension
Pesticide Safety Education Program**

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Cornell
Cooperative
Extension
Program

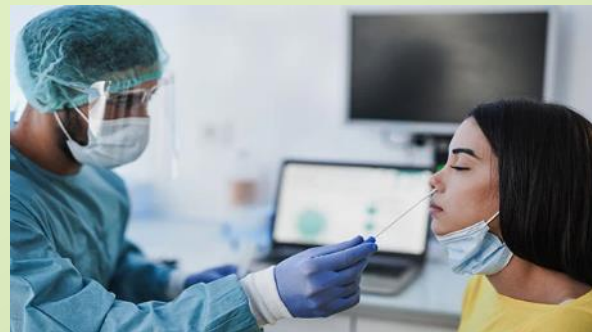


New York State
Integrated Pest Management
Program



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

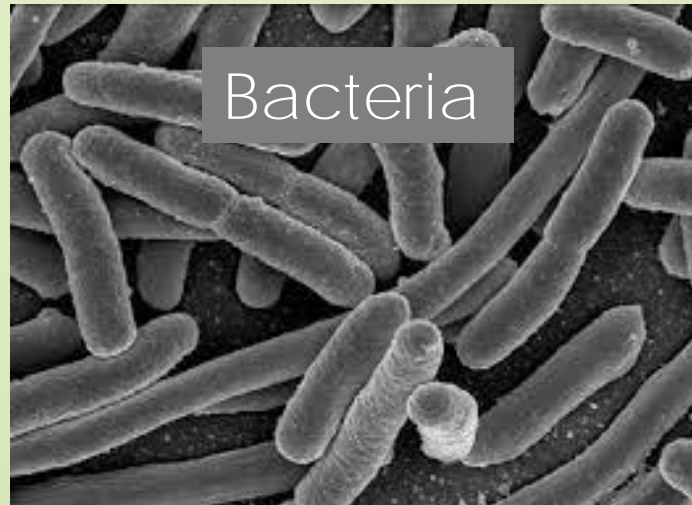


Plant Pathogen

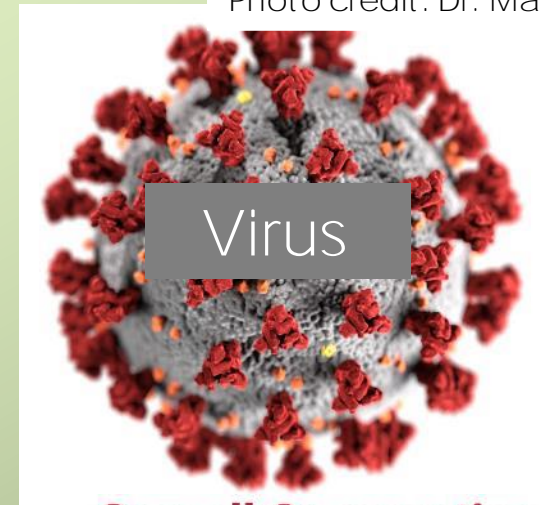
Photo credit: Dr. Margery Daughtrey



Rodent



Bacteria



Virus

What Is a Pesticide?

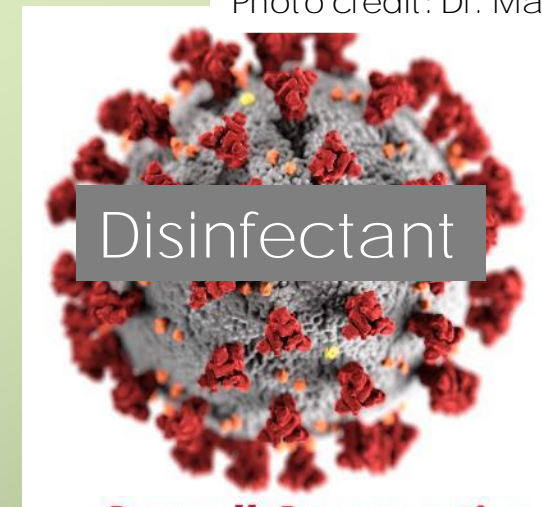


Photo credit: Dr. Margery Daughtrey

Hazard vs. Risk

Hazard (or Toxicity)
CAN it cause harm?
Inherent, immutable

Hazard (or Toxicity)

CAN it cause harm?

