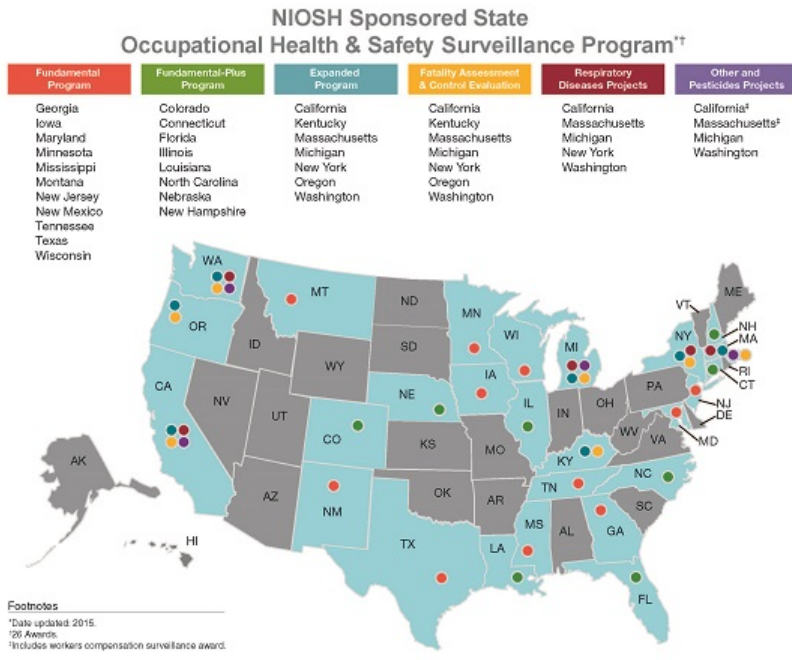


NIOSH Surveillance Program Overview

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Surveillance

Definition:

- ongoing, systematic collection, analysis, and interpretation of health data,
- essential to the planning, implementation and evaluation of public health practice,
- closely integrated with the dissemination of these data to those who need to know and linked to prevention and control

(Thacker, 2000)

