

# Workers' Experiences During a Pandemic - Survey Results

## CUPE Ontario Injured Workers/Health & Safety Conference

John Oudyk (OHCOW), Peter Smith (IWH)  
& the COVID-19 ad-hoc Survey Group

November 18, 2020





**Institute  
for Work &  
Health**

Research Excellence  
Advancing Employee  
Health



Peter Smith



## Research that matters to protecting the health and safety of workers

The Institute for Work & Health (IWH) is a Canadian leader in work injury and disability prevention research. An independent, not-for-profit organization, IWH conducts and shares actionable research to promote, protect and improve the health and safety of working people.

### OUR RESEARCH ▾

- Working conditions & health
- Vulnerability at work
- Workplace OHS programs & practices
- OHS regulation & enforcement
- Clinical treatment & health measurement
- Workplace disability management
- Compensation & benefit policy
- Selected topics
- Project directory



# Members of COVID-19 ad hoc Survey Group:

- Ontario healthcare unions' H&S staff reps (ONA, SEIU, OPSEU, CUPE, Unifor, USW)
- Canadian Federation of Nurses Unions (CFNU)
- OFL, BCNU, HSABC
- Guy Potter, occupational psychologist with Duke University Hospital in North Carolina (COPSOQ International Network)
- Peter Smith, researcher with Institute for Work and Health (IWH)
- A variety of interested academics and activists from Canada and the US
- Valerie Wolfe, Daryl Stephenson & myself (OHCOW)



# Pandemic Survey content:

- COPSOQ (StressAssess) scales measuring **burnout**, [**stress**] and **sleep symptoms** (2 questions each);
- GAD-2 and the PHQ-2 scales to measure **anxiety** and **depression** symptoms (2 questions each);
- 3 questions from the [DSM5 **acute stress** scale] (pre-PTSD);
- 3 questions from a German **self-efficacy** scale (General Self-Efficacy Short Scale (ASKU));
- custom made **exposure** scales (**PPE adequacy/availability**, similar for **preventive measures/procedures**, and training)
- COPSOQ scales for [**quantitative demands**], **work pace**, **predictability**, **role conflict**, **supervisor support**, **colleague support** (created a similar question for **family support**)
- StressAssess questions about **psychological H&S climate**, and organizational **culture's tolerance of behaviours harmful to mental health**

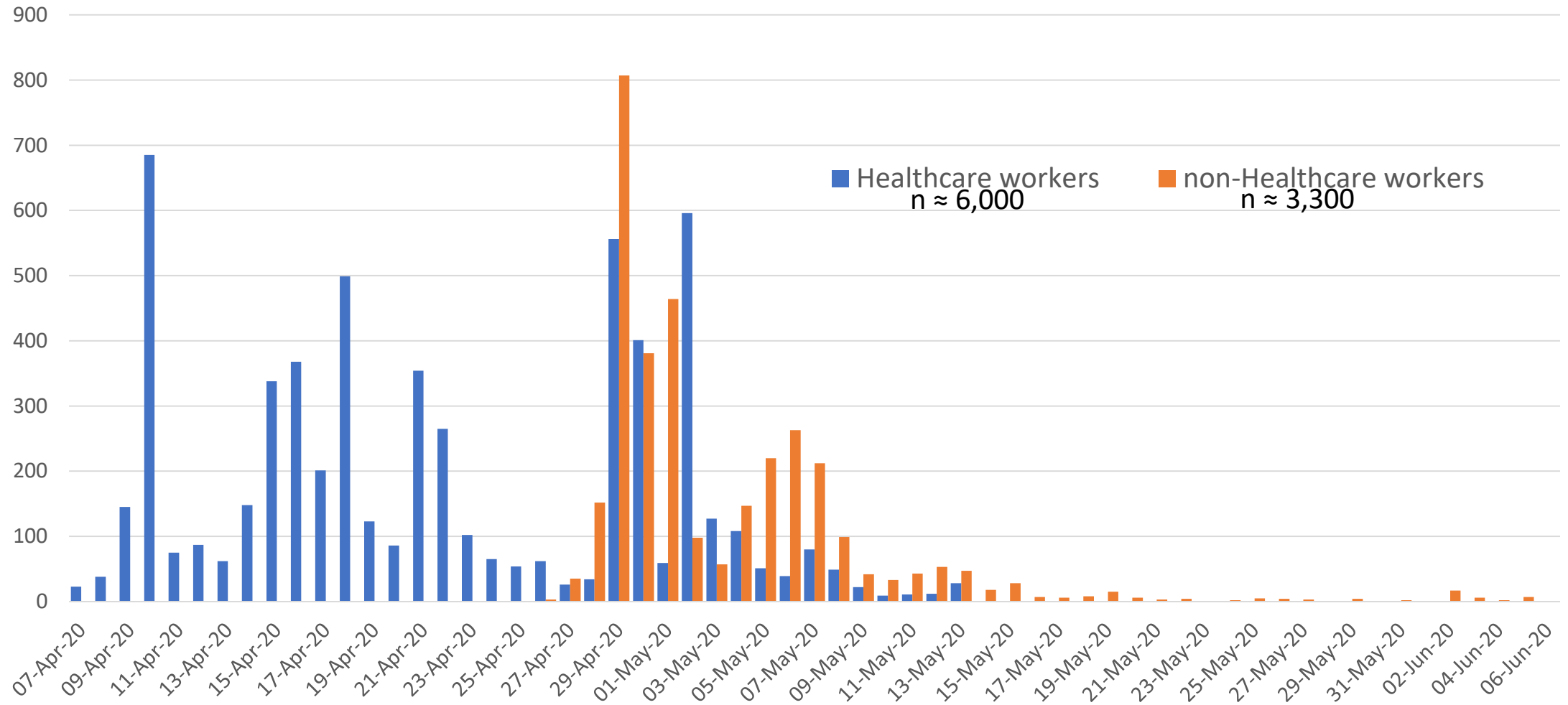


# Survey Purpose:

- To capture the experiences of workers during the pandemic in “real time”
- After the pandemic, experiences will likely be re-interpreted (“spun”) so try to collect a record captured in real time
- Designed survey to be filled in repeatedly as conditions change
- Launched April 6<sup>th</sup> responses still trickling in
- Non-healthcare workers survey launched April 26<sup>th</sup> responses also still trickling in