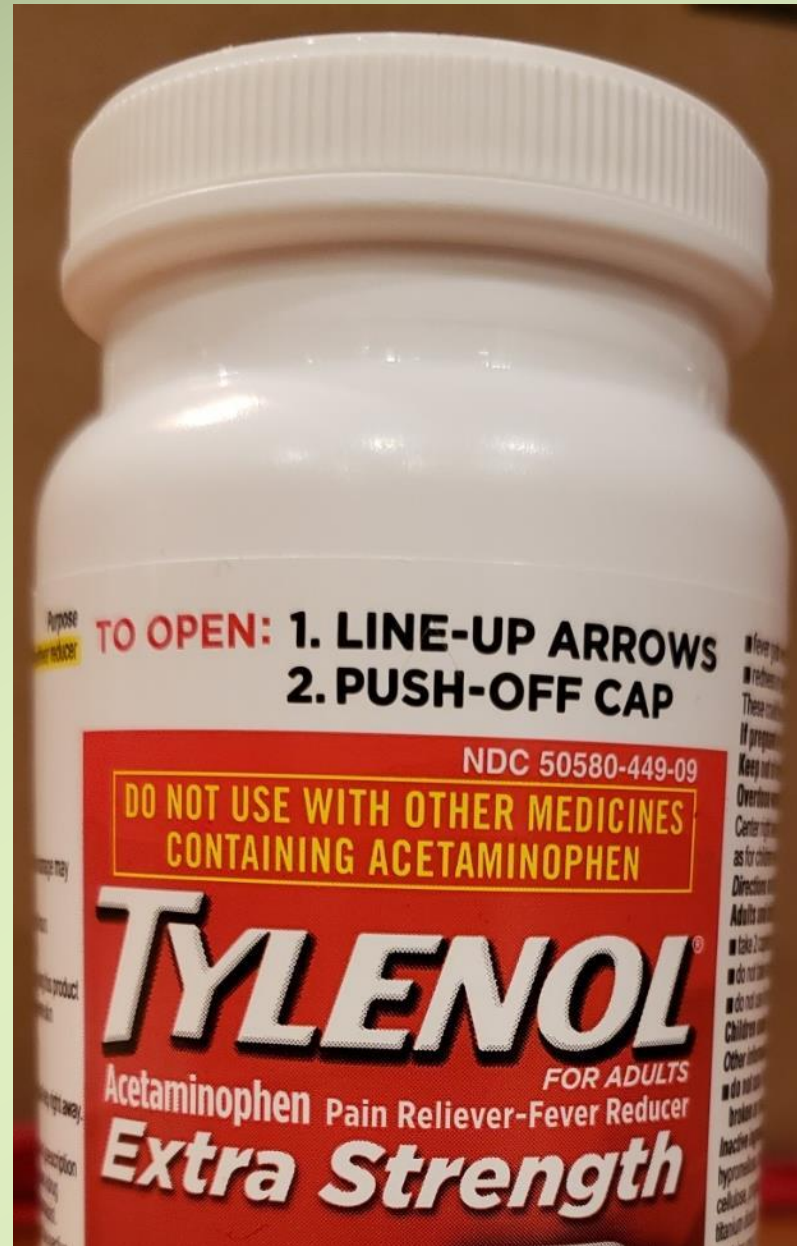
Inherent, immutable

Risk

WILL it cause harm?

