



**PH WINS**

PUBLIC HEALTH WORKFORCE  
INTERESTS AND NEEDS SURVEY

# 2021 SUMMARY REPORT:

## Laboratory Professionals

# ACKNOWLEDGEMENT & CITATION

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The Public Health Workforce Interests and Needs Survey (PH WINS) was developed by the de Beaumont Foundation and the Association of State and Territorial Health Officials to understand the interests and needs of the state and local governmental public health workforce in the United States, and was fielded in 2014, 2017, and 2021. For more information, visit [www.phwins.org](http://www.phwins.org).

**Citation:** de Beaumont Foundation and Association of State and Territorial Health Officials, *Public Health Workforce Interests and Needs Survey: 2021 Dashboard*. August 3, 2022.

# ABOUT THIS REPORT

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This report summarizes key findings about **laboratory professionals in the governmental public health workforce** from the 2021 Public Health Workforce Interests and Needs Survey (PH WINS).

- Key findings are organized by the main sections of PH WINS 2021:
  - Demographics
  - Workforce Characteristics
  - Staying & Leaving
  - Training Needs
  - Engagement & Satisfaction
  - Well-being

# WHAT IS PH WINS?

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## *Public Health Workforce Interests and Needs Survey*

- PH WINS, a partnership between the de Beaumont Foundation and the Association of State and Territorial Health Officials (ASTHO), was fielded in 2014, 2017, and 2021.
- **First and only nationally representative source of data** about the governmental public health workforce.
- Supports the governmental public health workforce in **understanding their strengths and gaps** and informs future investments in workforce development efforts.

# 2021 METHODS

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- PH WINS 2021 was distributed via web survey to **137,446 state and local governmental public health workers:**
  - 47 state health agencies
  - 29 big city health departments
  - 259 local health departments
- The PH WINS 2021 instrument had five domains: workplace environment, COVID-19 response, training needs, addressing public health issues, and demographics.
- One important change in 2021: non-permanent employees of centralized state health agencies were included in the nationally representative data set.

# WORKFORCE DEFINITION

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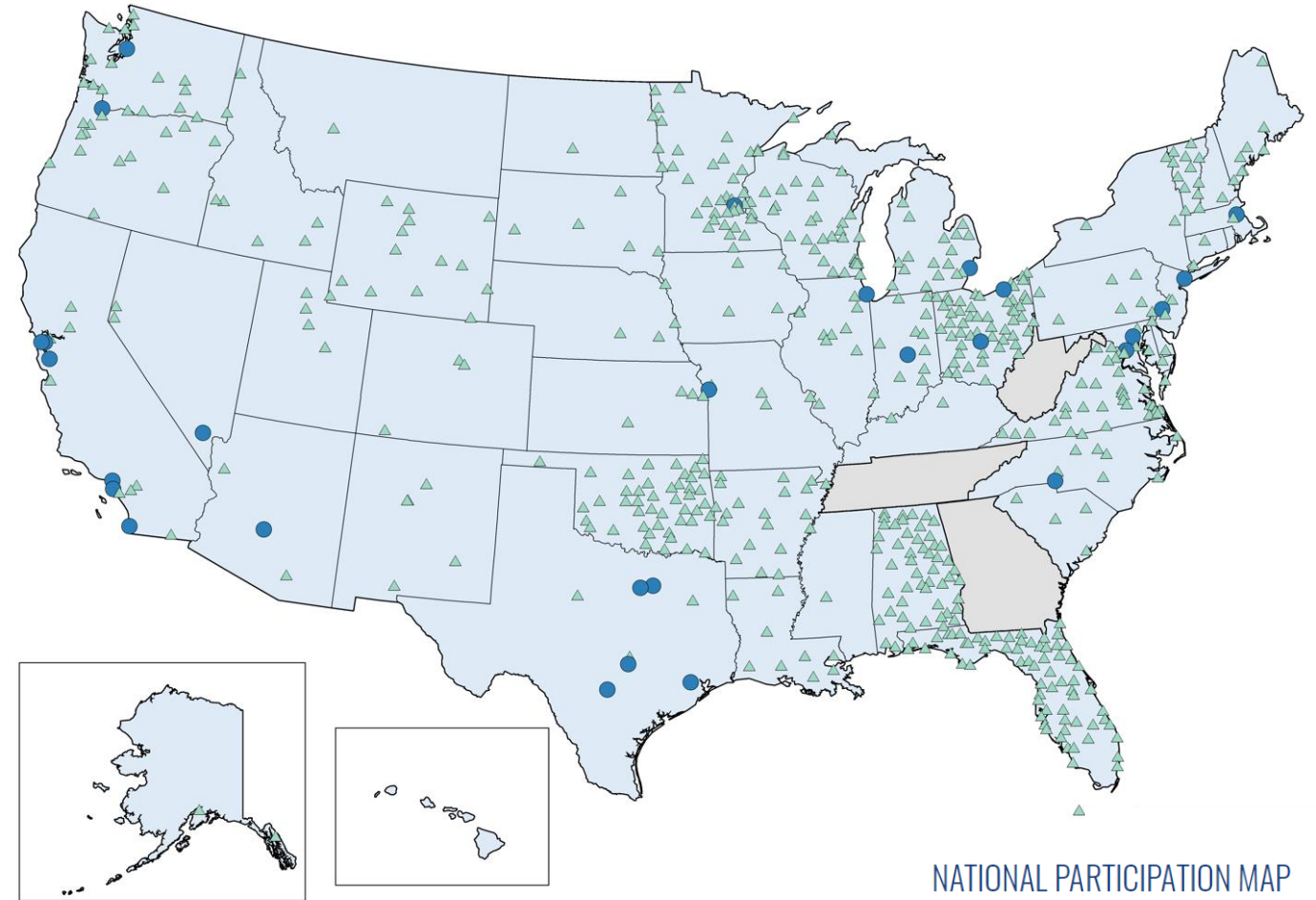
- Workforce groups are defined by a combination of responses to PH WINS questions on program area, job classification, education, and certifications.
- **Laboratory professionals** include PH WINS respondents who selected the following job classification(s), program area(s), or certification:
  - Job classifications: laboratory aide or assistant, laboratory technician, laboratory quality control worker, or laboratory scientist/medical technologist
  - Program area: public health laboratory
  - Certification: laboratory certification

