

MODULE 2 LESSON 2

Preparedness

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PREPAREDNESS

Agenda

Introduction

Topic 1: Components of Preparedness

Topic 2: Preparedness Activities

Summary

INTRODUCTION

Background

PPQ and plant health incidents

- ⦿ Preparing for the possibility
- ⦿ Planning and testing its capabilities well in advance

INTRODUCTION

Scope

Upon completion of this lesson, you will be able to:

- ◉ Recognize key components of APHIS preparedness efforts to respond to threats of agriculture
- ◉ Cite activities that build and refine PPQs capacity to support emergency response to pest detections

PROGRESS REPORT

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COMPONENTS OF PREPAREDNESS

Planning

Readily available publications for use during an emergency response include:

- Pest Response Guidelines
 - Guide for developing local survey or control programs for pests
- Mobilization Guide
 - Outlines how personnel will be deployed in an emergency



COMPONENTS OF PREPAREDNESS

Incident Command System (ICS) exercises

PPQ conducts a series of ICS exercises yearly to prepare for actual emergencies. These exercises consist of:

- ◉ Workshops
- ◉ Tabletop Exercises
- ◉ Drills
- ◉ Functional Exercises
- ◉ Full Scale Exercises



COMPONENTS OF PREPAREDNESS

Training and Qualifications

Emergency Qualifications System (EQS)

APHIS record keeping system to:

- Store the skills and qualifications of emergency response personnel
- Ensure only qualified personnel are assigned to duties at an emergency incident

COMPONENTS OF PREPAREDNESS

Training and Qualifications

Emergency Qualifications System (EQS)

Training for PPQ personnel includes:

- ⦿ Initial training on incident command system response principles
- ⦿ Ongoing training on current concepts and procedures

COMPONENTS OF PREPAREDNESS

Equipment and Supply Standards

Resource Ordering and Status System (ROSS)

- ① Identify and track needed resources to support emergency response
- ① Provide a database of qualified emergency response personnel

COMPONENTS OF PREPAREDNESS

Mutual Aid

- ⦿ Published mutual aid agreements
 - Formal agreement of mutual aid between PPQ and other organizations
 - Necessary for understanding the roles of each responding agency and what resources they will provide

COMPONENTS OF PREPAREDNESS

Funding

The availability of sufficient funds is necessary for PPQ to:

- ◉ React immediately to pest outbreaks
- ◉ Support state and national efforts to improve pest detection and mitigation activities
 - Procure traps and lures
 - Develop new technologies for early detection and effective response
 - Train personnel and dog teams

COMPONENTS OF PREPAREDNESS

Communication

Surveyors, diagnosticians, state and federal regularly officials need:

- ⦿ Rapid, reliable and secure communications
- ⦿ Information that flows efficiently through a commonly accepted architecture at all levels of government



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PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Plant Diagnostic Network (NPDN)

National communication system linking diagnostic facilities across the country that provide services for:

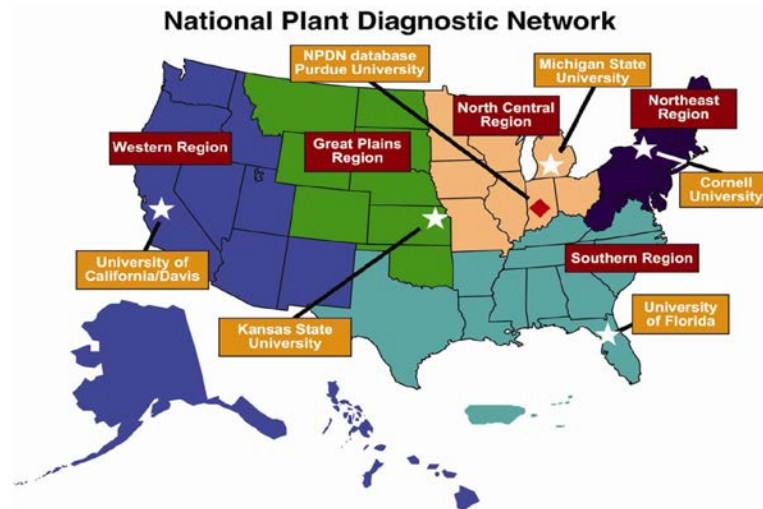
- ⦿ Plant disease diagnosis
- ⦿ Plant identification
- ⦿ Insect/pest identification

PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Plant Diagnostic Network (NPDN)

- Consist of five regional diagnostic networks
- Serves as hubs for land grant institutions and state departments of agriculture



PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Plant Diagnostic Network (NPDN)

- ① Establish an effective communication network of regional expertise
- ① Develop harmonized diagnostic and reporting protocols
- ① Catalog pest and disease occurrences in National Agricultural Pest Information database (NAPIS)
- ① Enhance communication among agencies and stakeholders responsible for responding to and mitigating new outbreaks

PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identifications

National Identification Services (NIS)