Can be managed

Risk = Hazard x Exposure



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
 - headache
 - backache
 - minor pain of arthritis
 - toothache
 - muscular aches
 - premenstrual and menstrual cramps
- temporarily reduces fever

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
- do not take more than 6 caplets in 24 hours, unless directed by a doctor
- do not use for more than 10 days unless directed by a doctor

children
under
12 years

ask a doctor

Effect of Following Label Directions on Hazard, Exposure, and Risk

	Follow Label	Ignore Label
Hazard	Unchanged	Unchanged

Effect of Following Label Directions on Hazard, Exposure, and Risk

	Follow Label	Ignore Label
Hazard	Unchanged	Unchanged
Odds of Overexposure	Lower	Higher

Effect of Following Label Directions on Hazard, Exposure, and Risk

	Follow Label	Ignore Label
Hazard	Unchanged	Unchanged
Odds of Overexposure	Lower	Higher
Risk	Very low	Much higher

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

Lifestage	Post-application Exposure Scenario	
Children 1 to <2 year old	Turf – sprays	Hand-to-Mouth ²
		Object-to-Mouth ³
		Incidental Soil Ingestion ⁴

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



Home Remedies

Claim
Chemical-free
Pesticide-free
Nontoxic
All-natural
Effective
Safe

Home Remedies

Claim	Reality
Chemical-free	Everything is made of chemicals
Pesticide-free	A chemical that controls pests is a pesticide
Nontoxic	Chemicals must be toxic to kill things
All-natural	Most use man-made products
Effective	Untested
Safe	Untested; often NOT safe

Home Remedies: Illegal to Use in NYS

Claim	Reality
Chemical-free	Everything is made of chemicals
Pesticide-free	A chemical that controls pests is a pesticide
Nontoxic	Chemicals must be toxic to kill things
All-natural	Most use man-made products
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Who Can Apply Pesticides on School Property?

