

VIRTUAL TRAINING INITIATIVE FOR
PROTECTING YOURSELF FROM
COVID-19 IN THE WORKPLACE

EVALUATION & OUTCOMES

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BACKGROUND

NIEHS uses a virtual training approach

The training tool online
March 22, 2020.

As of April 10, 2020
963 persons registered
380 responded to the
post evaluation questions

The registration and
evaluation data was
collected through Vivid
Learning Systems online

IBM SPSS Statistics
Version 26 was used to
analyze the data.

Table 1: Trainee background (n=963)

	“Yes” N	“Yes” %
Have you had any previous training on infectious diseases?	543	56.4
Do you have a role in the COVID-19 response?	635	65.9
Are you an essential employee in your organization?	746	77.5

Table 2: The training has prepared me to recognize COVID-19 hazards on the job (n=380)

	N	%
Strongly Agree	193	50.8
Agree	162	42.6
Neutral	21	5.5
Disagree	2	0.5
Strongly Disagree	2	0.5

Table 3: The training has increased my knowledge on how to control COVID-19 workplace exposures (n=380)

	N	%
Strongly Agree	225	59.2
Agree	127	33.4
Neutral	25	6.6
Disagree	0	0
Strongly Disagree	3	0.8

Figure 1. Evaluation data from Tables 2 and 3 (%)

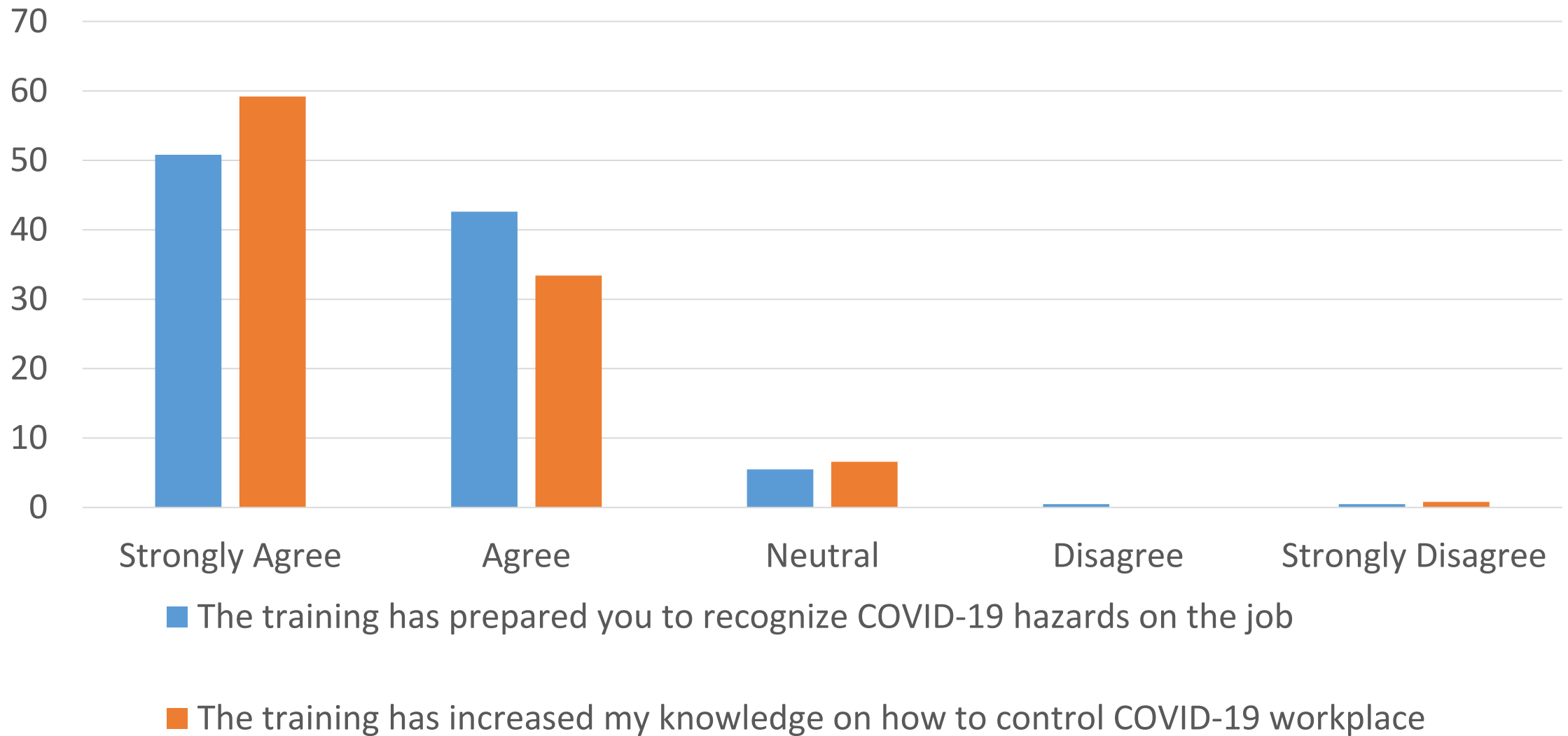


Table 4: What is your primary industry? (n=963)

