

Cultivating Cumberland

July - 2018 VOL. 23, ISSUE 7



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Attachments:

OSHA Fact Sheet: Protecting Workers from Heat Effects

Mosquito Bite Prevention

Smartphone App for Heat Stress

The National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA) has developed a free phone app that helps plan outdoor work activities based on the heat. The heat season is upon us and the app could prove useful and it's easy to implement.

The OSHA-NIOSH Heat Safety Tool App provides a real-time heat index and hourly forecasts specific to individual locations. The app also provides safety and health recommendations on preventing heat illness. It's a useful resource for planning outdoor work activities based on how hot it feels throughout the day.

Features include:

- A visual indicator of the current heat index and risk levels for employees;
- Precautionary recommendations specific to those risks;
- An interactive, hourly forecast of heat index values, risk levels and recommendations for planning outdoor work activities;
- The ability to edit locations, temperatures and humidity controls to calculate variable conditions; and
- Signs, symptoms and first-aid information for heat illness.

The 'OSHA-NIOSH Heat Safety Tool' App is available from Apple's App Store and Google Play for free.



RUTGERS

Highly Focused, Practical Training this August!

5-Day Intro to Food Science Course

Learn how to better develop, process, manufacture and promote your food products from industry-leading experts. Take any combination of the individual sessions listed below or attend the full five-day program.

5-Day Intro to Food Science Series

Day 1: Chemical Principles and Lipids

Day 2: Carbohydrates and Proteins

Day 3: Color Theory and Food Microbiology

Day 4: Nutrition Theory and Food Processing/Engineering

Day 5: Flavor and Sensory (half day)

Optional Tour of Rutgers Cutting-Edge Food Research Labs

Following Friday's half-day lecture, attendees are invited to participate in an optional tour of the facilities and labs that make up Rutgers University's Department of Food Science. See cutting-edge technology and real-world applications of the concepts presented throughout the entire program. We will also be touring the NJ Institute for Food, Nutrition & Health (IFNH)

Date, Cost, Location

Course Name:	Introduction to Food Science Course (LF0201CA19)
Date/Time:	August 20 - 24, 2018 from 9:00am to 4:00pm
Location:	New Jersey Institute for Food, 61 Dudley Road, New Brunswick, NJ, 08901
Cost: (Prices increase after 8/6/18)	5 Days: \$1,595 4 Days: \$1,395 3 Days: \$1,195 2 Days: \$895 1 Day: \$495
Meals:	Continental breakfast and lunch are included

Continuing Education Credits

Credit Type	Approved Credit Amount
Certified Food Scientist (CFS) Recertification Contact Hours	25 CHs
NJ Public Health Continuing Education Contact Hours	25 CEs

Any questions, contact:

Suzanne Hills

Program Coordinator

Rutgers Office of Continuing Professional Education

suzanne.hills@rutgers.edu

(848) 932-7234

Register online at:

<https://ce-catalog.rutgers.edu/coursedisplay.cfm?schID=68640>

GAPs Online Produce Safety Course

This course is intended to improve your understanding of GAPs to guide assessment of risks and implementation of practices to reduce risks on fresh produce farms. GAPs Online Produce Safety Course sessions scheduled for 2018 on the following dates:

August 8 running through August 28, 2018

September 12 running through October 2, 2018

October 10 running through October 30, 2018

November 28 running through December 18, 2018

Taking this course will not result in your farm being "GAPs Certified". GAPs certification is done by a third party (e.g. USDA, Primus, Global GAP) and involves the successful completion of an on-farm audit.

It is also important to consider that the GAPs Online Produce Safety Training Course is not currently equivalent to the required supervisor training described in the FSMA Produce Safety Rule 21 CFR Subpart C § 112.22(c). This GAPs Online Produce Safety Training Course may, however, satisfy training requirements as described in the FSMA Produce Safety Rule in §§ 112.21(a) and (b).

The Produce Safety Alliance plans to offer in-person training that meets the requirement in § 112.22(c) of the FSMA Produce Safety Rule. You can sign up for the listserv on the Produce Safety Alliance website: <http://producesafetyalliance.cornell.edu/> to be notified of where and when in-person trainings will be held.

To register for any session of the GAPs Online Produce Safety Course, go to <https://portal.ecornell.com/corporate/landingPage.do?method=load&corporateGroupId=15606>. You will need to go all the way to the bottom of the page. Under Courses, select the + sign next to Other, then click the Enroll Now link. After selecting the course, click Add to Cart and Checkout. After selecting Checkout for a second time, you will be asked to Create an Account and complete your eCornell Profile. When completing your profile, under Employer Information, Group Affiliations, you will be asked to enter a Group Code—enter G000107. (Please note that these are zeros and not the letter "O"). You will then need to click Add Group.