*\*PH WINS respondents were asked to report all program areas in which they currently serve. Workforce groups that are defined using program area include employees who work for the defining program area and may include employees who also work for additional program areas.*

# NATIONAL PARTICIPATION

- Nationally, the survey was completed by 44,732 individuals, for a **35% response rate**.
- Response rates varied by frame:
  - **SHA: 34%**
  - **Big Cities: 28%**
  - **Other locals: 52%**
    - **Locals in Regions V and X\*: 56%**

\*HHS Regions V and X participated in the PH WINS for All pilot programming, recruiting all locals in those regions, regardless of size, to participate in PH WINS.



NATIONAL PARTICIPATION MAP



# NATIONAL PARTICIPATION

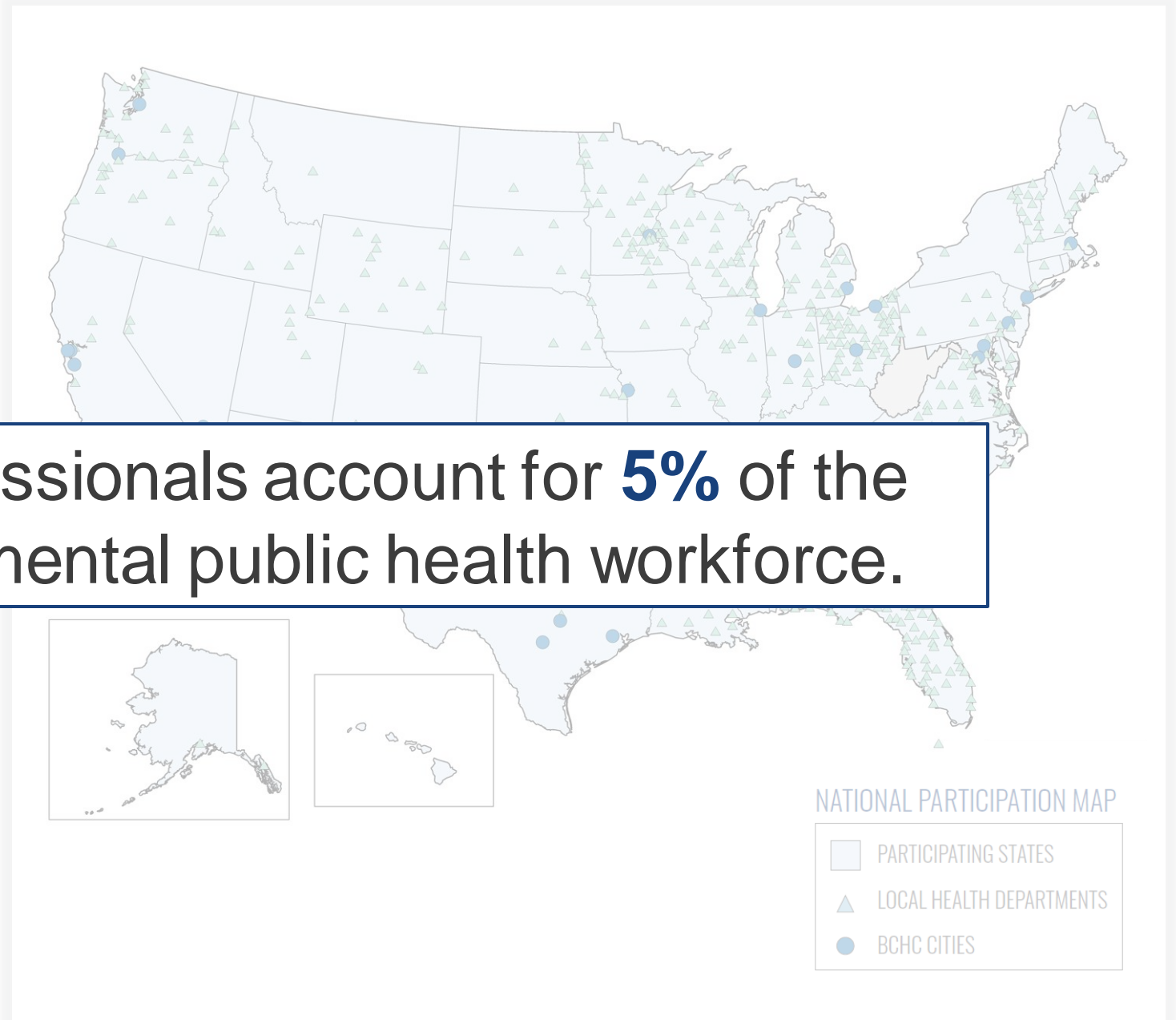
- Nationally, the survey was completed by 44,732 individuals, for a **35% response rate**.

