



Friday, May 11, 2018

Block 7

9:45AM-10:30AM

# Utilizing Course Evaluations and Developing an Annual Post-Impact Survey to Provide Effective Trainings

# Presenters

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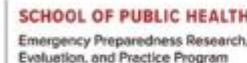
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# Biosafety and Infectious Disease Training Initiative (BIDTI)

## A National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP)

5UH4 ES027055 (Ebola Biosafety and Infectious Disease Response)

A Consortium Of:



Funded by:



National Institute of Environmental Health Sciences



# Objectives of Presentation

- 1) Provide an overview/refresher of program evaluation
- 2) Convey how evaluations are critical in the process of examining a program by allowing for the analyses of a program's activities and content
- 3) Demonstrate how evaluations provide information on potential areas in which a program's effectiveness can be improved and suggestions on how to keep the courses dynamic
- 4) Show an example of how BIDTI conducts evaluations using paper/electronic hybrid system



**Context**



# The What - Evaluation

“Evaluation is a process that critically examines a program. It involves **collecting and analyzing information** about a program’s activities, characteristics, and outcomes. Its purpose is to make judgments about a program, to **improve its effectiveness**, and/or to inform programming decisions...” - Patton (1987)

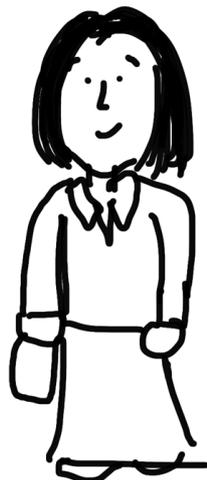
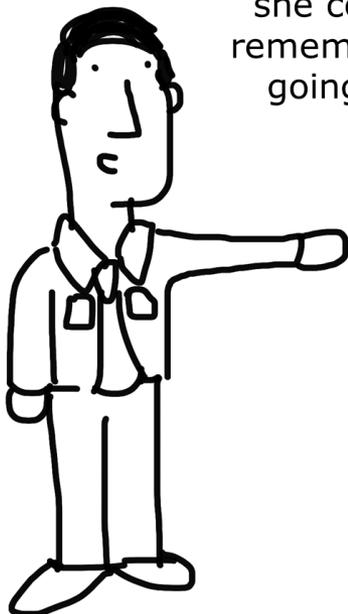


# The Why- Evaluation Matters

- Not only just because we have to!
- Improve program design
  - Periodically assess and adapt activities
- Improve implementation
- Refinement and constant feedback
- Demonstrate program impact
  - Show what you've accomplished



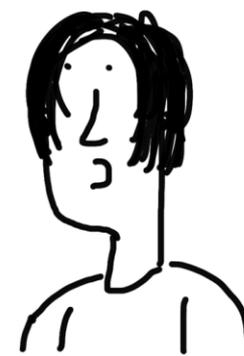
This is our evaluator. Every time she collects data it will help us remember what we said we were going to do in the first place.



[freshspectrum.com](http://freshspectrum.com)

You say your program works but why should I believe you?

Because I have evidence.