A minimum of 10 people must be registered for us to offer the course and class size is limited to 25 people. The course price is \$225.

Please let Don Stoeckel (dstoeckel@cornell.edu) know if you have any questions or concerns. E-mail Michele Humiston (mmc15@cornell.edu) if you wish to receive e-mail notifications of future online course dates and open registrations, or if you wish to be removed from the GAPs online course listserv.

Elizabeth A. Bihn, Ph.D.
Director, Produce Safety Alliance
Department of Food Science
Ph: 315.787.2625
email: eab38@cornell.edu

Visit www.producesafetyalliance.cornell.edu or www.gaps.cornell.edu for produce safety information!

Delmarva Soil Summit
November 1, 2018
University of Maryland Eastern Shore Princess Anne, MD

For farmers, service providers, and soil health nuts: A full day of learning from farmers and other experts about latest innovations in soil health and fertility.

Expert Speakers

- Soil Health guru Ellen Polishuk, Plant to Profit
- Delmarva soils, James Brewer, National Resource Conservation Service
- And more!

In-Depth Afternoon Breakouts

- In-Depth Soil Test Analysis with Bill McKibben, Head Agronomist at Logan Labs
- Planting Green with Adam Snyder of Harborview Farms
- Air-Seeder Presentation with Sussex Conservation District
- Soil Health Tools with University of Maryland Extension Specialists Nevin Dawson and Dr. Sara Via
- Plus more!

Extras:

- Open Farmer-to-Farmer Notice Board
- Nutrient Management Credits
- Soil & Ag Service Tradeshow
- Extended Speaker Q&A
- Networking Opportunities

For Sponsorship & Exhibit Opportunities: Niamh Shortt, niamh@futureharvestcasa.org

Centennial Celebration & Field Day at Penn State Fruit Research & Extension Center

The Fruit Research and Extension Center (FREC) is holding a Centennial Celebration & Field Day celebrating the 100-year history of developing scientific information for the benefit of the fruit industry throughout Pennsylvania.

When: Tuesday, July 10, 2018; 10:00 a.m. - 4:00 p.m.

Where: Penn State Fruit Research & Extension Center; 290 University Drive, Biglerville, Pennsylvania 17307

Cost: \$20.00; Lunch Included

Register on the phone at 1-877-345-0691 or online at <https://extension.psu.edu/centennial-celebration-field-day>

Gleaning Opportunities in Cumberland County

The New Jersey Agricultural Society's Farmers Against Hunger program recently received a grant with the objective to increase gleaning opportunities. Anyone interested in participating should contact Al Murray njagriculturalsociety@gmail.com. For those you do not know, Al is the retired Assistant Secretary of Agriculture and present Executive Secretary of the Ag Society.



United States Department of Agriculture

News Release

Farm Service Agency

1318 S. Main Rd. Bldg. 5A
Vineland, NJ 08360
www.fsa.usda.gov/nj

Contact: Angela J. Andreoli
Angela.Andreoli@nj.usda.gov
856-205-1225 Ext. 2

Farm Service Agency County Committee Nomination Period in Atlantic and Cumberland Counties to Launch June 15

(Vineland, NJ), June 15, 2018 – The U.S. Department of Agriculture (USDA) encourages America’s farmers and ranchers to nominate candidates to lead, serve and represent their community on their local county committee. According to USDA’s Farm Service Agency (FSA) Atlantic/ Cape May/ Cumberland County Executive Director Angela J. Andreoli, FSA will accept nominations for county committee members beginning Friday, June 15, 2018.

Producers across the country are already serving on committees where they play a critical role in the day-to-day operations of FSA, making important decisions on programs dealing with disaster and conservation, emergencies, commodity loan price support, county office employment and other agricultural issues.

“County committees are unique to FSA and allow producers to have a voice on federal farm program implementation at the local level,” said Andreoli. “It is also important that committees are comprised of members who fairly represent the diverse demographics of production agriculture for their community. I encourage all producers, including women, minority and beginning farmers and ranchers, to participate in the nomination and election process.”

Nationwide, more than 7,700 dedicated farmers and ranchers serve on FSA county committees, which consist of 3 to 11 members and meet once a month, or as needed. Members serve three-year terms.

Producers can nominate themselves or others. Organizations, including those representing beginning, women and minority producers, may also nominate candidates to better serve their communities. To be eligible to serve on an FSA county committee, producers must participate or cooperate in an FSA program and reside in the area where the election is being held.