Response frame:

Laboratory professionals account for **5%** of the national governmental public health workforce.

- Small Cities: 28%
- Big Cities: 28%
- Other locals: 52%
  - Locals in Regions V and X\*: 56%

\*HHS Regions V and X participated in the PH WINS for All pilot programming, recruiting all locals in those regions, regardless of size, to participate in PH WINS.





# 2021 KEY FINDINGS: DEMOGRAPHICS

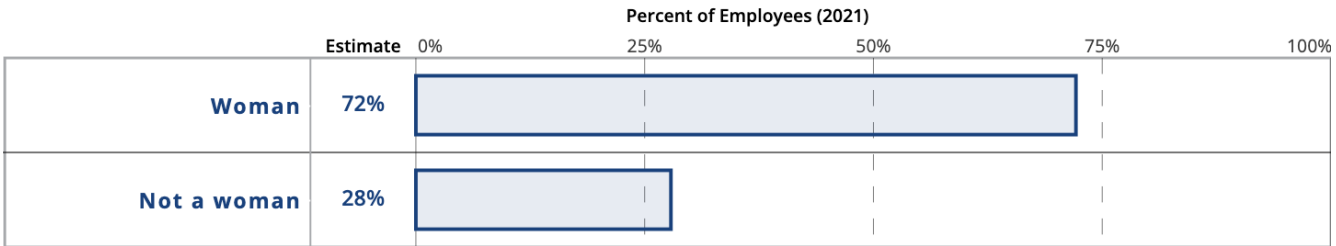
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- PH WINS respondents self-reported demographic (personal) characteristics like their gender, race/ ethnicity, and age.
- Respondents also self-reported the highest level of education attained and whether they have a specialized degree in public health.

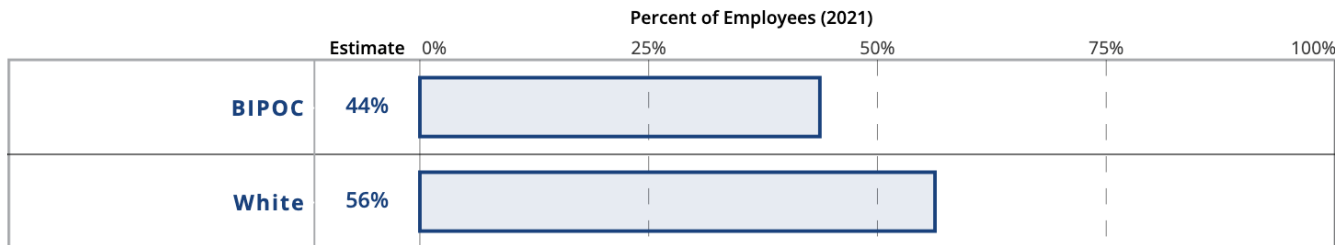
# DEMOGRAPHICS

- **72%** of laboratory professionals **self-identify as a woman.**
- **More than half** of laboratory professionals **self-identify as White.**