# Number of responses over time



# Main Outcome: Anxiety Symptoms

## Generalized Anxiety Disorder screener (GAD-2)

Over the past 7 days how often have you been bothered by the following problems:

- Feeling nervous, anxious or on edge
- Not being able to stop or control worrying

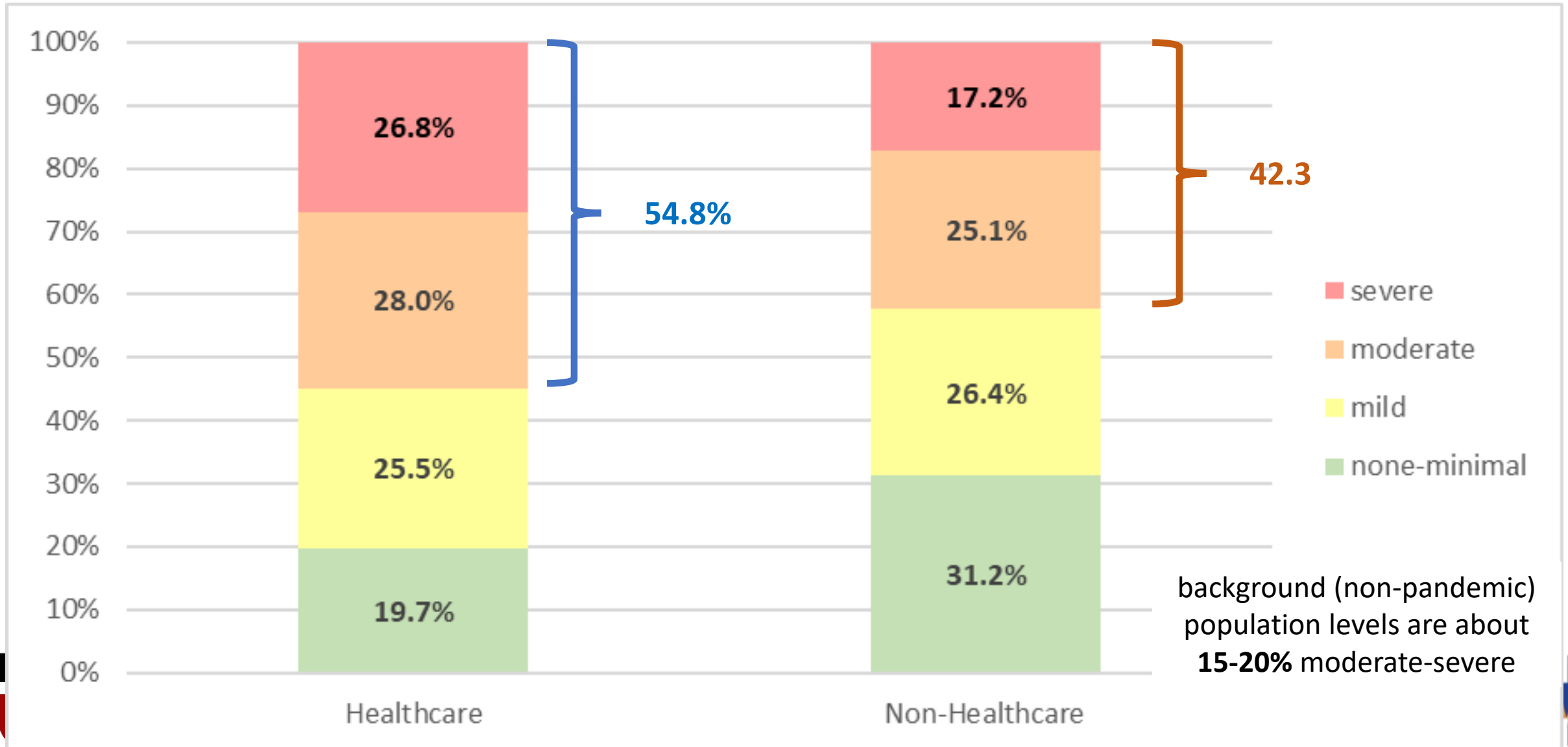
Response options: not at all (0), several days (1), more than half the days (2), nearly every day (3) – scale scored from 0 to 6

Cut-point for clinical follow up is a score of 3 or more





# Distribution of GAD-2 scores; **healthcare** (n=5988) and **non-healthcare** (n=3305) samples





# Main Outcome: Depressive Symptoms

## Patient Health Questionnaire screener (PHQ-2)

Over the past 7 days how often have you been bothered by the following problems:

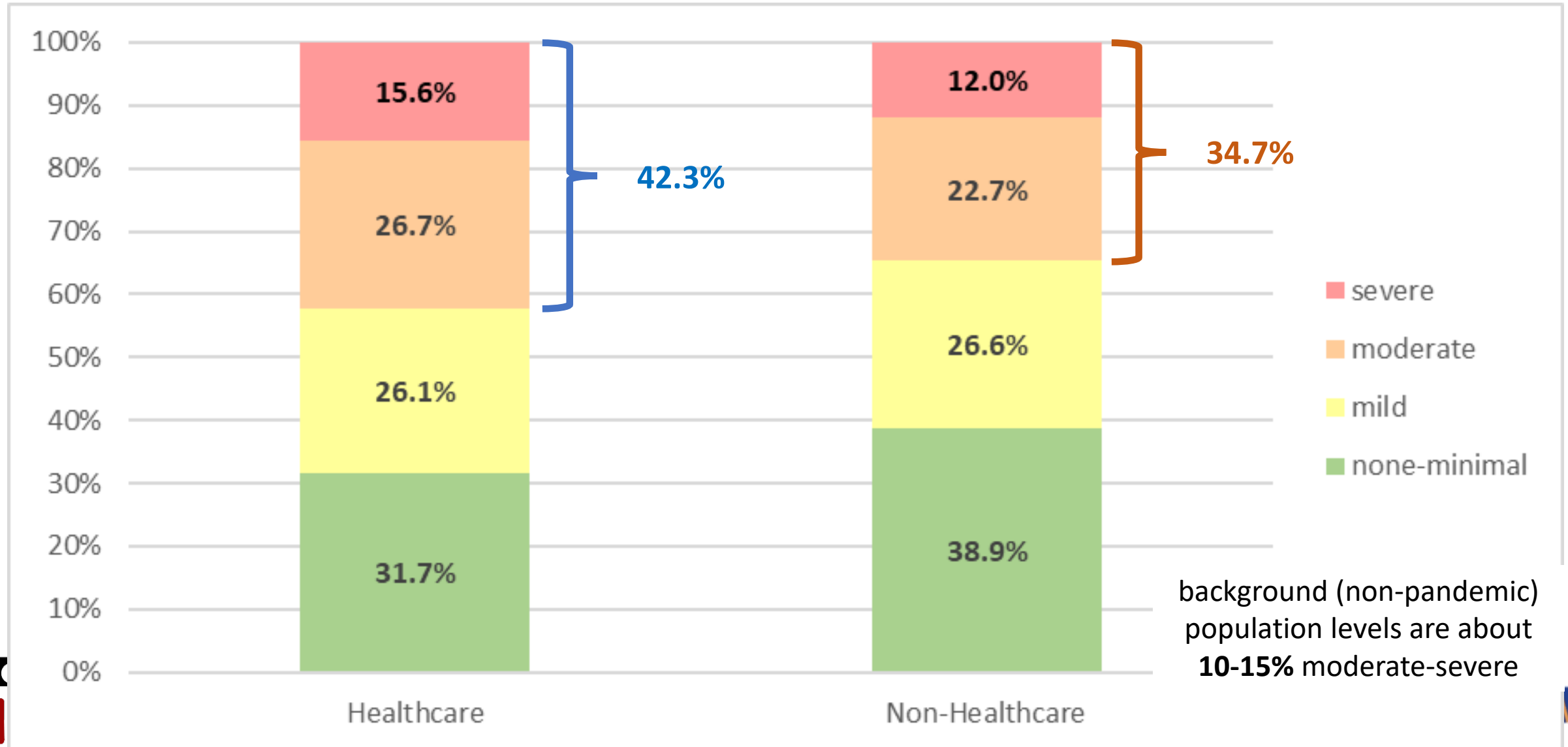
- Little interest or pleasure in doing things
- Feeling down, depressed or hopeless

Response options: not at all (0), several days (1), more than half the days (2), nearly every day (3) – scale scored from 0 to 6