This year, nominations and elections for Cumberland County will be held in local administrative area 1, which includes Stow Creek, Greenwich, Hopewell, Upper Deerfield, Bridgeton and Shiloh. Nominations and elections for Atlantic County will be held in local administrative area 3, which includes Buena, Buena Vista and Vineland.

To be considered, a producer must sign an FSA-669A nomination form. The form and other information about FSA county committee elections are available at www.fsa.usda.gov/elections, or from the Atlantic/ Cape May/ Cumberland County FSA office. All nomination forms for the 2018 election must be postmarked or received in the local FSA office by Aug. 1, 2018. Visit farmers.gov for more information.

Election ballots will be mailed to eligible voters beginning Nov. 5, 2018. Read more to learn about important election dates.

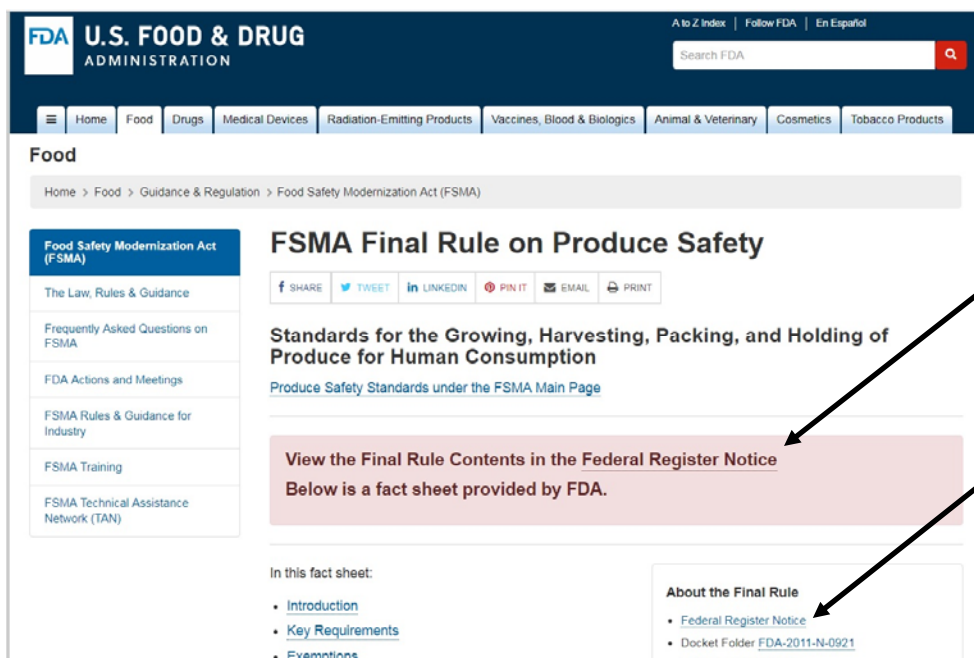
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USDA is an equal opportunity provider, employer and lender.

How to Find the Produce Safety Rule on the Internet

The Federal Register Notice can be found on the FDA’s “FSMA Final Rules on Produce Safety” Webpage: <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm334114.htm>

Once you have accessed the link referenced above there are two ways to access the final rule: clicking on either “Federal Register Notice” in the pink box or the link on the right hand side of the page that says “Federal Register Notice”. Both links will take you to a 216-page long PDF version of the Produce Safety Rule as published in the Federal Register Notice.



Where to find the most up-to-date version of the Produce Safety Rule

While the Federal Register Notice for the Produce Safety Rule includes the codified language, there have been some technical changes to the Rule since it was first issued in November 2015. The best place to access the most current version of the rule is from the US Government Publishing Office Website (pictured below). This version is approximately 39 pages, and it contains only the codified portion of the Produce Safety Rule.

Go to the website, <https://www.gpo.gov/fdsys/search/submitcitation.action?publication=CFR>, select “Code of Federal Regulations (e.g. 2008 7 CFR 1940 337)” in the Collections drop down box.



Next, select “Most Recent” in the “Year” drop down list; “21” in the “Title” drop down list; type “112” in the “Part” box:

This will bring up a PDF of the most recent version of the Rule, updated April 1 each year. Previous year’s editions can also be found through this site.