	N	%
Health care	333	34.6
State or local government	172	17.9
Telecommunications	92	9.6
Federal Government	72	7.5
Construction	39	4.0
Manufacturing	22	2.3
Food Services	19	2.0
OH&S	18	1.9
Oil & Gas	15	1.6
Education	14	1.5
Social Assistance	14	1.5
Transportation	14	1.5
Other	139	14.4

Note: Similar responses have been partially grouped together

Table 5: What is your occupation? (n=963)

	N	%
Nurse	110	11.4
Health & Safety	108	11.2
Firefighter	70	7.3
Doctor & Physician	57	5.9
Military	32	3.3
Tower Technician	27	2.8
Administrative	12	1.2
Emergency Medical	11	1.1
Other	536	55.7

Note: Similar responses have been partially grouped together

KIRKPATRICK EVALUATION FRAMEWORK

Level Name	Level Meaning	When is it measured?	Outcome
1-Reaction	Satisfaction with training	Immediately after training	Short term
2-Learning	Acquire intended knowledge, skills, awareness, confidence	Immediately after training	Short term
3-Behavior	Apply what was learned from training to their job	6 months-1 year	Intermediate
4-Results	Achieving the training objective(s)	>1 Year	Long Term

Contribution	Attribution
Training helped to cause outcomes	Training caused the outcomes

DID THE TRAINING CAUSE THE OUTCOMES?

- ❑ *ATTRIBUTION* is nice, but rare, requires:
 - *experiment* (random assignment – almost impossible in training evaluation), or
 - well-designed *quasi-experimental* study (control group, pre-post, high response rate)

- ❑ Arguing that the training made a *CONTRIBUTION* is more likely -- and also valuable
 - Use longitudinal studies, case studies, surveys, natural experiments

- ❑ Due to the emerging, rapidly evolving situation (pandemic & need for on-line training)
 - Currently only 2 evaluation questions – no pre-post test, low response rate

- ❑ To increase our confidence that the training *CONTRIBUTED* to the outcomes, encourage grantees to:
 - 5 pre-post knowledge questions using “polls” in software
 - Increase response rate by requiring those questions be completed
 - 6-12 month follow-up of trainees: individual & organizational-level actions taken

INTENDED OUTCOMES OF COVID-19 TRAINING INITIATIVE

Short Term (Immediate)	Intermediate (6 Months)	Long Term (>1 Year)
<p style="text-align: center;">CURRENT QUESTIONS</p> <p>Trainees report:</p> <ul style="list-style-type: none"> ▪ Being better prepared to recognize COVID-19 hazards at work ▪ Increased knowledge on control of COVID-19 workplace exposures <p style="text-align: center;">POTENTIAL QUESTIONS</p> <ul style="list-style-type: none"> ▪ <u>Trainers</u> prepared to train workers ▪ Organizational capacity to deliver training using <u>methods</u> adapted to social distancing ▪ <u>Pre-post questions</u> on knowledge, skills, awareness, confidence, empowerment and reduced anxiety to COVID-19 and other infectious diseases 	<p style="text-align: center;">POTENTIAL QUESTIONS</p> <ul style="list-style-type: none"> • <u>Integration of materials</u> into workplace safety training • <u>Changes in organizational practices</u>, plans, policies, and use of hierarchy of controls that support worker safety and infection control • <u>National network</u> able to respond to infectious disease events and provide high quality biosafety trainings across worker populations with exposure potential 	<p style="text-align: center;">POTENTIAL QUESTIONS</p> <ul style="list-style-type: none"> • Improved organizational and community <u>capacity to respond</u> to COVID-19 and other infectious diseases • <u>Safer workplaces</u> through enhanced worker training and work-related infection control • <u>Improved safety culture</u> in workplaces with exposure potential

THANK YOU!

If you have any questions or comments, please feel free to reach me at eric.persaud@downstate.edu

**You can learn more about attribution vs. contribution in a CDC presentation:
https://www.cdc.gov/dhds/pubs/docs/april_2011_cb.pdf**

**These slides were developed with Paul Landsbergis, PhD
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