## GENDER COLLAPSED LAB PROFESSIONALS: ALL EMPLOYEES



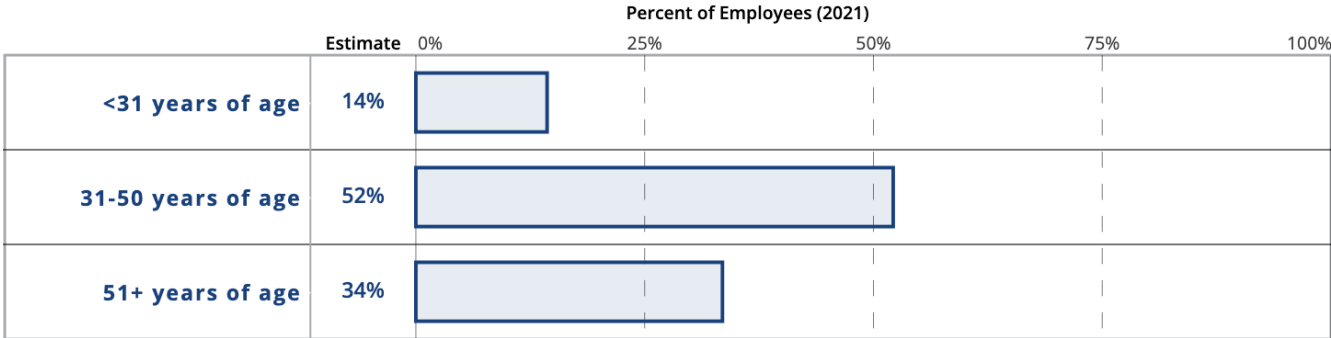
## RACE & ETHNICITY COLLAPSED LAB PROFESSIONALS: ALL EMPLOYEES



# DEMOGRAPHICS

- **52%** of laboratory professionals are between the **ages of 31 and 50 years**.