Links to Recent FDA Communications Regarding the FSMA Produce Safety Rule

1. What to Expect Now That Larger Farms Must Comply with the FSMA Produce Safety Rule, A conversation with Samir Assar—02-01-2018
<https://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm594712.htm>
2. FDA, USDA Announce Formal Agreement to Bolster Coordination and Collaboration—01-30-2018
<https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm594424.htm>
3. FDA Announces Enforcement Discretion Policy for Certain FSMA Regulations— 01-04-2018
<https://www.fda.gov/Food/NewsEvents/ConstituentUpdates/ucm590667.htm>
4. Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption; Extension of Compliance Dates for Subpart E—09-13-2017
<https://www.federalregister.gov/documents/2017/09/13/2017-19434/standards-for-the-growing-harvesting-packing-and-holding-of-produce-for-human-consumption-extension>
5. Dr. Scott Gottlieb’s Speech to the 2017 NASDA Annual Meeting—09-12-2017
<https://www.fda.gov/NewsEvents/Speeches/ucm575499.htm>

NOP Seeks Input on Upcoming Enforcement Rulemaking through Interactive Webinar

On Wednesday July 17, 2018, from 1:00 PM to 2:00 PM (Eastern Time), the National Organic Program (NOP) will host an interactive webinar engaging the organic community about NOP's upcoming Strengthening Organic Enforcement rulemaking.

The webinar will provide an overview of the scope of the proposed rule and invite general feedback on these topics and NOP's data needs for this activity. Viewers will access the webinar through their computers and will be able to provide feedback via live chat.

Pre-registration is not required for this webinar session.

Webinar Logistics

Date: Tuesday, July 17, 2018

Time: 1:00-2:00 PM U.S. Eastern Time

To participate, access the meeting website: <https://cc.readytalk.com/r/3lysp7ou67ay&eom>

This is an online event. The audio for the webinar should come through your computer speakers – make sure your volume is on. You will not need to install any extra plug-ins/software.

New Rutgers Fact Sheet

The following fact sheets are now available:

- | | |
|--------|---|
| FS1290 | Identifying and Understanding False-Green Kyllinga in Cool-Season Turf.
Elmore, M. and Murphy, J.
https://njaes.rutgers.edu/fs1290/ |
| FS1294 | Ultra-Niche Crop Series: Crop SWOT Analysis Template. Carleo, J.
https://njaes.rutgers.edu/fs1294 |

New Office Location of Rutgers Cooperative Extension of Gloucester County

Michelle Infante-Casella and Hemant Gohil are now in a new office location.

Shady Lane County Complex
254 County House Road
Clarksboro, NJ 08020

They also have a new phone number; 856-224-8040

This new office provides more office space, multiple options for educational programs including a 4-classroom building, and 3 conference rooms for small group meetings.

For more information about the Rutgers Cooperative Extension of Gloucester County see <http://gloucester.njaes.rutgers.edu>

Calendar of Important Events

📅 Indicates the newly added event since last calendar

July 2018

July 11

MidAtlantic Women in Agriculture: Stress Management on the Farm, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

July 25

MidAtlantic Women in Agriculture: Farm Transition Taxes and Medicaid Estate Recovery, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

July 25-27

Better Process Control School, Cook Student Center, 59 Biel Road, New Brunswick, NJ; 8:30-4:30 p.m.; \$995 by 7/11; \$1,095 after. Continental breakfast & deli buffet lunch provided. For more information call Suzanne Hills 848-932-7234.

📅 **July 31**

Golf & Fine Turf Day, Hort Farm 2, 102 Ryders Lane, North Brunswick, NJ 08902; 7:30-4:00 p.m.; Basic training for the professional fertilizer applicator and Certification or Recertification Exam; \$75 fee; Exam is in English and Spanish. 2 pesticide credits assigned to this class; Call 973-812-6467 with questions; Register online at www.njturfgrass.org

August 2018

📅 **August 1**

Lawn, Landscape & Sports Field Day, Adelphia Farm, 594 Halls Mills Road, Freehold, NJ 07728; 7:30 a.m.-2:00 p.m.; Sports Field Mgrs of NJ sponsored trade show and equipment demonstrations; CORE session at 1:30-2:00 p.m.; 1 pesticide credit assigned for this session; Call 973-812-6467 with questions; Register online at www.njturfgrass.org

August 8

MidAtlantic Women in Agriculture: Understanding Credit and Credit Scores, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

August 20-24

Introduction to Food Science Course, New Jersey Institute for Food, Nutrition and Health, Room 101, 61 Dudley Road, New Brunswick, NJ; Registration for 5 days \$1,595 by 8/6; \$1,645 after. Breakfast and lunch will be provided. Check in time 8:30; class runs 9am-4pm. For more information call Suzanne Hills, Program Coordinator 848-932-7234.