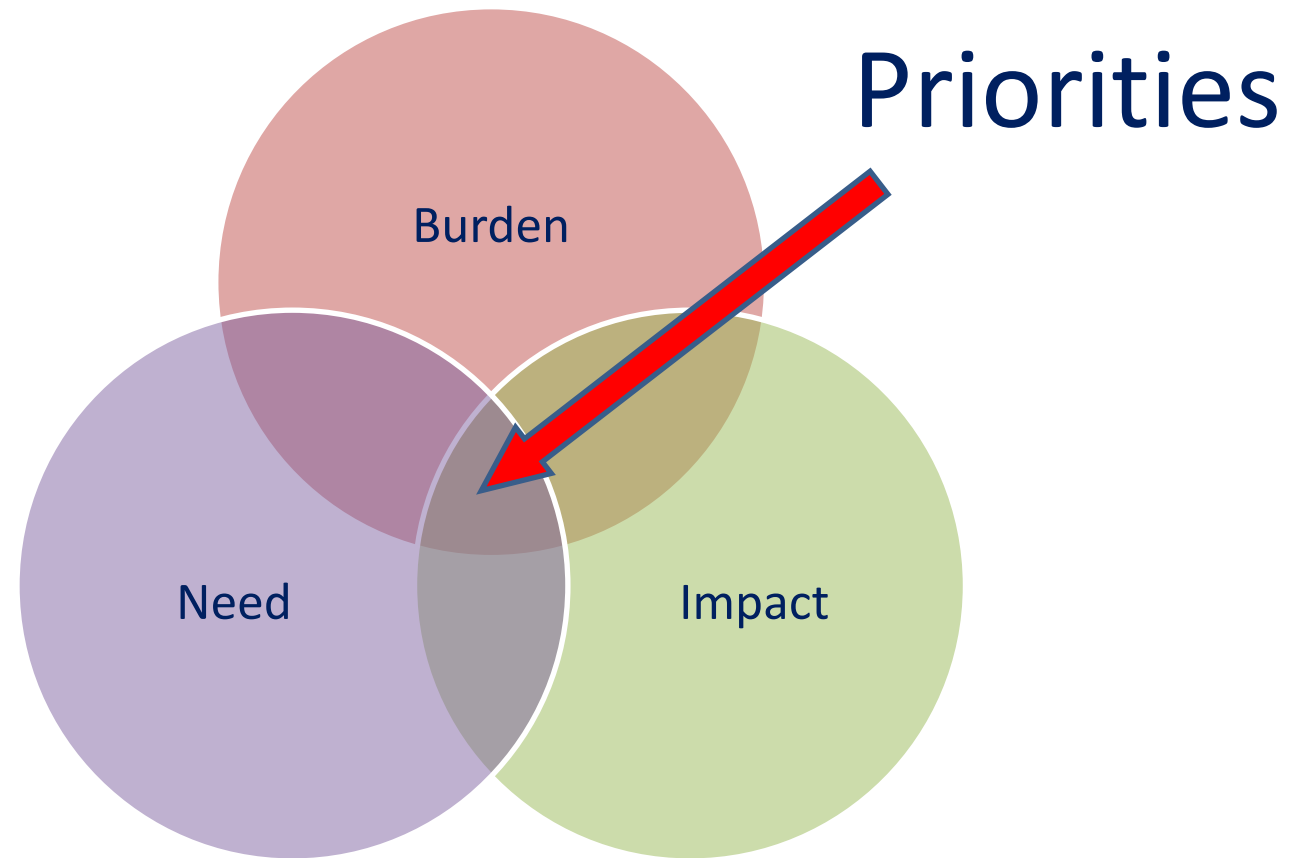
Overview

- How surveillance fits within the NIOSH portfolio
- Challenges in occupational health surveillance
- Current strategies

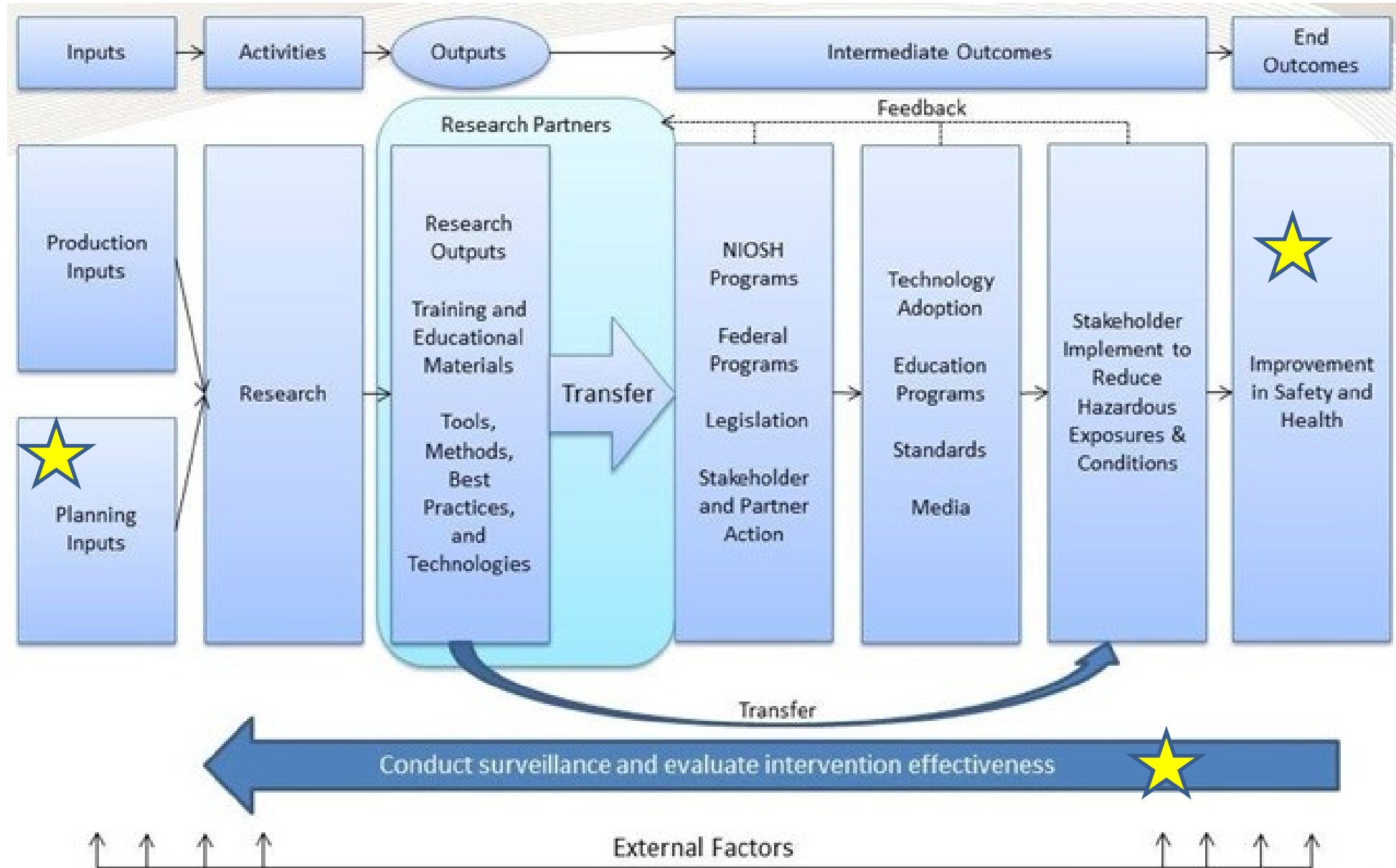
What does the NIOSH Surveillance Program do?