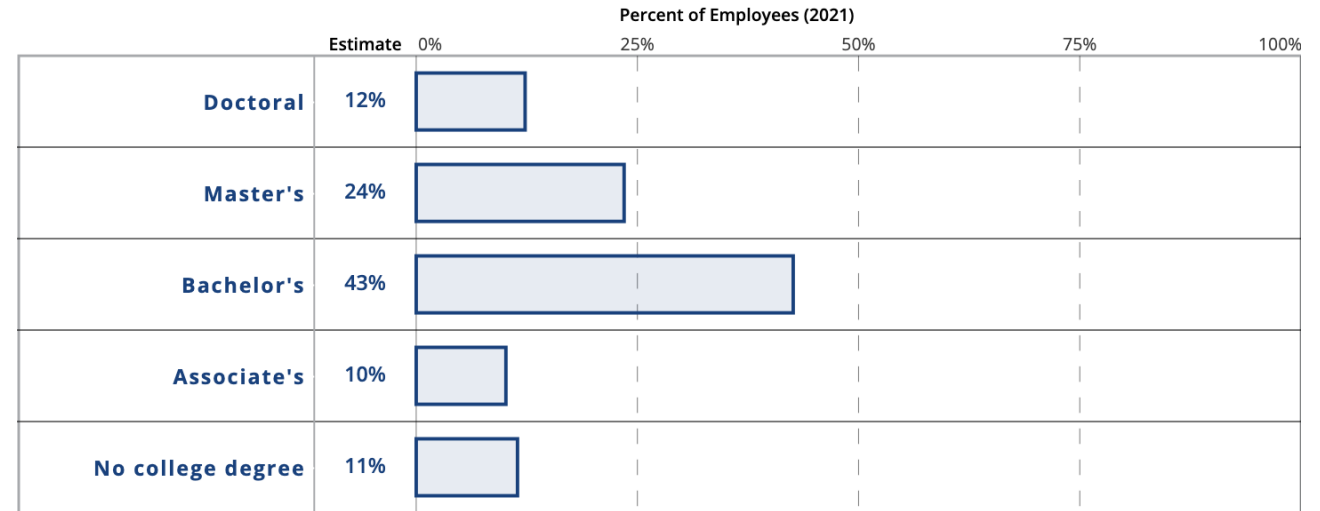
## AGE COLLAPSED LAB PROFESSIONALS: ALL EMPLOYEES



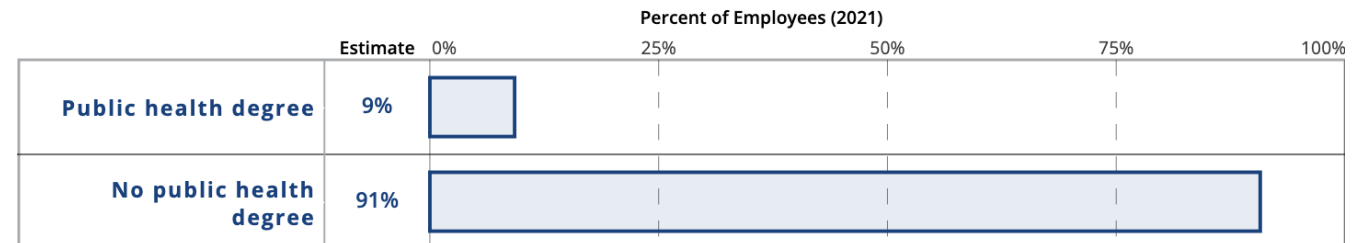
# EDUCATIONAL ATTAINMENT

- **36%** of laboratory professionals **have an advanced degree.**
  - 24% have a Master's degree.
  - 12% have a Doctoral degree.
- **9%** have a specialized **degree in public health.**

## EDUCATIONAL ATTAINMENT LAB PROFESSIONALS: ALL EMPLOYEES



## PUBLIC HEALTH TRAINING LAB PROFESSIONALS: ALL EMPLOYEES



# 2021 KEY FINDINGS: WORKFORCE CHARACTERISTICS

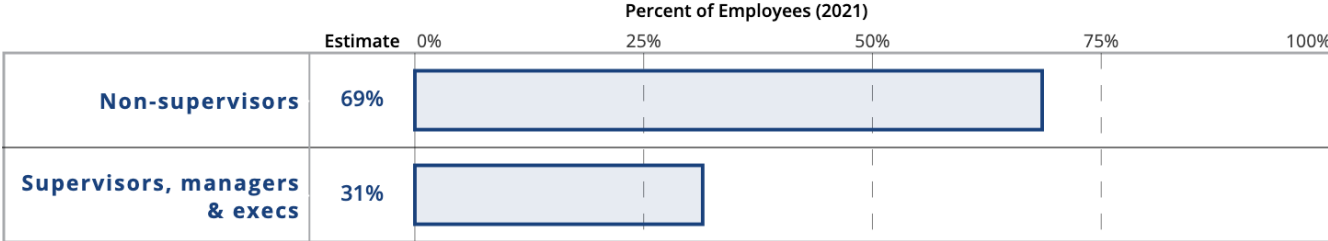
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- PH WINS respondents were asked a series of questions related specifically to their job and the work they do, including:
  - Supervisory status
  - Job role
  - Primary program area
  - Tenure in public health overall, at their agency, and in their current job.
- Respondents also reported full-time/part-time status and salary information.

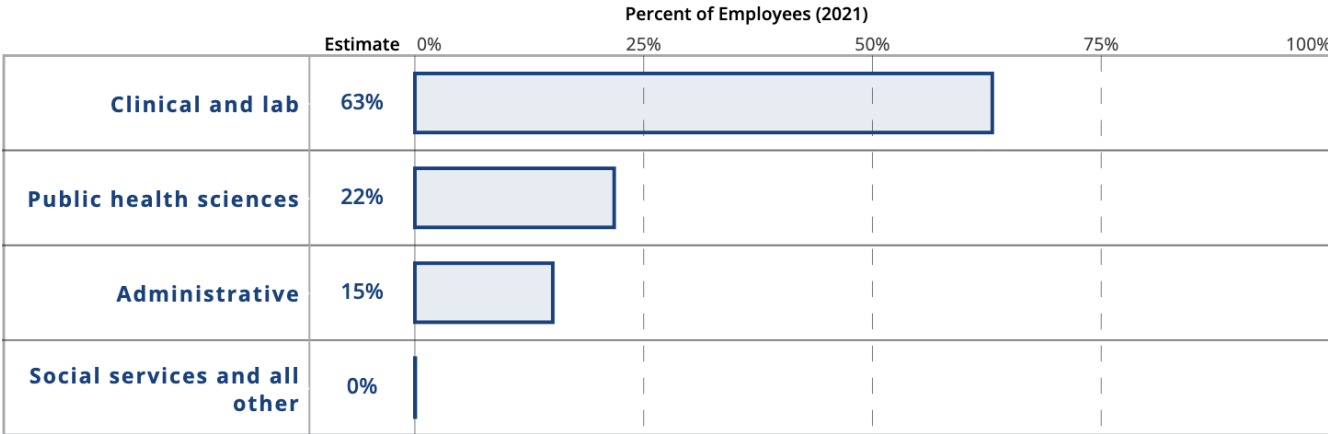
# SUPERVISORY STATUS/JOB ROLE

- **69%** of laboratory professionals work in a **non-supervisory role**.
- **63%** of staff work in a **clinical and lab job role**.