August 22

MidAtlantic Women in Agriculture: An Overview of the Resource Stewardship Evaluation Tool, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

Golf & Fine Turf Day, Hort Farm 2, 102 Ryders Lane, North Brunswick, NJ 08902; 7:30-4:00 p.m.; Basic training for the professional fertilizer applicator and Certification or Recertification Exam; \$75 fee; Exam is in English and Spanish. 2 CEU Credits assigned to this class; Call 973-812-6467 with questions; Register online at www.njturfgrass.org

September 2018

September 12

MidAtlantic Women in Agriculture: Soil Maps for Production Agriculture, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

September 21

CORE Training Program for the NJ Pesticide Applicators License, Extension Conference Center, 18 Ag Extension Way, New Brunswick, NJ; 12:30-4:30p.m. 6 CORE credits assigned for this class. Registration fee \$145.00. For more information call Carol Broccoli 848-932-7207

September 24-26

2018 United Fresh Washington Conference, 1901 Pennsylvania Ave NW #1100, Washington, DC 20006; Registration begins at 7:00 a.m. everyday; March on Capitol Hill: U.S. House & Senate Congressional Meetings on 9/25 at 2:30 - 5:30 p.m.; Tickets sold separately for United FreshPAC Reception & Dinner on 9/25 at 6:15 p.m. - 9:00 p.m. For more information contact Angela Tiwari, Director of Grassroots and Political Action 202-303-3416

September 26-27

Sensory Evaluation, University Inn & Conference Center, 178 Ryders Lane, New Brunswick, NJ. Registration \$945 by 9/12; \$975 after. Continental breakfast and deli buffet lunch provided. Day 1 check in 8:00 a.m.; class runs 8:30 a.m. - 4:30 p.m. For more information call Suzanne Hills, Coordinator 848-932-7234

September 26

MidAtlantic Women in Agriculture: Farm Recordkeeping, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

September 28

Making Sense of the Numbers: Statistics for Food Scientists, University Inn & Conference Center, 178 Ryders Lane, New Brunswick, NJ; 8:30 a.m. - 4:30 p.m. Check in time 8:00 a.m. Registration \$395 by 9/14; \$450 after. For more information call Suzanne Hills, Program Coordinator 848-932-7234

October 2018

October 10

MidAtlantic Women in Agriculture: Smart Choice Health Insurance Basics, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018-Wednesday-webinars-tickets>

October 12-13

Fall Flower and Garden Fest, Truck Crops Experiment Station, 2024 Experiment Station Road, Crystal Springs, MS 39059; 9:00 a.m.-2:00 p.m.; For more information contact the Mississippi County Extension office, or call 601-892-3731.

October 19

CORE Training Program for the NJ Pesticide Applicators License, Extension Conference Center, 18 Ag Extension Way, New Brunswick, NJ; 12:30-4:30p.m. Registration fee \$145.00. 6 CORE credits assigned for this course. For more information call Carol Broccoli 848-932-7207.

October 24

MidAtlantic Women in Agriculture: Preparing Your Marketing Efforts for the Holidays, Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018/Wednesday-webinars-tickets>

October 25

The Landscape Conference: Rutgers EcoComplex, 1200 Florence Columbus Rd., Bordentown, NJ 08505; Pesticide Credits assigned to this conference; More information coming soon. To register go to www.njnla.org; Call 609-291-7070 with questions

November**November 1**

Farm Lease Agreements: Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018/Wednesday-webinars-tickets>

November 14

Farm Lease Agreements: Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018/Wednesday-webinars-tickets>

November 15-16

Pacific Northwest Vegetable Association Conference & Trade Show, Three Rivers Convention Center 7016 W Grandridge Blvd, Kennewick, WA 99336; Ticket sales start July 1, \$110-\$550, Register at <https://www.eventbrite.com/e/2018-pacific-northwest-vegetable-association-conference-and-trade-show-registration-43723580406>

November 28

GMO: Webinar series held 2nd & 4th Wednesdays each month at noon. Cost is free. To register visit: <https://www.eventbrite.com/e/2018/Wednesday-webinars-tickets>

November 28-30

National Council of Agricultural Employers Ag Labor Forum, Tropicana 3801 S Las Vegas Boulevard, Las Vegas, NV 89109, Register online at <http://ncaeonline.org/register/>. For more information call 202-629-9320

December**December 3-7**

2018 Irrigation Show, Long Beach Convention & Entertainment Center, 300 East Ocean Boulevard, Long Beach, California 90802; Call 703.536.7080 with questions.

December 4-6 Great Lakes Fruit, Vegetable and Farm Market EXPO, Devos Place Conference Center; Grand Rapids, MI 49503; Registration starts 9/2018; Contact Maureen Kelly for registration questions 734-239-8027.