Types of Pesticide Applications



Residential

Types of Pesticide Applications



Residential



Private

Types of Pesticide Applications



Residential



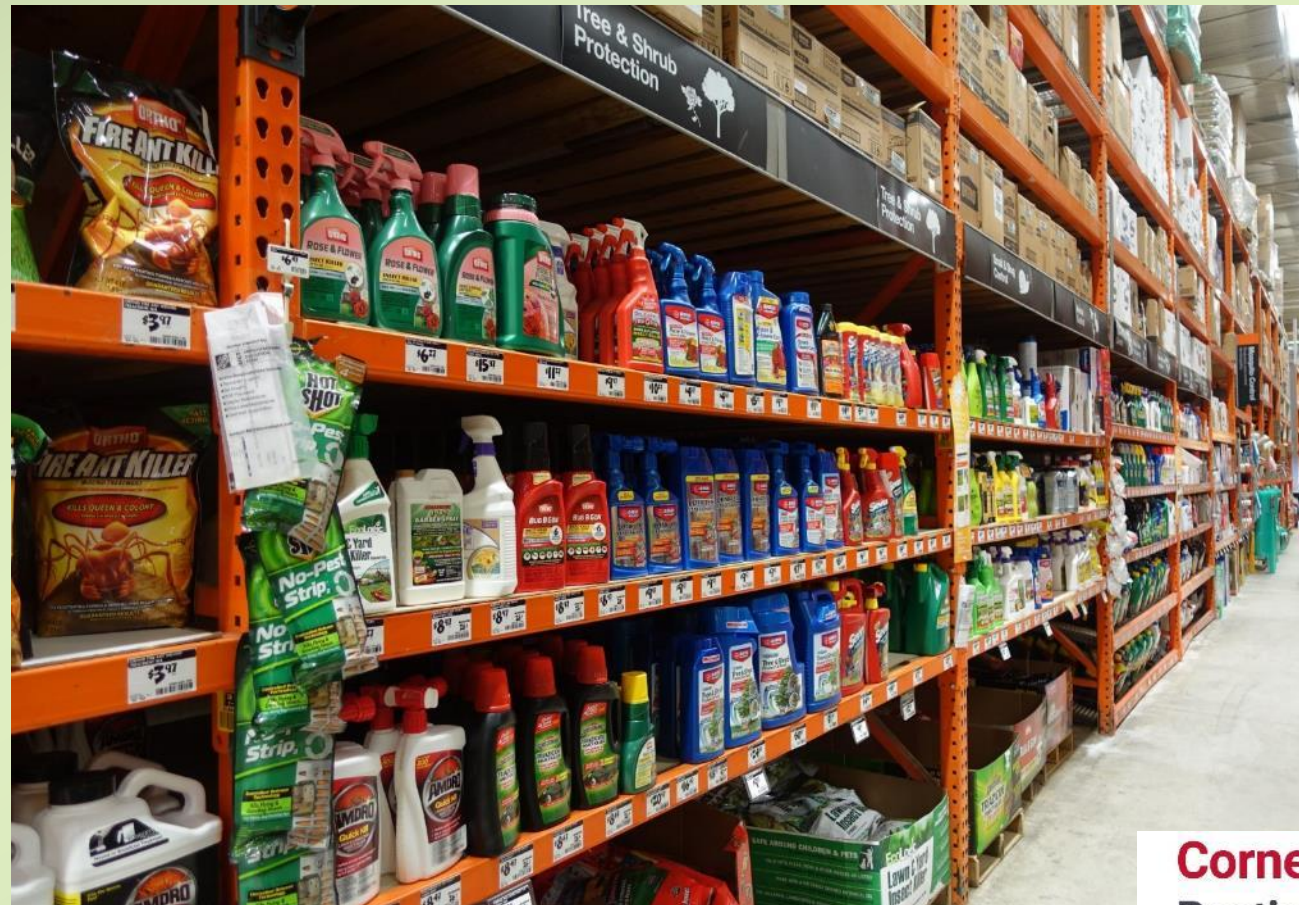
Private



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*TM
insecticide

Pesticide Product Classification

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

Classified for
“RESTRICTED USE”
in New York State
under 6NYCRR Part 326

ACCEPTED
VIA NOTIFICATION
LABEL NOT REVIEWED

FEB 06 2018

New York State Department
of Environmental Conservation
Division of Materials Management
Pesticide Product Registration

GROUP 3 INSECTICIDE PULL HERE TO OPEN ►



Doc ID: 555505

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





Bureau of Pesticides Management - Information Portal

Businesses and People

Applicators & Technicians

Verify the certification status of a pesticide applicator or technician.

Search

Businesses & Agencies

Search for registered pesticide businesses or agencies.

Search

Restricted Pesticide Dealers

Locate businesses that are permitted to sell restricted-use pesticides.

Search

Exams and Courses

Courses

Search for pesticide certification training course.

Search

Exams

Find an upcoming pesticide certification exam.

Search

Online Forms

- [nFORM Application Instructions](#)
- [Pesticides Applicator and Technician Renewal](#)
- [Pesticide Certification Exam Registration](#)
- [Request a Replacement Certification Identification Card or Update Contact Information](#)

Pesticide Product Information

Products

[How to Search for COVID-19 Products?](#)

Search our database of pesticide products.

Search

Product Open Data

Download delimited files with all Product open data

Download

NYSPAD Product Data

Download delimited files with all NYSPAD data (current and archival).

Download

Pending (NAI and MCL) Registrations

Download delimited files of pending NAI and MCL registrations.

Download

NPIRS Public Website

State-by-state access to pesticide products registered with the EPA (this website is not managed by NY DEC).

Visit Website

Company/Product Text Files


Download text files with company information and product information.

Download


Business/Agency

Bureau of Pesticides Management - Information Portal

 Pesticide Professionals

 Restricted Pesticide Dealers

 Pesticides Business/Agencies

 Home

Businesses

Business Name:

Registration #:

Category:  

Include Not-For-Hire Agencies


Location

State: 

Region: 

County:  

City:

 Search


 Reset

Showing 1 - 15 out of 15 Businesses

101 PEST CONTROL LLC

Business Registration #: 17678
3a - Ornamental and Turf
7a - Structural & Rodent Control
7c - Termite Control

6 TIOGA TER
ALBANY, NY 12208
USA

 More

Business/Agency

Bureau of Pesticides Management - Information Portal

Pesticide Professionals | Restricted Pesticide Dealers | Pesticides Business/Agencies | Home

Businesses

Business Name: []
Registration #: []
Category: 7
 Include Not-For-Hire

Showing 1 - 15 of []

101 PEST CONTROL LLC

Business Registration #: 17678
3a - Ornamental and Turf
7a - Structural & Rodent Control
7c - Termite Control