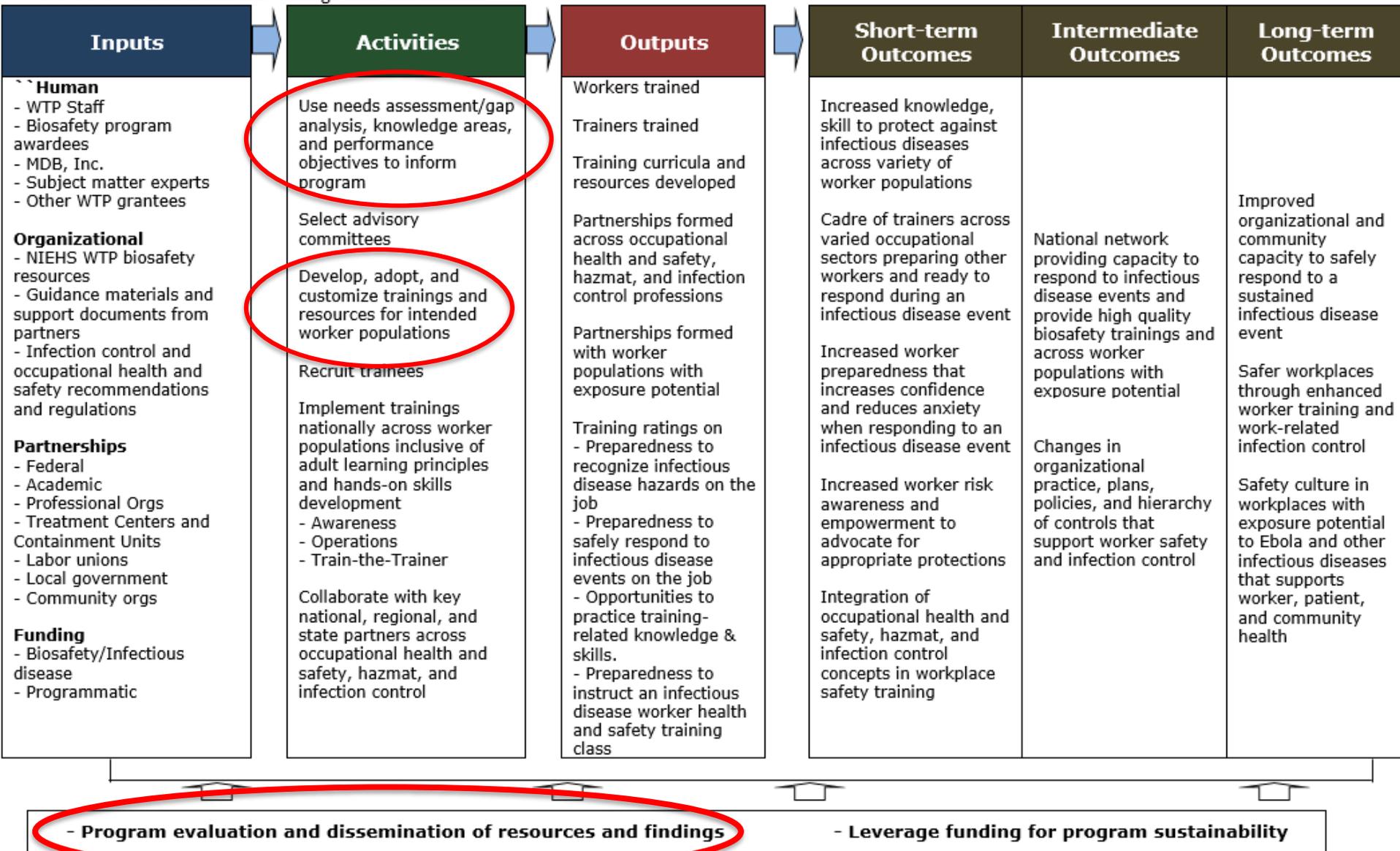


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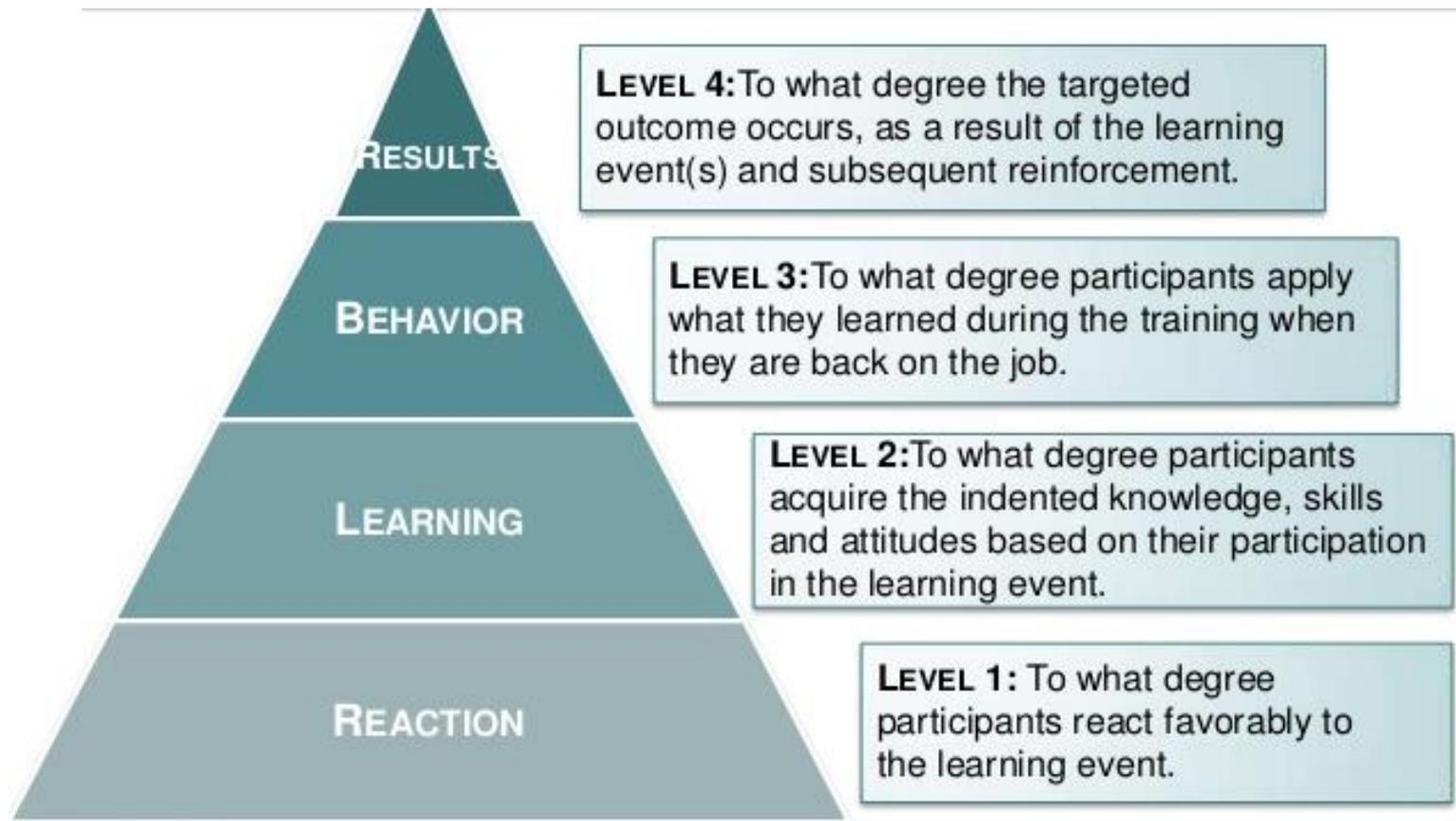


# Logic Model for the NIEHS Worker Training Program (WTP) Ebola Biosafety Training and Infectious Disease Response Initiative Last Updated: August 9, 2016

**Program Purpose:** Support the development, implementation, and dissemination of occupational safety and health and infection control worker training programs to prevent and reduce exposure of hospital employees, emergency responders, and other healthcare and non-healthcare workers who are at risk of exposure to Ebola virus and other infectious diseases through their work duties.



# Kirkpatrick's Levels of Evaluation



# WTP Evaluation

- Grantees implement own evaluations that fit context of their program
- Keeping in mind Minimum Health & Safety Training Criteria (Minimum Criteria Document)
- And also the common measures for evaluation
  - Frequently uses Likert-type scale questions
- WTP Evaluation historically grounded in Kirkpatrick 'Four Level' Model



# NIEHS All-Grantee Suggested Measures for IDR

## 1. Recommended Questions

### Participant Training Evaluation Post-Test (Upon Completion)

To what extent do you agree with the following statements?      Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

#### All Courses

- |  |                       |                       |
|--|-----------------------|-----------------------|
| 1) The training has prepared me to recognize infectious disease hazards on the job.        | <input type="radio"/> | <input type="radio"/> |
| 2) The training has prepared me to safely respond to infectious disease events on the job. | <input type="radio"/> | <input type="radio"/> |

#### Train-the-Trainer Courses

- |   |                       |                       |
|---|-----------------------|-----------------------|
| 3) I feel prepared to instruct an infectious disease worker health and safety training class. | <input type="radio"/> | <input type="radio"/> |
|---|-----------------------|-----------------------|

## 2. Other Optional Questions

### Participant Training Evaluation Post-Test (Upon Completion)

**Questions 4-6** could be used to assess pre-course knowledge during a post-test, if a pre- and post-test is not being used.  
**Questions 7-10** assess knowledge and skills gained from the course.  
**Question 11** assesses the hands-on nature of the training.