REGULARLY SCHEDULED MEETINGS

✓ Indicates meeting will be held at RCE of Cumberland County

<p>✓</p> <p>Pesticide Certification Exam Schedule—Cumberland County 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn & Carmel)</p> <p><u>2018</u></p> <p>Sep 20 Oct 18</p> <p>To Register call 609-984-6614 For directions call 856-451-2800 *****</p>	<p>Cumberland County Agriculture Development Board County Administration Bldg. Freeholder Room 164 W. Broad Street Bridgeton, NJ 08332</p> <p><u>2018</u></p> <p>Jul 10 Aug 14 Sept 11 Oct 9 Nov 13 Dec 11</p> <p>Reg. Meetings start at 7 p.m. Information call 856-453-2211 *****</p>	<p>✓</p> <p>Cumberland County Board Of Agriculture 291 Morton Avenue Millville, NJ 08332 (Between Rosenhayn & Carmel) 7 pm meetings</p> <p><u>2018</u></p> <p>Sept 20 Oct 18 Nov 15 Dec 20</p> <p>For info call Hillary Barile, President 856-453-1192 *****</p>
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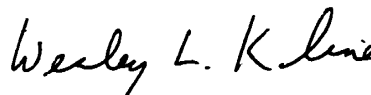
**Cumberland County Improvement Authority (CCIA)
Pesticide Container Recycling**
9:00 a.m. to 12 Noon
Cumberland County Solid Waste Complex
169 Jesse's Bridge Rd. (located off Route 55 Exit 29)
Deerfield Township, New Jersey
Questions? Call Division of Ag & Natural Resources, NJ Dept. of Ag 609-292-2242

Program in Cumberland County suspended until further notice.

Sincerely,



Salvatore S. Mangiafico, Ph.D.
County Agent II/Associate Professor
Environmental & Resource Management
Internet: Mangiafico@njaes.rutgers.edu



Wesley L. Kline, Ph.D.
County Agent II/Associate Professor
Vegetable & Herb Production
Internet: wkline@njaes.rutgers.edu

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The user is responsible for the proper use of pesticides, residues on crops, storage and disposal, as well as damages caused by drift.

Use of Trade Names: Trade names are used in this publication with the understanding that no discrimination is intended and no endorsement is implied. In some instances the compound may be sold un-

Protecting Workers from the Effects of Heat

At times, workers may be required to work in hot environments for long periods. When the human body is unable to maintain a normal temperature, heat illnesses can occur and may result in death. It is also important to consider that hot work environments may exist indoors. This fact sheet provides information to employers on measures they should take to prevent worker illnesses and death caused by heat stress.

What is Heat Illness?

The following are illnesses that may result from exposure to heat in the workplace.

Heat Stroke is the most serious heat-related health problem. Heat stroke occurs when the body's temperature regulating system fails and body temperature rises to critical levels (greater than 104°F). **This is a medical emergency that may result in death!** The signs of heat stroke are confusion, loss of consciousness, and seizures. Workers experiencing heat stroke have a very high body temperature and may stop sweating. If a worker shows

Occupational Factors that May Contribute to Heat Illness

- High temperature and humidity
- Low fluid consumption
- Direct sun exposure (with no shade) or extreme heat
- Limited air movement (no breeze or wind)
- Physical exertion
- Use of bulky protective clothing and equipment

signs of possible heat stroke, **get medical help immediately**, and call 911. Until medical help arrives, move the worker to a shady, cool area and remove as much clothing as possible. Wet the worker with cool water and circulate the air to speed cooling. Place cold wet cloths, wet towels or ice all over the body or soak the worker's clothing with cold water.

Heat Exhaustion is the next most serious heat-related health problem. The signs and symptoms of heat exhaustion are headache, nausea, dizziness, weakness, irritability, confusion, thirst, heavy sweating and a body temperature greater than 100.4°F. Workers with heat exhaustion should be removed from the hot area and given liquids to drink.

Cool the worker with cold compresses to the head, neck, and face or have the worker wash his or her head, face and neck with cold water. Encourage frequent sips of cool water. Workers with signs or symptoms of heat exhaustion should be taken to a clinic or emergency room for medical evaluation and treatment. Make sure that someone stays with the worker until help arrives. If symptoms worsen, call 911 and get help immediately.

Heat Cramps are muscle pains usually caused by the loss of body salts and fluid during sweating. Workers with heat cramps should replace fluid loss by drinking water and/or carbohydrate-electrolyte replacement liquids (e.g., sports drinks) every 15 to 20 minutes.

Heat Rash is the most common problem in hot work environments. Heat rash is caused by sweating and looks like a red cluster of pimples or small blisters. Heat rash may appear on the neck, upper chest, groin, under the breasts and elbow creases. The best treatment for heat rash is to provide a cooler, less humid work environment. The rash area should be kept dry. Powder may be applied to increase comfort. Ointments and creams should **not** be used on a heat rash. Anything that makes the skin warm or moist may make the rash worse.