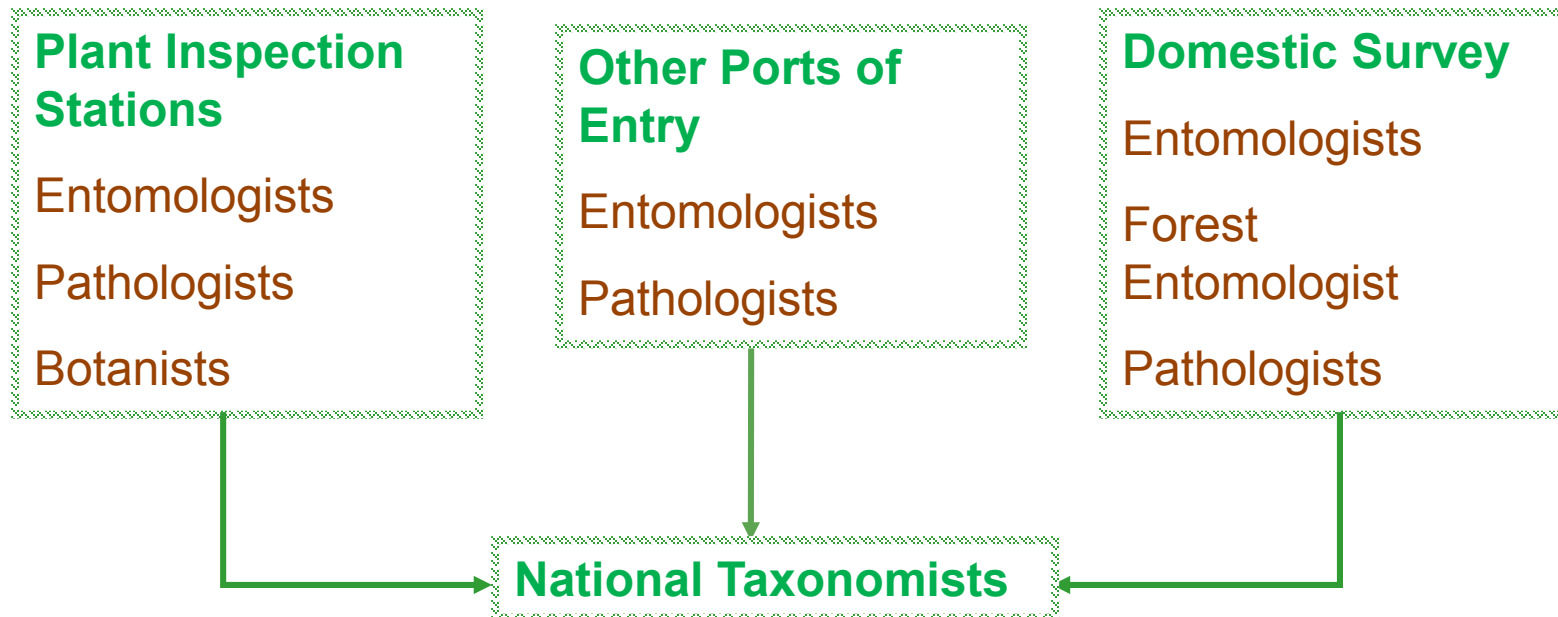
- ◎ PPQ is responsible for communicating presumptive and confirmatory pest identifications to internal and external parties
- ◎ Timely notification of a new plant pest, disease, or noxious weed identification is critical to limiting the impact of plant pest detections

PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Identification Services (NIS)

- Coordinate identification of plant pests of USDA's regulatory programs



PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Identification Services (NIS)

- Collaborate with scientists stationed at:
 - Federal research laboratories
 - Land grant universities
 - State departments of agriculture
 - Independent institutions



PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Identification Services (NIS)

- ◉ Supports the use of alternative diagnostic methods
 - Molecular Diagnostics Laboratory
 - Provide final identifications of targeted quarantine pests using molecular and biochemical tests

PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

National Identification Services (NIS)

- Supports the use of digital imaging technology
 - Remote Pest Identification Program
 - Use of digital imaging technology to capture detailed images of suspected pests
 - Electronically transmitted to qualified specialists for identification



PREPAREDNESS ACTIVITIES

Timely and Accurate Diagnostics and Identification

Center for Plant Health Science and Technology(CPHST)

- Develop, adapt and validate molecular and other diagnostic tools and methods to detect and identify quarantine plant pests and pathogens
 - Practical
 - Robust
 - Easy to use

PREPAREDNESS ACTIVITIES

Timely and Accurate
Diagnostics and
Identification

CPHST strengthens
partnerships with
academic institutions,
state, federal,
international entities,
and industries to ensure
diagnostic methods are
accurate and current.



PREPAREDNESS ACTIVITIES

Timely and Appropriate Survey Methods

Center for Plant Health Science and Technology(CPHST)

- ◉ Develop new survey technology and tools
- ◉ Coordinate with PPQ operations to ensure survey techniques are practical, feasible, and user friendly
- ◉ Provide advanced data analysis techniques, including geographic information system (GIS) spatial analysis, modeling, and other techniques

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SUMMARY

In this lesson, you learned the:

- ① Components of APHIS preparedness efforts to respond to threats of agriculture
- ① Activities that build and refine PPQs capacity to support emergency response to pest detections

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REFERENCES

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