#### All Courses

Please rate your level of knowledge on the following topics <b>prior to</b> participating in this training:	Great deal of knowledge about the content	Fair amount of knowledge about the content	Limited knowledge about the content	No prior knowledge about the content	No opinion
4) Infectious disease exposure control plans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) Infectious disease prevention and control measures in my workplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) Appropriate choice of personal protective equipment (PPE) for use with potentially infectious materials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>(Add other content areas as applicable to your training)</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# **BIDTI-Specific Evaluations**

# Paper/Electronic Hybrid

1. Paper evaluations are distributed to trainees at the end of class to ensure completion and return
  - Reasons: Low accountability if given a link; issues with technology access in our populations
  - Trainers generally read their evals immediately after the course
2. Identical version of evaluations were made as Qualtrics surveys (that can be filled out multiple times)
  - Someone (my undergraduate assistant) enters in every evaluation form as the participants filled it out
  - One for each level: Community, Awareness and Operations
3. Easily generated reports for RPPR, Progress Reports & immediate feedback to us on what to improve



# Sample Paper Evaluation

## Biosafety and Infectious Disease Training Initiative (BIDTI)

A Consortium Of:



Funded by:



National Institute of Environmental Health Sciences

## Community-Level Training: Ebola and Infectious Diseases of Public Health Significance

February 23, 2018 | French Lick, IN

### Participant Training Evaluation Post-Test

- To what extent do you agree with the following statements? If it is not applicable or was not covered, please leave it blank.

All Courses	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The training has prepared me to recognize infectious disease hazards on the job.	✓				
2. The training has prepared me to safely respond to infectious disease events on the job.	✓				

- Please rate your knowledge gained on the following topics participating in this training. If it is not applicable or was not covered, please leave it blank.

All Courses	Gained great deal of knowledge about the content	Gained fair amount of knowledge about the content	Gained limited amount of knowledge about the content	Did not gain any knowledge about the content	No opinion
1. Infectious disease exposure control plans.	✓				
2. Infectious disease control measures in my workplace.	✓				

- Please rate your achievement of the learning objectives for this workshop. If it is not applicable or was not covered, please leave it blank.

Learning Objectives	Excellent	Very Good	Good	Fair	Poor
1. Explain the definition of an Infectious Disease of Public Health Significance (IDPHS)	✓				
2. Distinguish an IDPHS from other communicable diseases	✓				
3. Understand the importance of education on disease transmission and the environmental persistence of organisms	✓				
4. Understand key elements of the 2014-2015 Ebola outbreak in West Africa and lessons learned	✓				

Learning Objectives	Excellent	Very Good	Good	Fair	Poor
5. Recognize basic facts about Ebola Virus Disease and infectious disease transmission	✓				
6. Identify how workers in affected industries/how you might be exposed	✓				
7. Identify basic methods workers can implement to protect themselves from infectious disease scenarios					

- Please rate the presenter(s) competence and effectiveness.

Presenter	Excellent	Very Good	Good	Fair	Poor
Brandon Howell, EdD, MBA, CHIE	✓				
Aurora Le, MPH, CPH	✓				

- What new skill or idea will you implement into at your workplace over the next few months as a result of attending this educational event?