- Analyze & interpret existing data
- Collect data to fill gaps in surveillance data
- Fund & conduct surveillance research
- Provide support to states for surveillance & prevention efforts
- Work with Federal, State & private partners to improve OSH surveillance
- Communicate findings for prevention

Setting Priorities



NIOSH Logic Model



Challenges

- ❑ NIOSH mandated to protect health of all workers
- ❑ No single data source in US to capture injury and illness of individuals within the context of work
- ❑ Underreporting of injuries and illnesses
- ❑ Many health conditions occur after the worker has left work or retired
- ❑ Many health conditions occur during work but are not recognized as work-related
- ❑ Many public health surveillance systems have wealth of population-based health data but are missing information about work risk factors
- ❑ Even simple information about work is difficult to code
- ❑ Expectations for timely dissemination of information

Plan for NIOSH Surveillance Program

1. Leverage existing surveys and systems
2. Incorporate industry and occupation into existing surveys and data systems
3. Improve autocoders to expand available data
4. Build capacity in states
5. Accelerate communication for prevention

Plan for NIOSH Surveillance Program:

1. Leverage existing surveys and systems

- ❑ Why?
 - ❑ Large amount of health information as well as some information on work
 - ❑ Low cost to use existing data/systems
- ❑ Examples
 - BLS (CFOI and SOII)
 - Vital records (death and birth)
 - Birth defect registries
 - Workers compensation data
- ❑ Other approaches or methods?

Plan for NIOSH Surveillance Program:

2. Incorporate Industry & Occupation into Existing Surveys and Data Systems

Why?

- I&O shown to be a good surrogate workplace exposure, at a population level
- Less costly to add work-relevant data into existing systems than create new ones

Approach

- Incorporate I&O in data collections – through partnerships
 - CDCs Behavioral Risk Factor Surveillance System (BRFSS), (N=400K respondents)
 - Cancer Registries
 - CDC Notifiable disease case reports
 - Medical & Hospital Records (EHRs)
- Requires use of autocoders to achieve necessary scale

Value of this approach? Other ideas?

Plan for NIOSH Surveillance Program:

3. Improve autocoders to expand available data

- ❑ Why?
 - ❑ Makes uncoded data available for analysis
 - ❑ Faster and less expensive than manual coding
- ❑ Created tools (autocoders) to convert text into standard codes
 - ❑ NIOSH launched the NIOSH Industry and Occupation Computerized Coding System (NIOCCS) – publicly accessible, web based coding tool
<http://www.cdc.gov/niosh/topics/coding/overview.html>
 - ❑ NIOSH developed method for coding “cause of injury” text in WC medical records
- ❑ Method(s) to improve or expand autocoding?

Plan for NIOSH Surveillance Program:

4. Build State Capacity

- ❑ Why?
 - ❑ States are close to workplace
 - ❑ Can use state-specific data to identify regional issues and follow-up
 - ❑ Strength is intervention/education

- ❑ Build Capacity
 - ❑ Since 2005, number of NIOSH funded states increased from 15 to 26
 - ❑ Building capacity for states to work with state-specific WC data

- ❑ Encourage interventions

- ❑ What approaches can we find to maintain/expand this valuable component?

Plan for NIOSH Surveillance Program:

5. Accelerate communication for prevention

- ❑ Why?

- ❑ Encourage use of knowledge for prevention
- ❑ Expectation that information available quickly
- ❑ Expectation for individualized information

- ❑ Share surveillance documents with partners

- ❑ State Clearinghouse RSS feed

- ❑ Find ways to place data in a visual and interactive context to better understand the significance of data

- ❑ Ideas for sharing information with partners and public that meet federal standards but do not require de novo design

Summary

- Scope of the NIOSH mission and need is broad
- Current surveillance approach
 1. Leverage existing surveys and systems
 2. Incorporate I&O into existing surveys and data systems
 3. Improve autocoders
 4. Build capacity in states
 5. Accelerate communication for prevention
- Recommendations on **economical, sustainable, and coordinated** approach that meets the mission