Cut-point for clinical follow up is a score of 3 or more



# Distribution of PHQ-2 scores; **healthcare** (n=5988) and **non-healthcare** (n=3305) samples



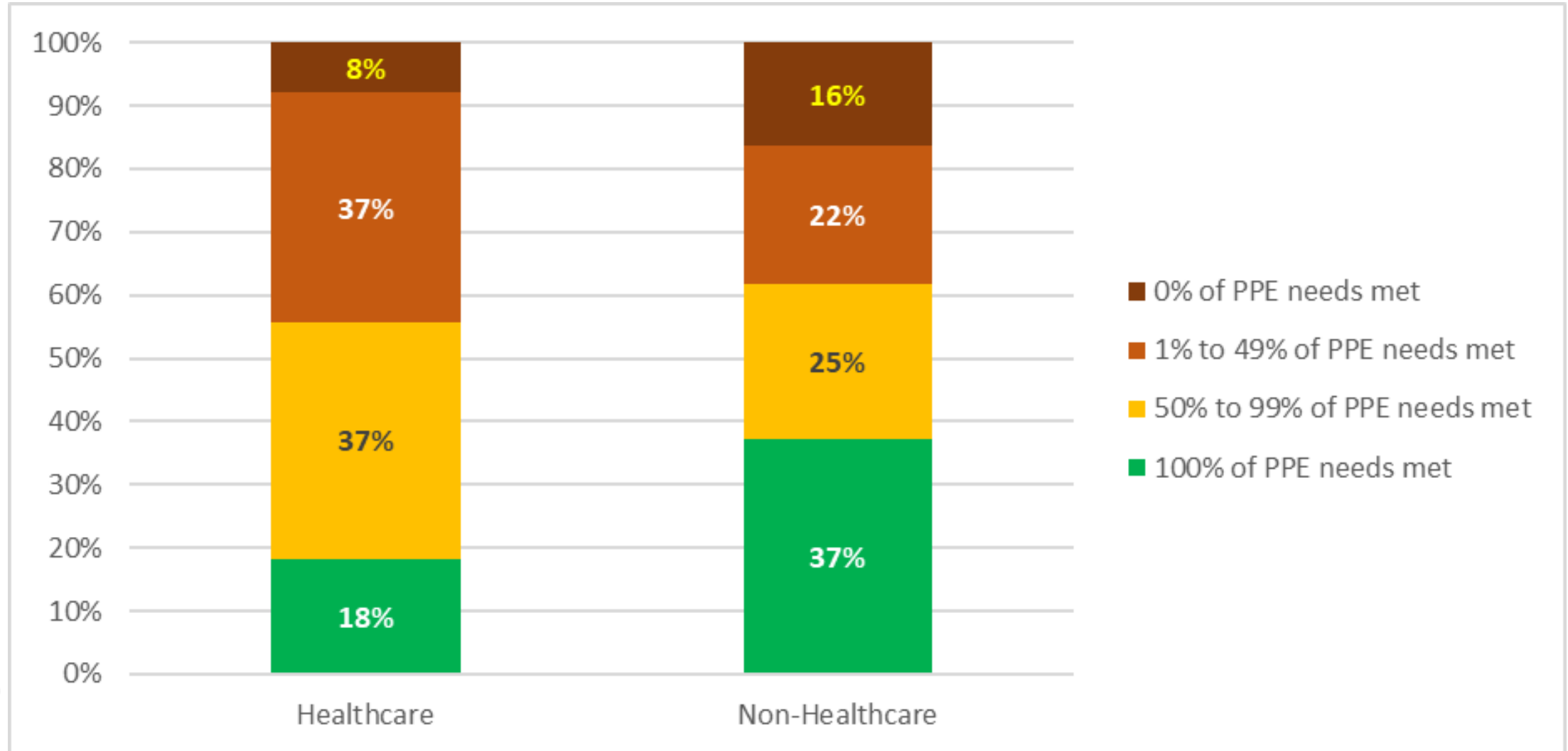
# Personal protective equipment (PPE) supply and adequacy

Appropriate type and adequate supply	Appropriate type but inadequate supply	Inappropriate type, but adequate supply	Inappropriate type and inadequate supply	Needed, but not available	Not sure/don't know what is appropriate	Not applicable
Type of PPE is needed					Type of PPE is not needed	
Needs Met	Needs not Met	Needs not Met	Needs not Met	Needs not Met	Not Applicable	

(1) Gloves; (2) Eye protection/goggles; (3) face shield; (4) gown; (5) hand sanitizer; (6) soap and running water\* (7) surgical or procedure masks; (8) N95 masks; (9) regular (half/full face) cartridge respirators\* (10) Powered air particulate respirators (PAPRs)



# Perceived adequacy of PPE among **healthcare workers** (n=5988) and **on-site workers** (n=1693)



# Adequacy of preventive infection control procedures (ICP)

## Healthcare survey

Appropriate and adequately implemented	Appropriate type but inadequately implemented	Inappropriate	Lacking	Not sure/don't know what is appropriate	Not applicable
Type of ICP is needed				Type of ICP is not needed	
Needs Met	Needs not Met	Needs not Met	Needs not Met	Not Applicable	

(1) Screening incoming patients; (2) Symptomatic patients wearing masks; (3) cohorting patients; (4) restrict access and control flow of COVID patients; (5) ventilation system; (6) Airborne infection isolation rooms (AIIR); (7) Personal hygiene facilities; (8) house cleaning practices; (9) laundry cleaning practices; (10) waste disposal practices