## SUPERVISORY STATUS COLLAPSED LAB PROFESSIONALS: ALL EMPLOYEES



## JOB CLASSIFICATION LAB PROFESSIONALS: ALL EMPLOYEES



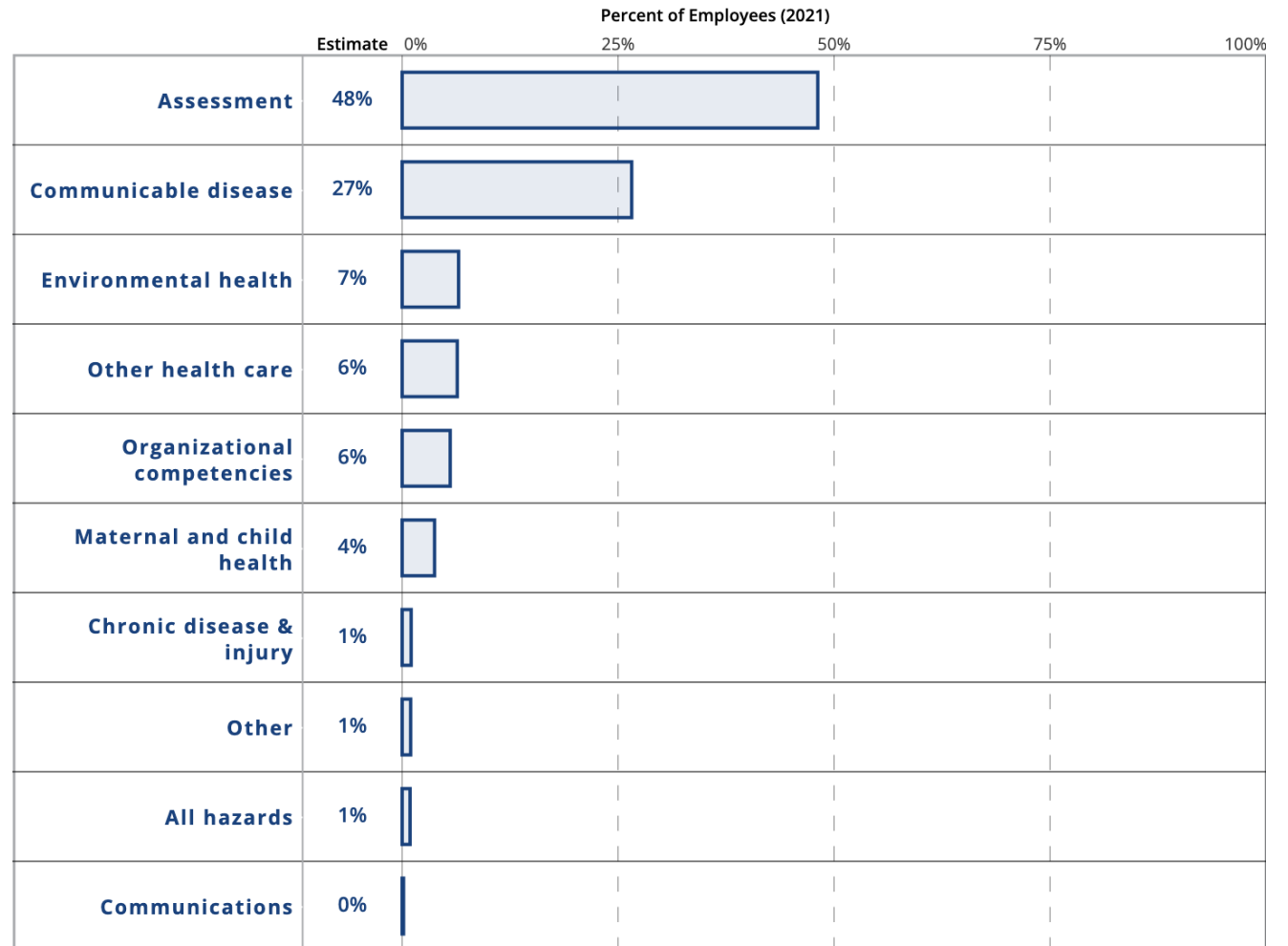
# PROGRAM AREA

- 75% of laboratory professionals are distributed across **two primary program areas**:
  - Assessment**
  - Communicable disease**

