

# Farm Toxicology for Primary Care

## Recognition and Management of Pesticide Poisonings

Online Self-Paced Learning  
Available November 1, 2021 - August 31, 2024

### Course Description

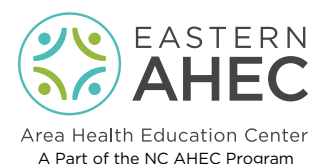
Agricultural workers and their families are exposed to pesticides used in agriculture today. These chemicals enable farmers to deliver higher yields to meet the growing demand for food worldwide. However, they also have varied toxicity – both acute and chronic.

This online self-paced course focuses on the recognition and management of pesticide poisonings, including critical information sources and the long-term consequences of pesticide exposure. Insecticides, herbicides, rodenticides, fungicides, and poisonous gases are explored through cases, mechanisms of toxicity, acute and chronic clinical effects, differential diagnosis, and management. Emphasis is placed on the importance of the occupational and environmental history.

### Who Should Participate

Physicians, physician assistants, nurse practitioners, and nurses practicing in primary care.

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*Jointly Provided by:*  
The Brody School of Medicine at East Carolina University  
North Carolina Agromedicine Institute  
Eastern Area Health Education Center

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## Recognition and Management of Pesticide Poisonings

### Learning Objectives

Upon completion of this knowledge-based educational activity, participants should have greater knowledge and understanding of strategies to recognize and manage pesticide poisoning in primary care.

- Describe the importance of pesticide use to US agriculture
- Identify barriers to the recognition and management of pesticide poisonings
- Apply concepts & strategies learned to take an occupational & environmental history, use differential diagnosis techniques to identify, evaluate and treat acute and chronic pesticide poisonings
- Utilize resources available to gain insight into specific poisonings
- Describe different classes of pesticides and associated toxicity, physical findings, differential diagnosis, laboratory tests, and treatments

### Course Modules

#### Module 1

##### Introduction to Farm Toxicology

**William J. Meggs, MD, PhD, FACMT, FACEP**

Professor, Division of Toxicology  
Department of Emergency Medicine  
Brody School of Medicine at East Carolina University

#### Module 2

##### Critical Information Sources

**William J. Meggs, MD, PhD, FACMT, FACEP**

Professor, Division of Toxicology  
Department of Emergency Medicine  
Brody School of Medicine at East Carolina University

#### Module 3

##### Cholinergic Agents and Organochlorines

**Dalia Alwasiyah, MD**

Emergency Medicine Consultant  
Medical Toxicology Consultant

#### Module 4

##### Pyrethroids, Nicotine & Neonicotinoids

**Jason B. Hack, MD, FACEP, FACMT**

Professor of Emergency Medicine  
Chief, Division of Medical Toxicology  
Brody School of Medicine at East Carolina University

#### Module 5

##### Herbicides

**Stephanie T. Weiss, MD, PhD**

Senior Addiction Medicine Research Fellow  
Wake Forest School of Medicine

#### Module 6

##### Rodenticides

**Ricky Langley MD, MPH**

Adjunct Associate Professor  
Department of Public Health  
East Carolina University

#### Module 6

##### Fungicides

**H. Thomas Cusick III, MD**

Occupational and Environmental Medicine Resident  
Duke University

#### Module 7

##### Poisonous Gases

**Jennifer Parker Cote, MD**

Assistant Professor, Department of Emergency Medicine  
Division of Medical Toxicology  
Brody School of Medicine at East Carolina University

#### Module 8

##### Long Term Consequences of Pesticide Exposures

**Gayle Thomas, MD**

Medical Director, NC Farmworker Health Program  
Associate Professor, Department of Family Medicine  
UNC School of Medicine

# Farm Toxicology for Primary Care

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### Credit

#### Physicians

Accreditation: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Brody School of Medicine at East Carolina University, North Carolina Agromedicine Institute, and Eastern Area Health Education Center. The Brody School of Medicine at East Carolina University is accredited by the ACCME to provide continuing medical education for physicians.

Credit: The Brody School of Medicine at East Carolina University designates this enduring material for a maximum of 4.5 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### CME for Physician Assistants

AAPA accepts certificate of participation for educational activities certified for *AMA PRA Category 1 Credit(s)*<sup>™</sup> from organizations accredited by ACCME or a recognized state medical society. Physician Assistants may receive a maximum of 4.5 hours of Category 1 credit for completing this program.

#### Nurses:

4.5 Nursing Contact Hours

Eastern AHEC Department of Nursing & Allied Health is approved as a provider of nursing continuing professional development by the North Carolina Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

#### Other Professionals

All other participants will receive 4.5 Eastern AHEC Contact Hours.

### Registration

Registration is online only at [www.easternahec.net](http://www.easternahec.net) and requires a current MyAHEC account.

### Fee

There is no fee for this online self-paced course.

### Cancellation Policy

Cancellations must be in writing ([easternahec@ecu.edu](mailto:easternahec@ecu.edu)).

### Handouts and Evaluations

Handouts will be available online only. Evaluations will be emailed after completion of the course. Once the evaluation has been completed, your certificate will be available.

### Americans with Disabilities Act

Individuals requesting accommodation under the Americans with Disabilities Act (ADA) should contact Eastern AHEC [easternahec@ecu.edu](mailto:easternahec@ecu.edu) or call the Eastern AHEC Help Desk 252.744.5210.



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For more information, contact Ikisha Brothers at 252.335.4399 or [brothersi16@ecu.edu](mailto:brothersi16@ecu.edu).

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