# Adequacy of preventive infection control procedures (ICP)

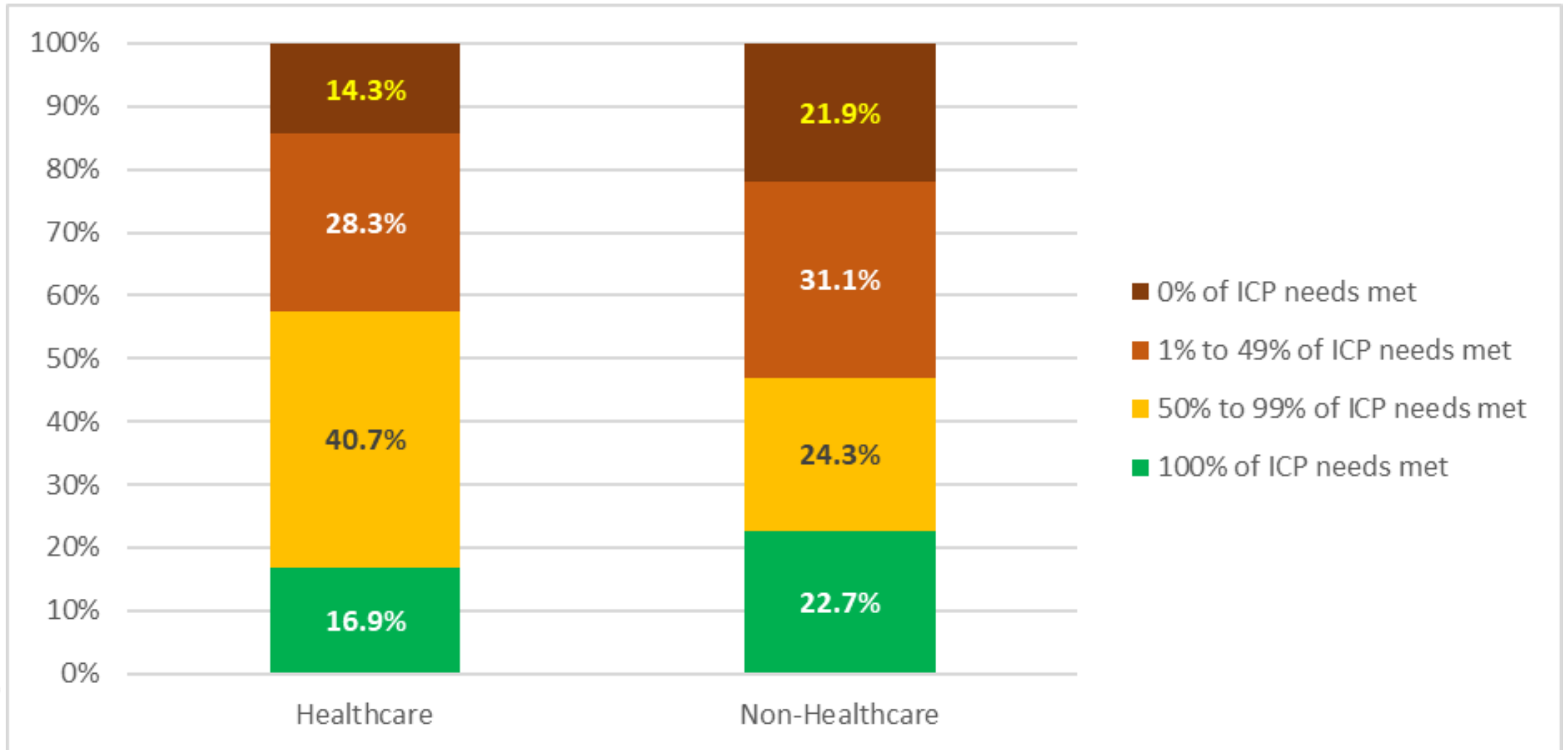
## Non-Healthcare survey

Appropriate and adequately implemented	Appropriate type but inadequately implemented	Inappropriate	Lacking	Not sure/don't know what is appropriate	Not applicable
Type of ICP is needed				Type of ICP is not needed	
Needs Met	Needs not Met	Needs not Met	Needs not Met	Not Applicable	

(1) Reporting procedures; (2) isolation of people; (3) physical distancing from clients/customers; (4) physical distancing from co-workers; (5) regular cleaning; (6) sanitising food preparation surfaces; (7) disinfecting high-touch surfaces; (8) laundry for work clothes; (9) laundry for work-related materials; (10) waste disposal practices; (11) staggered schedules; (12) places to change to/from work clothes; (13) installation of physical barriers; (14) increased ventilation



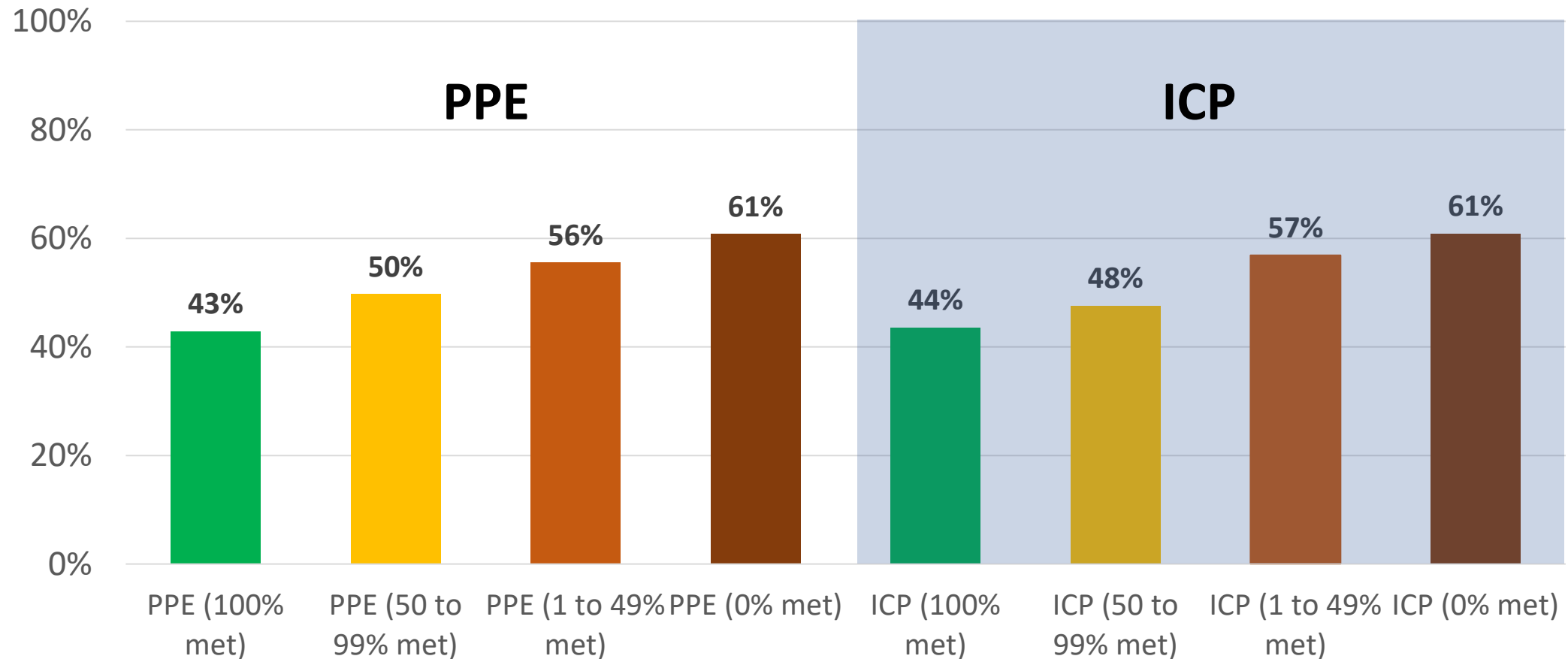
# Perceived adequacy of ICP among **healthcare workers** (n=5988) and **on-site workers** (n=1693)