*\*PH WINS respondents were asked to report all program areas in which they currently serve. This graph represents only the primary program area - the area in which a respondent spent the most time serving.*

## PROGRAM AREA

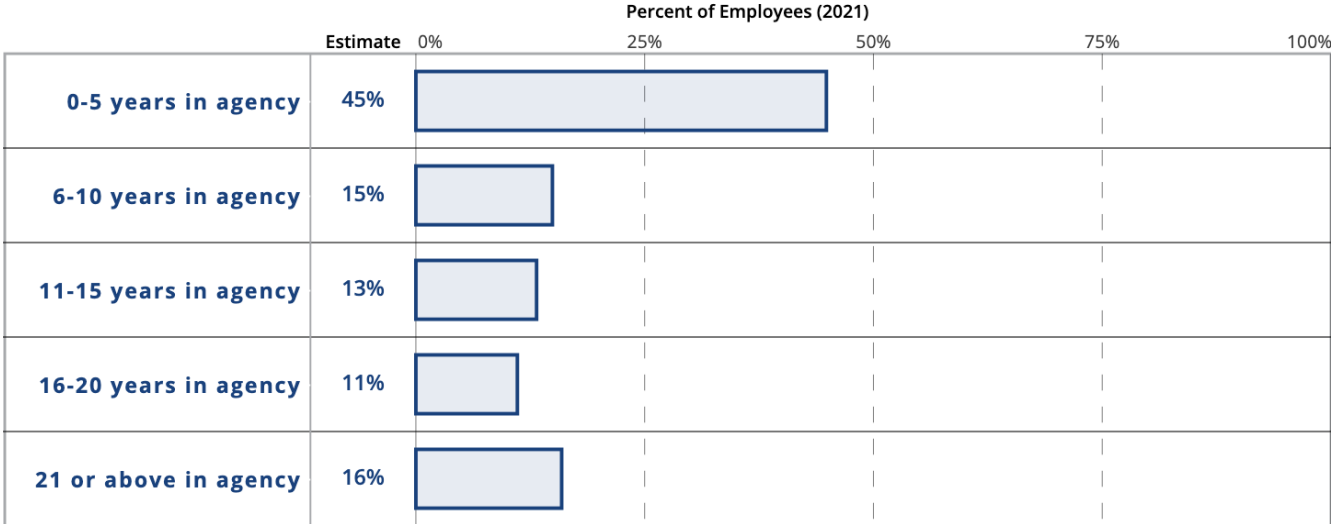
### LAB PROFESSIONALS: ALL EMPLOYEES



# TENURE AT AGENCY

- **45% of laboratory professionals** in 2021 had served at their agency **for 5 years or less.**
- 16% had served 21 or more years.

## AGENCY TENURE LAB PROFESSIONALS: ALL EMPLOYEES





# 2021 KEY FINDINGS: STAYING & LEAVING

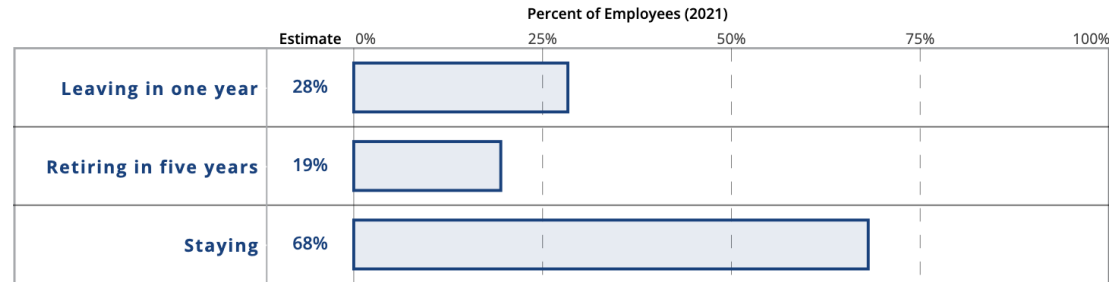
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- PH WINS respondents were asked a series of questions related to their intent to leave or stay at their agency and whether the COVID-19 pandemic affected their decision.
- Respondents were also asked to select reasons why they intend to stay or leave.