~~Don~~ After this presentation I'm more aware of my activities and surroundings in my environment

- Please rate your comfort level in sharing the information you learned today with your co-workers, family members or friends:

High  Moderately High  Fair  Moderately Low  Low

- Today's course was intended to provide you with an introduction to infectious diseases of public health significance. Are you interested in attending a more in-depth hands-on workshop?  Yes  No

- Please describe the elements you would include in the perfect one-hour community level course.

no opinion

- Did you perceive any conflict of interest (i.e., commercial support, product endorsement, or unannounced off-label product use) during the presentation?  Yes  No  Don't know/undecided  
Please describe:

- Would you like to share anything else?

no, thank you

# Qualtrics Form

1.1.

**NIEHS Participant Training Evaluation Post-Test: To what extent do you agree with the following statements?**

The training has prepared me to recognize infectious disease hazards on the job.

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
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1.2. The training has prepared me to safely respond to infectious disease events on the job.

Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
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**2.1. NIEHS Participant Training Evaluation Post-Test: To what extent do you agree with the following statements?**

Gained great deal of knowledge about the content
Gained fair amount of knowledge about the content
Gained limited amount of knowledge about the content
Did not gain any knowledge about the content
No opinion

3.1.

**Please rate your achievement of the learning objectives for this workshop.**

Explain the definition of an Infectious Disease of Public Health Significance (IDPHS)

Excellent	Very Good	Good	Fair	Poor
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3.2. Distinguish an IDPHS from other communicable diseases

Excellent	Very Good	Good	Fair	Poor
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3.3. Understand the importance of education on disease transmission and the environmental persistence of organisms

Excellent	Very Good	Good	Fair	Poor
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3.4. Understand key elements of the 2014-2015 Ebola outbreak in West Africa and lessons learned

Excellent	Very good	Good	Fair	Poor
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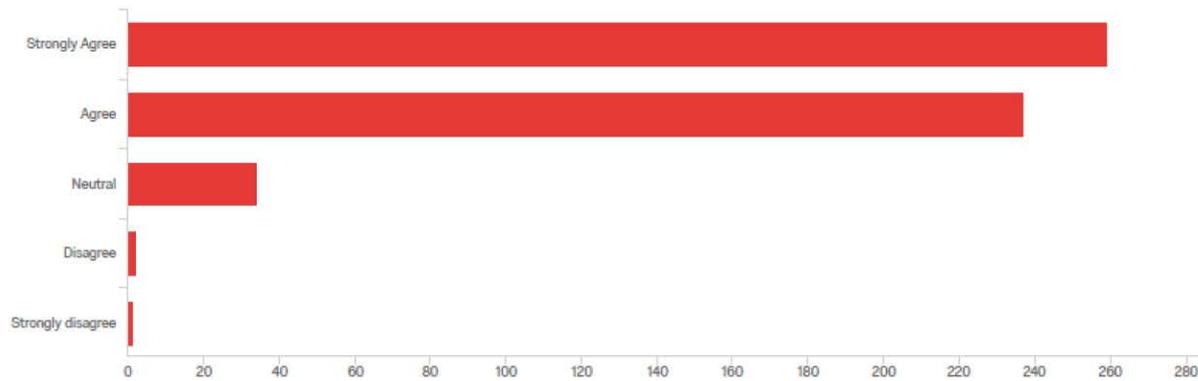
3.5. Recognize basic facts about Ebola Virus Disease and infectious disease transmission.

Excellent	Very Good	Good	Fair	Poor
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# Sample Report

1.1 - NIEHS Participant Training Evaluation Post-Test: To what extent do you agree with the following statements? The training has prepared me to recognize infectious disease hazards on the job.



#	Field	Choice Count
1	Strongly Agree	48.59% 259
2	Agree	44.47% 237
3	Neutral	6.38% 34
4	Disagree	0.38% 2
5	Strongly disagree	0.19% 1