# Adjusted\* proportion of sample with anxiety (GAD-2) scores 3 and over by PPE needs met, ICP needs met (N = 5,988)

Healthcare workers

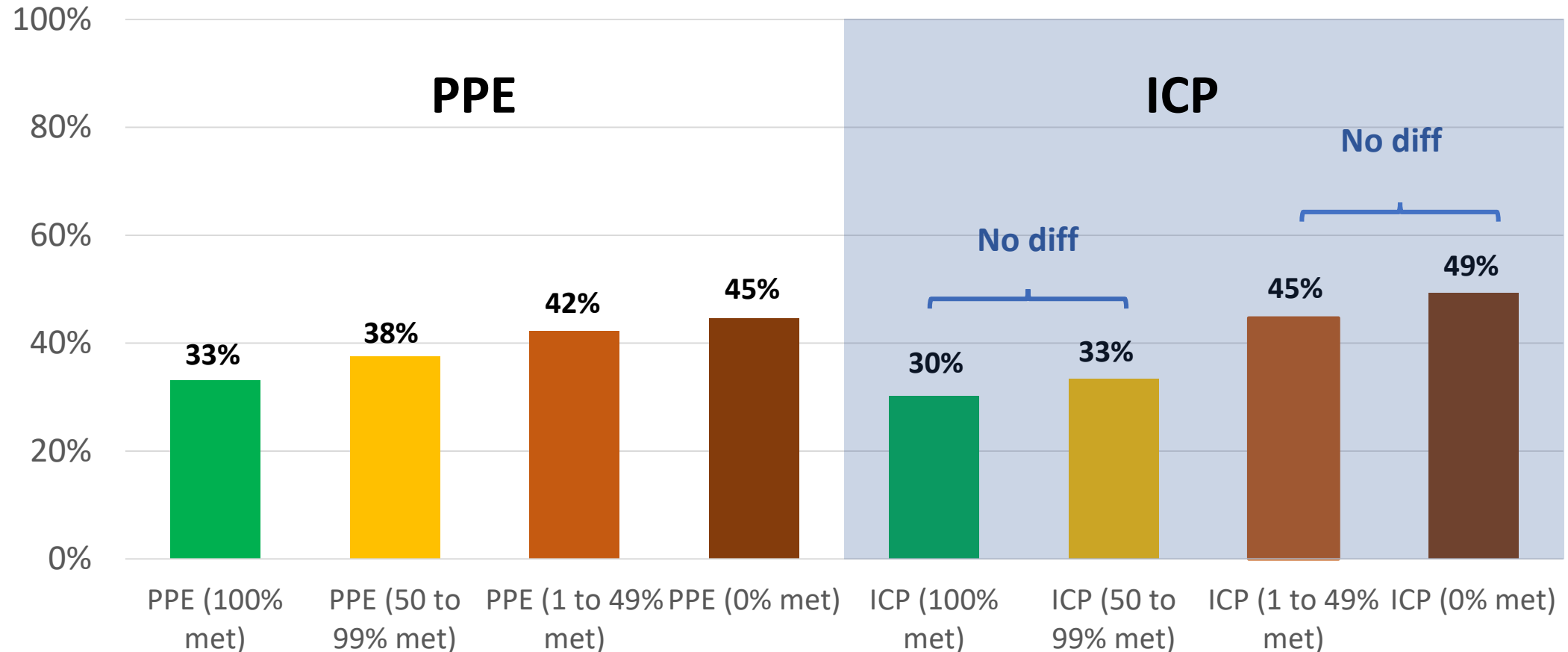


\* Adjusted for age, sex, visible minority status, province, population density, type of healthcare facility, job tenure, current work hours, interactions with COVID-19 patients, patients at workplace with COVID-19, co-workers at workplace with COVID-19, experiencing COVID-19 symptoms, training related to COVID-19 and training in donning and doffing PPE.