6 TIOGA TER
ALBANY, NY 12208
USA

Contact: (518) 488-8811

Search [] Reset [] More []

Business Registration Details

Print []

101 PEST CONTROL LLC Expiration: 06/30/2023

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

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

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

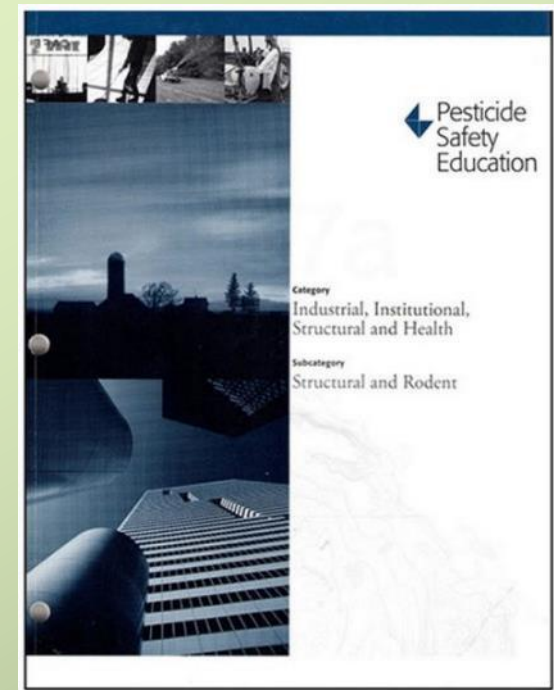
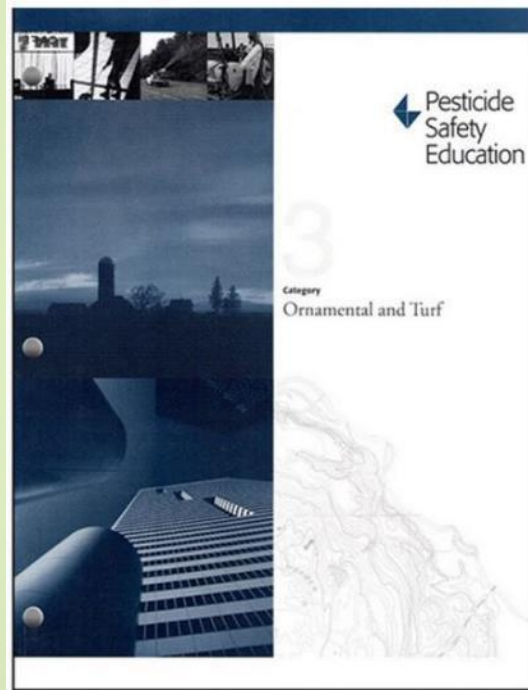
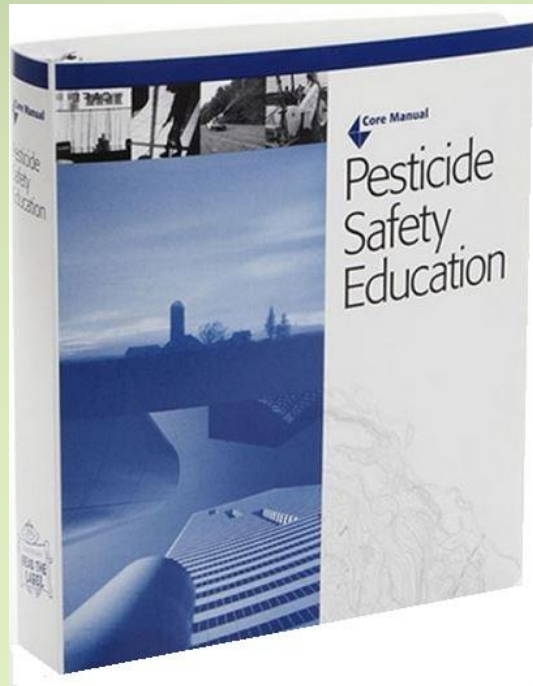
- Can use or supervise the use of any pesticide within their category(ies) of certification
- Can supervise the use of pesticides by technicians and apprentices
- Supervised individuals must have same employer as the supervising certified applicator