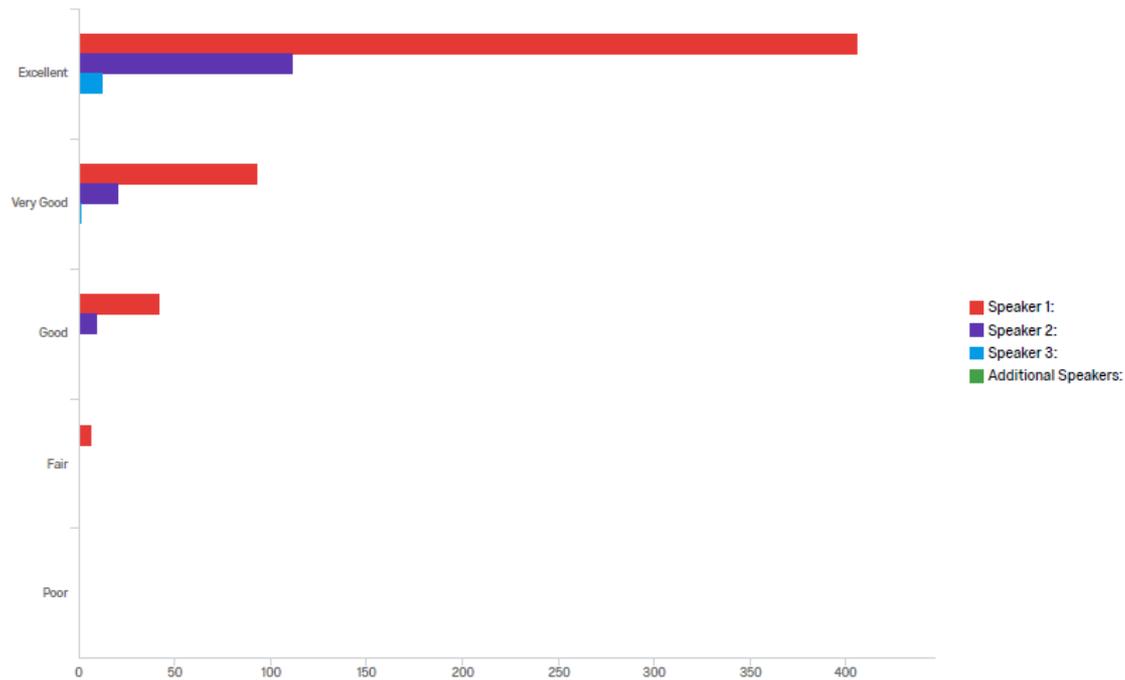
533

Showing Rows: 1 - 6 Of 6



# Sample Report 2

4 - Please rate the presenter(s) competence and effectiveness.



#	Field	Excellent	Very Good	Good	Fair	Poor	Total
1	Speaker 1:	74.22% 406	17.00% 93	7.68% 42	1.10% 6	0.00% 0	547
2	Speaker 2:	79.29% 111	14.29% 20	6.43% 9	0.00% 0	0.00% 0	140
3	Speaker 3:	92.31% 12	7.69% 1	0.00% 0	0.00% 0	0.00% 0	13
4	Additional Speakers:	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0



# Sample Report 3

5 - What new skill or idea will you implement in your workplace over the next few months as a result of attending this educational event?

I will make sure to make people aware on the correct way to cough

Encouraging basic hygiene to prevent these diseases

Proper hand hygiene

Washing my hands

Ways to reduce possibility of exposure to bacteria

PPE

Administrative controls

Wear PPE



# Post-Impact Survey

- Administered at the end of each year to trainees (only electronic from collected email addresses)
- Over time, want to determine behavior changes on Kirkpatrick model
- Short, 10 questions, anonymous
- Utilizes some NIEHS guiding questions
- Will look for comparisons over time (3 years of program)



1.  
Overall, the BIDTI course I attended was worth my time.

Strongly Agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

2.  
How would you rate the BIDTI course in its overall usefulness to your workplace?

Excellent

Very Good

Good

Fair

Poor

7.  
Has the BIDTI course influenced your hand hygiene and personal hygiene practices?

Yes

No

8.  
In what ways has the BIDTI training resulted in changes at your workplace and/or the way you work? Please select all that apply:

Change in how you use Personal Protective Equipment (PPE)