# Adjusted\* proportion of sample with depression (PHQ-2) scores 3 and over by PPE needs met, ICP needs met (N = 5,988)

Healthcare workers

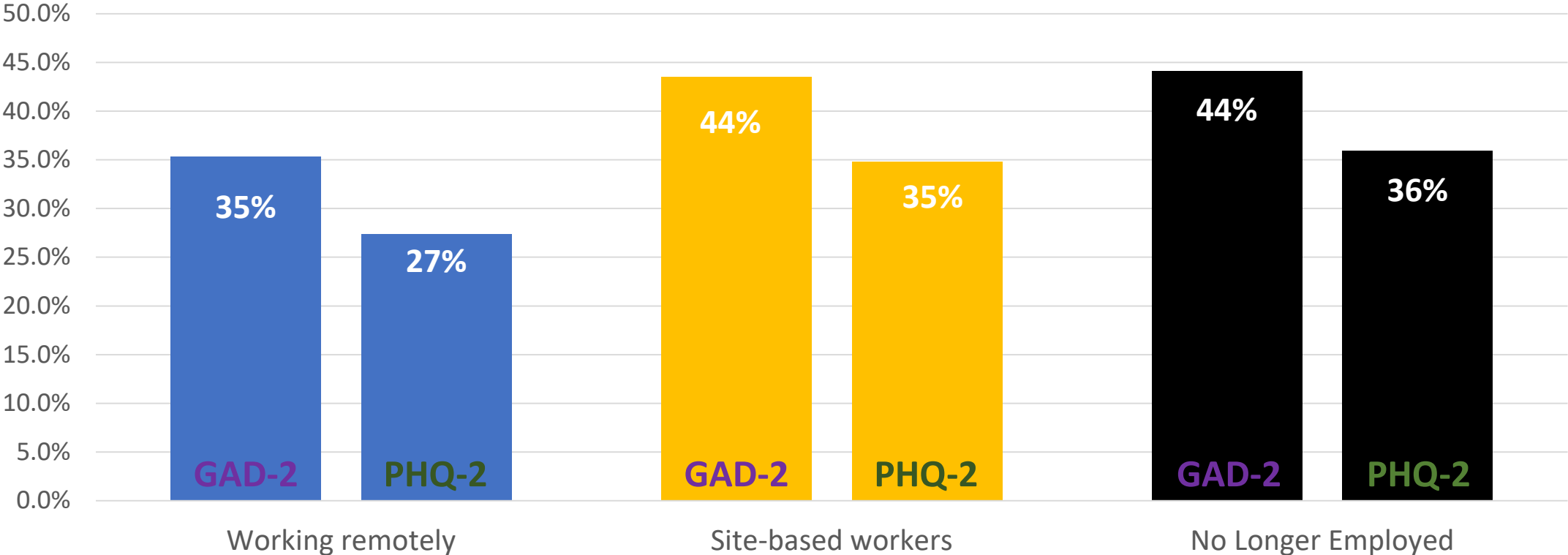


\* Adjusted for age, sex, visible minority status, province, population density, type of healthcare facility, job tenure, current work hours, interactions with COVID-19 patients, patients at workplace with COVID-19, co-workers at workplace with COVID-19, experiencing COVID-19 symptoms, training related to COVID-19 and training in donning and doffing PPE.



# Adjusted\* proportion of respondents with GAD-2 and PHQ-2 scores of three and higher by working status (N = 3,305)

non-Healthcare workers

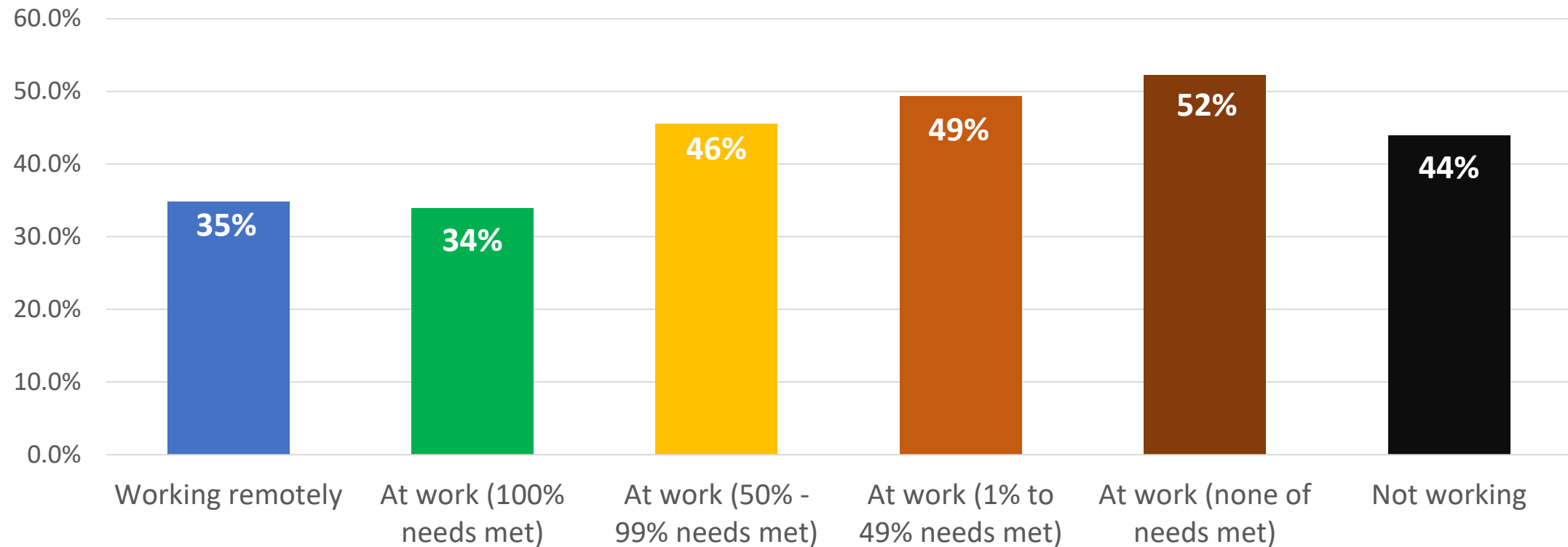


\* Adjusted for age (grouped), sex, visible minority status, presences of disability, population density, province of residence, supervisory status, job tenure, coworkers with COVID-19, experiencing symptoms of COVID-19, being exposed to someone with COVID-19, workplace size and date of survey.