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

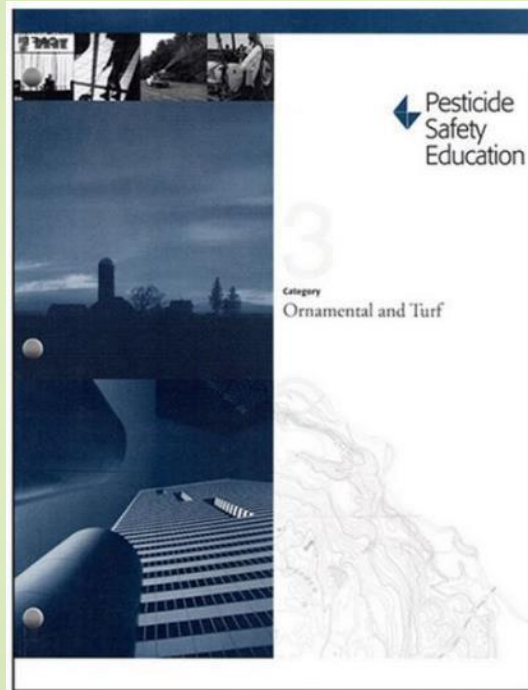
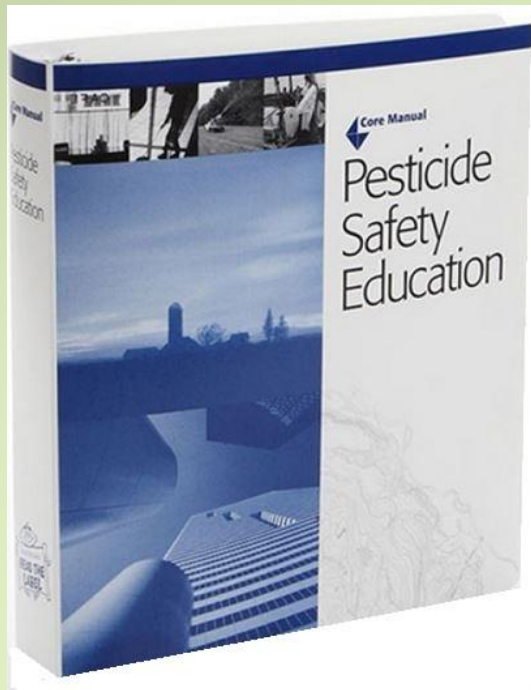
- Can use any general-use pesticide within their category of certification
- Can use restricted-use pesticides under the direct supervision of certified commercial applicator; must be able to contact applicator within 30 minutes
- CANNOT supervise the use of pesticides by other technicians or apprentices