Changed the work environment to make it safer

Created or updated an exposure control plan

Shared knowledge or skills with coworkers or supervisors

Purchased new equipment or PPE

Reached out to others outside your direct field of work

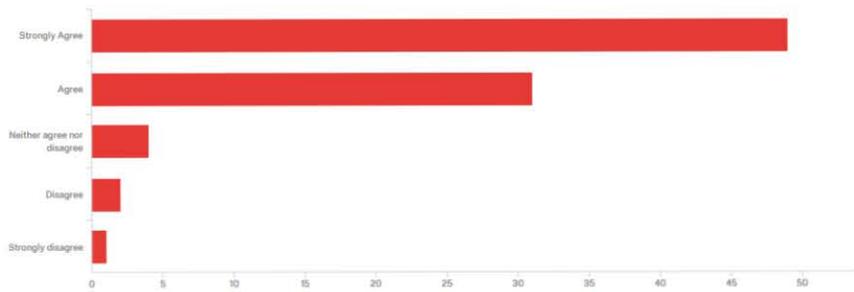
Changed a policy or procedure

Other. Please explain.



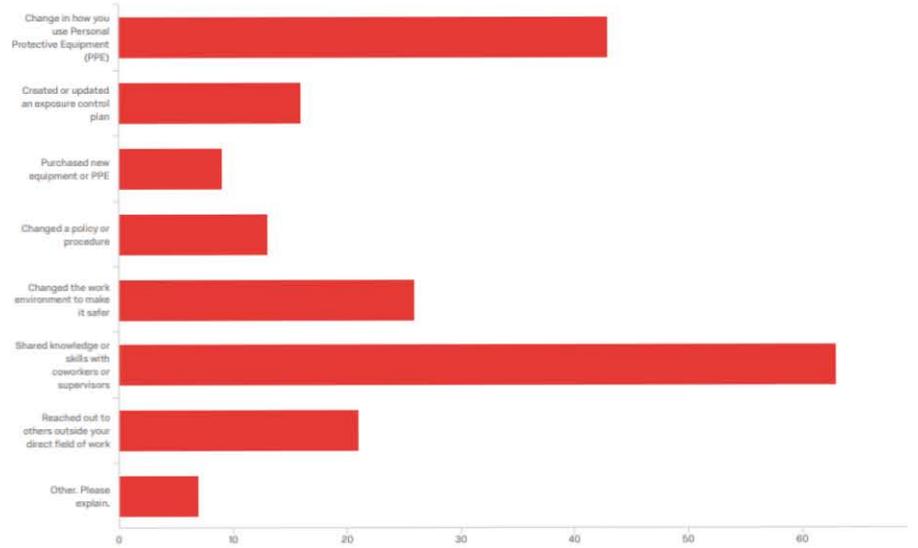
# Post Impact Survey Results

1 - Overall, the BIDTI course I attended was worth my time.



#	Field	Choice Count
1	Strongly Agree	56.32% 49
2	Agree	35.63% 31
3	Neither agree nor disagree	4.60% 4
4	Disagree	2.30% 2
5	Strongly disagree	1.15% 1

8 - In what ways has the BIDTI training resulted in changes at your workplace and/or the way you work? Please select all that apply:



#	Field	Choice Count
1	Change in how you use Personal Protective Equipment (PPE)	21.72% 43
2	Created or updated an exposure control plan	8.08% 16
3	Purchased new equipment or PPE	4.55% 9
4	Changed a policy or procedure	6.57% 13
5	Changed the work environment to make it safer	13.13% 26
6	Shared knowledge or skills with coworkers or supervisors	31.82% 63
7	Reached out to others outside your direct field of work	10.61% 21
8	Other. Please explain.	3.54% 7



**Thank you!**

**Questions?  
(15 minutes)**

**Please take 2-3 minutes to fill out your evaluations.**



# References

1. Patton, M. Q. (1987). *How to use qualitative methods in evaluation*, 4<sup>th</sup> Ed.. Boston, MA: Sage Publications.
2. My Environmental Education Evaluation Resource Assistant (MEERA). (2018). University of Michigan. Retrieved from <http://meera.snre.umich.edu/evaluation-what-it-and-why-do-it>
3. Kirkpatrick's Levels of Evaluation. (2016). *E-learning Infographics*. Retrieved from <https://elearninginfographics.com/kirkpatrick-levels-evaluation-infographic/>