# Adjusted\* proportion of respondents with GAD-2 scores of three and higher by working and PPE needs being met (N = 3,305)

non-Healthcare workers

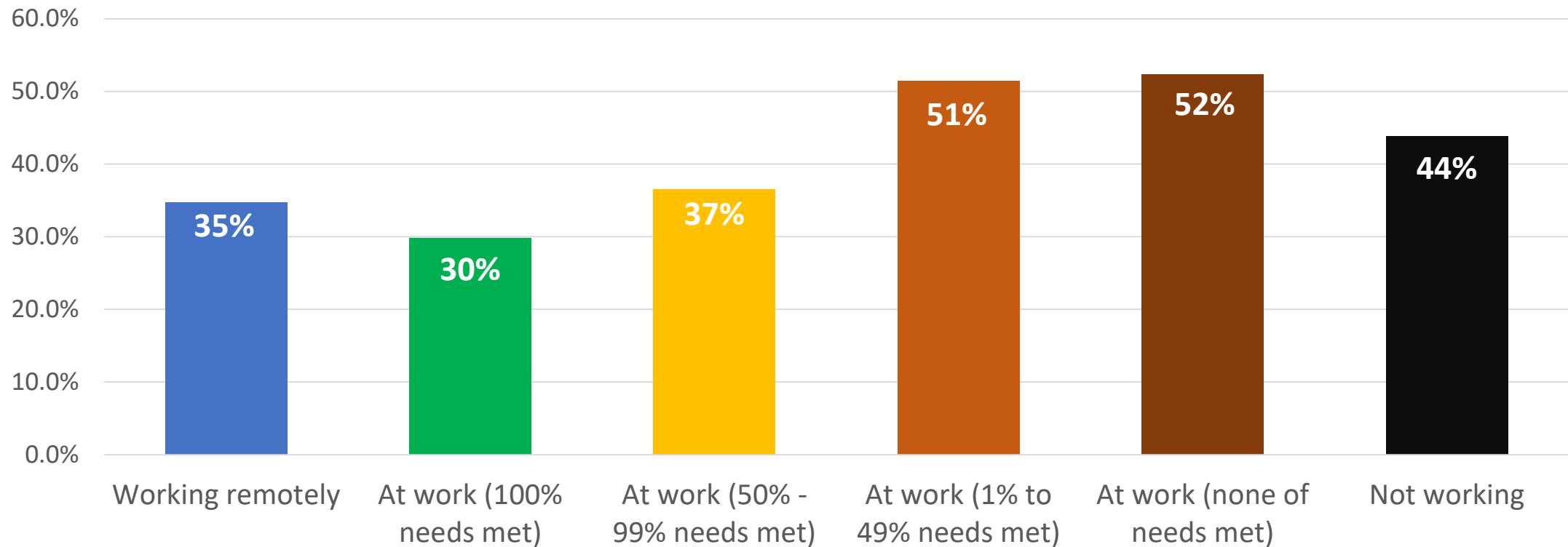


\* Adjusted for age (grouped), sex, visible minority status, presences of disability, population density, province of residence, supervisory status, job tenure, coworkers with COVID-19, experiencing symptoms of COVID-19, being exposed to someone with COVID-19, workplace size and date of survey.



# Adjusted\* proportion of respondents with GAD-2 scores of three and higher by working and ICP needs being met (N = 3,305)

non-Healthcare workers



\* Adjusted for age (grouped), sex, visible minority status, presences of disability, population density, province of residence, supervisory status, job tenure, coworkers with COVID-19, experiencing symptoms of COVID-19, being exposed to someone with COVID-19, workplace size and date of survey.



# Key Messages

- PPE and ICP are not only about infection control, but are also associated with mental health symptoms
- Working at the workplace with all ICP needs met is associated with less anxiety than working at home
- Strengthening and auditing workplace infection control programs and providing adequate PPE is important for both healthcare and non-healthcare workplaces
- The mental health of all workers is an integral part of the pandemic response – monitoring both worker psychosocial responses to exposures/conditions, and ensuring workers have confidence in prevention measures, should be included in pandemic plans



# The Association between the Perceived Adequacy of Workplace Infection Control Procedures and Personal Protective Equipment with Mental Health Symptoms: A Cross-sectional Survey of Canadian Health-care Workers during the COVID-19 Pandemic

L'association entre le caractère adéquat perçu des procédures de contrôle des infections au travail et de l'équipement de protection personnel pour les symptômes de santé mentale. Un sondage transversal des travailleurs de la santé canadiens durant la pandémie COVID-19

Peter M. Smith, PhD<sup>1,2,3</sup> , John Oudyk, MSc<sup>4</sup>, Guy Potter, PhD<sup>5</sup>, and Cameron Mustard, ScD<sup>1,2</sup>

## Abstract

**Objectives:** To examine the relationship between perceived adequacy of personal protective equipment (PPE) and workplace-based infection control procedures (ICP) and mental health symptoms among a sample of health-care workers in

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1-8

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Article on non-healthcare workers survey expected to be published this week in the [Annals of Work Exposures and Health](https://academic.oup.com/annweh)  
<https://academic.oup.com/annweh>





# Second wave survey (now open):

For **healthcare workers** (including EMS) **working at healthcare workplaces** (including homecare):

[https://www.surveymonkey.com/r/Pandemic\\_Survey](https://www.surveymonkey.com/r/Pandemic_Survey) (EN)

[https://www.surveymonkey.com/r/sondage\\_pandemie](https://www.surveymonkey.com/r/sondage_pandemie) (FR)

... for **all other workers** either **working from home** (i.e. remotely), or at **a non-healthcare workplaces**:

[https://www.surveymonkey.com/r/Pandemic\\_survey2](https://www.surveymonkey.com/r/Pandemic_survey2) (EN)

[https://www.surveymonkey.com/r/sondage2\\_pandemie](https://www.surveymonkey.com/r/sondage2_pandemie) (FR)



Thank you for allowing us to  
share our findings with you!

[joudyk@ohcow.on.ca](mailto:joudyk@ohcow.on.ca)

psmith@iwh.ca