Certified Commercial Technician: Eligibility Requirements

- 2 years as 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

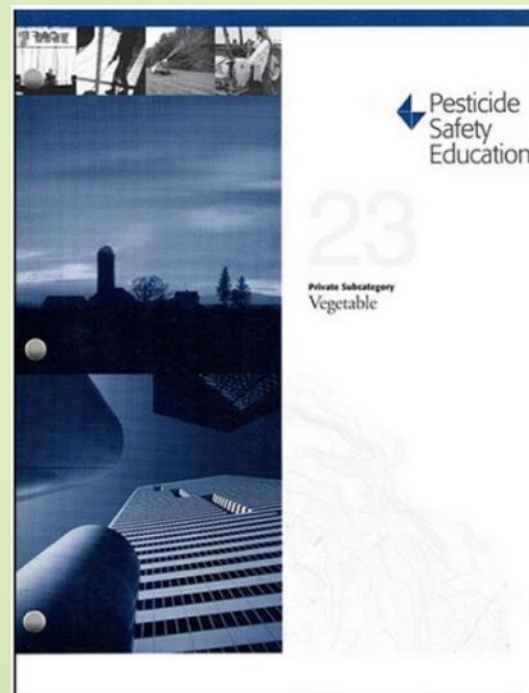
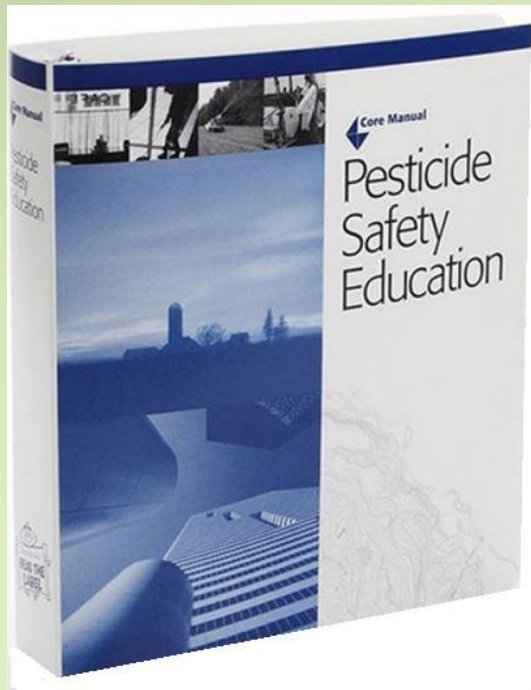
- Can use or supervise the use of any pesticide within the Private category
- Can supervise the use of pesticides within the Private category by individuals employed by the same agency as the certified applicator
- Supervising applicator must be on site and within voice contact when supervised person 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

	Commercial Applicator	Commercial Technician	Apprentice	Private Applicator
Exam Fee	\$100/exam	\$100/exam	n/a	\$100/exam
License Fee	\$450/3 yr + \$150/added category	\$450/3 yr	None	\$25/ 5 yr
Recertification training	10-12 credits every 3 yrs	None	n/a	10 credits every 5 yrs

Recertification Courses

- www.dec.ny.gov/nyspad

Bureau of Pesticides Management - Information Portal

Businesses and People

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Verify the certification status of a pesticide applicator or technician.

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Exams and Courses

Courses
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Exams
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Online Forms

Course

Title:

Category:

Sponsor:

Distance Learning:

Start: From: To:

Course Type:

Open to Public:

Location

State:

Region:

County:

Only Outside US

Course	Location
Title: <input type="text"/>	State: <input type="text" value="Choose One"/>
Category: <input type="text" value="x 3A- Ornamental and Turf"/>	Region: <input type="text" value="Choose One"/>
Sponsor: <input type="text" value="Choose One"/>	County: <input type="text" value="x JEFFERSON"/>
Distance Learning: <input type="text" value="No"/>	<input type="checkbox"/> Only Outside US
Start: From: <input type="text" value="06/16/2022"/> To: <input type="text"/>	
Course Type: <input type="text" value="Recertification"/>	
Open to Public: <input type="text" value="Yes"/>	

Showing 1 - 1 out of 1 Courses

July 22, 2022

TREE PEST IMPACTS ON COMMUNITY FOREST HEALTH

Watertown, NY
Region 6


Course Details



TREE PEST IMPACTS ON COMMUNITY FOREST HEALTH



TREE PEST IMPACTS ON COMMUNITY FOREST HEALTH

Date	July 22, 2022	Contact	CHRISTINA MCLAUGHLIN (518) 626-1066 <i>NYSDEC Lands and Forests</i> <i>625 BROADWAY</i> <i>ALBANY, NY 12223</i> <i>USA</i>
Location	Watertown, NY		
County	JEFFERSON		
Course ID	NY-22-420072		
Sponsor	NYSDEC AND NYS URBAN FORESTRY COUNCIL		
Open to the Public	Yes		[address]

Categories

Code	Description	Credits
2	Forest	0.75
3a	Ornamental and Turf	0.75

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

Safe Playing Field Act: What Is an Emergency?

- 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

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

Pesticides Exempt from 409-k OR 409-h

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

<https://psep.cce.cornell.edu/>

Cornell Cooperative Extension **Pesticide Safety Education Program**

ABOUT US

FOR APPLICATORS

FOR EDUCATORS

FOR GENERAL PUBLIC



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