Prevention Made Simple: Program Elements

Heat Illness Prevention Program key elements include:

- A Person Designated to Oversee the Heat Illness Prevention Program
- Hazard Identification
- Water. Rest. Shade Message
- Acclimatization
- Modified Work Schedules
- Training
- Monitoring for Signs and Symptoms
- Emergency Planning and Response

Designate a Person to Oversee the Heat Stress Program

Identify someone trained in the hazards, physiological responses to heat, and controls. This person can develop, implement and manage the program.

Hazard Identification

Hazard identification involves recognizing heat hazards and the risk of heat illness due to high temperature, humidity, sun and other thermal exposures, work demands, clothing or PPE and personal risk factors.

Identification tools include: OSHA's Heat [Smartphone App](#); a Wet Bulb Globe Thermometer (WBGT) which is a measure of heat stress in direct sunlight that takes into account temperature, humidity, wind speed, sun and cloud cover; and the National Weather Service [Heat Index](#). Exposure to full sun can increase heat index values up to 15°F.

Water.Rest.Shade

Ensure that cool drinking water is available and easily accessible. (Note: Certain beverages, such as caffeine and alcohol can lead to dehydration.)

Encourage workers to drink a liter of water over one hour, which is about one cup every fifteen minutes.

Provide or ensure that fully shaded or air-conditioned areas are available for resting and cooling down.

Acclimatization

Acclimatization is a physical change that allows the body to build tolerance to working in the heat. It occurs by gradually increasing workloads and exposure and taking frequent breaks for water and rest in the shade. Full acclimatization may take up to 14 days or longer depending on factors relating to the individual, such as increased risk of heat illness due to certain medications or medical conditions, or the environment.

New workers and those returning from a prolonged absence should begin with 20% of the workload on the first day, increasing incrementally by no more than 20% each subsequent day.

During a rapid change leading to excessively hot weather or conditions such as a heat wave, even experienced workers should begin on the first day of work in excessive heat with 50% of the normal workload and time spent in the hot environment, 60% on the second day, 80% on day three, and 100% on the fourth day.

Modified Work Schedules

Altering work schedules may reduce workers' exposure to heat. For instance:

- Reschedule all non-essential outdoor work for days with a reduced heat index.
- Schedule the more physically demanding work during the cooler times of day;
- Schedule less physically demanding work during warmer times of the day;
- Rotate workers and split shifts, and/or add extra workers.
- Work/Rest cycles, using established industry guidelines.
- Stop work if essential control methods are inadequate or unavailable when the risk of heat illness is very high.

Keep in mind that very early starting times may result in increased fatigue. Also, early morning hours tend to have higher humidity levels.

Training

Provide training in a language and manner workers understand, including information on health effects of heat, the symptoms of heat illness, how and when to respond to symptoms, and how to prevent heat illness.

Monitoring for Heat Illness Symptoms

Establish a system to monitor and report the signs and symptoms listed on the previous page to improve early detection and action. Using a buddy system will assist supervisors when watching for signs of heat illness.

Emergency Planning and Response

Have an emergency plan in place and communicate it to supervisors and workers. Emergency plan considerations include:

- What to do when someone is showing signs of heat illness. This can make the difference between life and death.
- How to contact emergency help.
- How long it will take for emergency help to arrive and training workers on appropriate first-aid measures until help arrives.
- Consider seeking advice from a healthcare professional in preparing a plan.

Engineering Controls Specific to Indoor Workplaces

Indoor workplaces may be cooled by using air conditioning or increased ventilation, assuming that cooler air is available from the outside. Other methods to reduce indoor temperature include: providing reflective shields to redirect radiant heat, insulating hot surfaces, and decreasing water vapor pressure, e.g., by sealing steam leaks and keeping floors dry. The use of fans to increase the air speed over the worker will improve heat exchange between the skin surface and the air, unless the air temperature is higher than the skin temperature. However, increasing air speeds above 300 ft. per min. may actually have a warming effect. Industrial hygiene personnel can assess the degree of heat stress caused by the work environment and make recommendations for reducing heat exposure.

Additional information

For more information on this and other issues affecting workers or heat stress, visit: www.osha.gov/heat; www.cdc.gov/niosh/topics/heatstress; and www.noaa.gov/features/earthhobs_0508/heat.html.

Workers have the right to working conditions that do not pose a risk of serious harm, to receive information and training about workplace hazards and how to prevent them, and to file a complaint with OSHA to inspect their workplace without fear of retaliation.

For more information about workers' rights, see OSHA's workers page at www.osha.gov/workers.html.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.

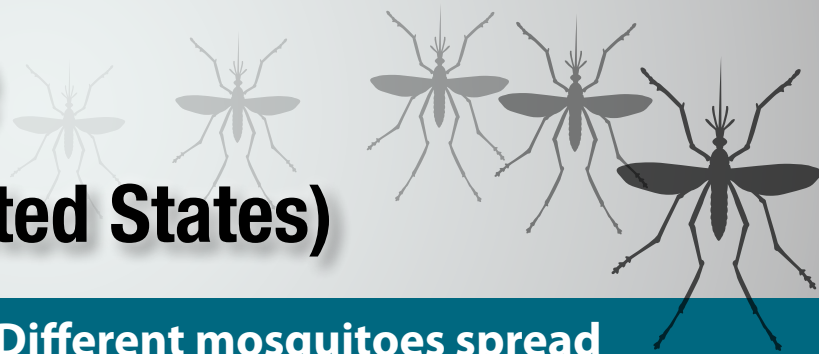


www.osha.gov (800) 321-OSHA (6742)





U.S. Department of Labor

Mosquito Bite Prevention (United States)



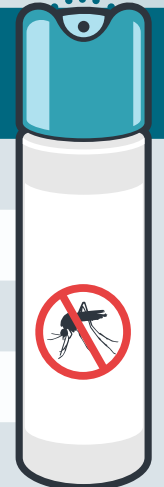
Not all mosquitoes are the same. Different mosquitoes spread different viruses and bite at different times of the day.

Type of Mosquito	Viruses spread	Biting habits
 <p><i>Aedes aegypti</i>, <i>Aedes albopictus</i></p>	<p>Chikungunya, Dengue, Zika</p>	<p>Primarily daytime, but can also bite at night</p>
 <p><i>Culex</i> species</p>	<p>West Nile</p>	<p>Evening to morning</p>

Protect yourself and your family from mosquito bites

Use insect repellent

Use an Environmental Protection Agency (EPA)-registered insect repellent with one of the following active ingredients. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.

Active ingredient	
Higher percentages of active ingredient provide longer protection	 <p>Find the insect repellent that's right for you by using EPA's search tool*.</p>
DEET	
Picaridin (known as KBR 3023 and icaridin outside the US)	
IR3535	
Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD)	
2-undecanone	

* The EPA's search tool is available at: www.epa.gov/insect-repellents/find-insect-repellent-right-you



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Protect yourself and your family from mosquito bites *(continued)*



- ◆ Always follow the product label instructions.
- ◆ Reapply insect repellent every few hours, depending on which product and strength you choose.
 - » Do not spray repellent on the skin under clothing.
 - » If you are also using sunscreen, apply sunscreen first and insect repellent second.

Natural insect repellents (repellents not registered with EPA)

- ◆ The effectiveness of non-EPA registered insect repellents, including some natural repellents, is not known.
- ◆ To protect yourself against diseases like chikungunya, dengue, and Zika, CDC and EPA recommend using an EPA-registered insect repellent.
- ◆ When used as directed, EPA-registered insect repellents are proven safe and effective. For more information: www2.epa.gov/insect-repellents

If you have a baby or child



- ◆ Always follow instructions when applying insect repellent to children.
- ◆ Do not use insect repellent on babies younger than 2 months of age.
- ◆ Dress your child in clothing that covers arms and legs, or
 - ◆ Cover crib, stroller, and baby carrier with mosquito netting.
 - ◆ Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
 - » Adults: Spray insect repellent onto your hands and then apply to a child's face.
 - ◆ Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under 3 years of age.

Treat clothing and gear



- ◆ Treat items such as boots, pants, socks, and tents with permethrin or purchase permethrin-treated clothing and gear.
 - » Permethrin-treated clothing will protect you after multiple washings. See product information to find out how long the protection will last.
 - » If treating items yourself, follow the product instructions.
 - » Do not use permethrin products directly on skin.

Mosquito-proof your home



- ◆ Use screens on windows and doors. Repair holes in screens to keep mosquitoes outside.
- ◆ Use air conditioning when available.
- ◆ Keep mosquitoes from laying eggs in and near standing water.
 - » Once a week, empty and scrub, turn over, cover, or throw out items that hold water, such as tires, buckets, planters, toys, pools, birdbaths, flowerpots, or trash containers. Check inside and outside your home.

Have you visited the Cumberland County website for the Present and/or past issues of "Cultivating Cumberland"? It's a great resource for information and dates.....

<http://Cumberland.njaes.rutgers.edu/>

Public Notification and Non-discrimination Statement

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Cooperative Extension of Cumberland County



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