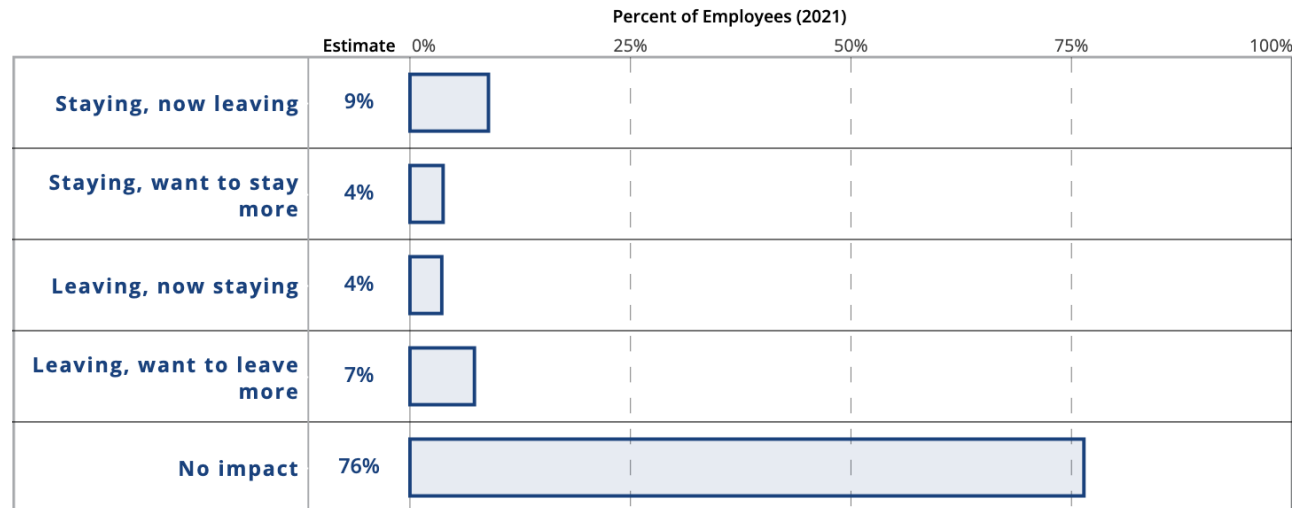
# INTENT TO LEAVE/STAY

- **More than a quarter** of laboratory professionals **are considering leaving** their organization within the next year.
- 24% reported that the **COVID-19 pandemic impacted their decision** to stay or leave.
  - Among those who intend to leave, 40% said the pandemic impacted their decision (*data not shown*).

## INTENT TO LEAVE LAB PROFESSIONALS: ALL EMPLOYEES



## IMPACT OF COVID ON STAYING & LEAVING LAB PROFESSIONALS: ALL EMPLOYEES

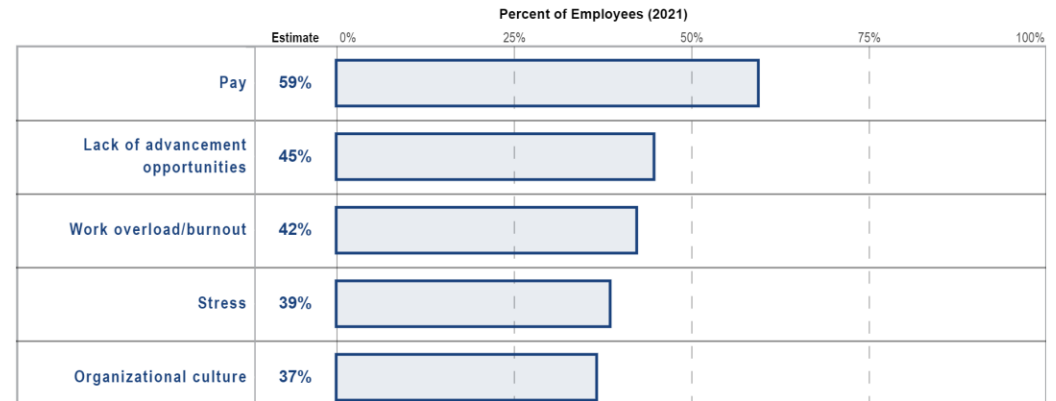


# REASONS FOR LEAVING/STAYING

- Understanding employees' reasons for leaving is critical for improving recruitment and retention.
- **Top reasons for leaving** among laboratory professionals who intend to leave include:
  - **Lack of opportunities for advancement** (reported by 45%)
  - **Work overload/burnout** (reported by 42%)

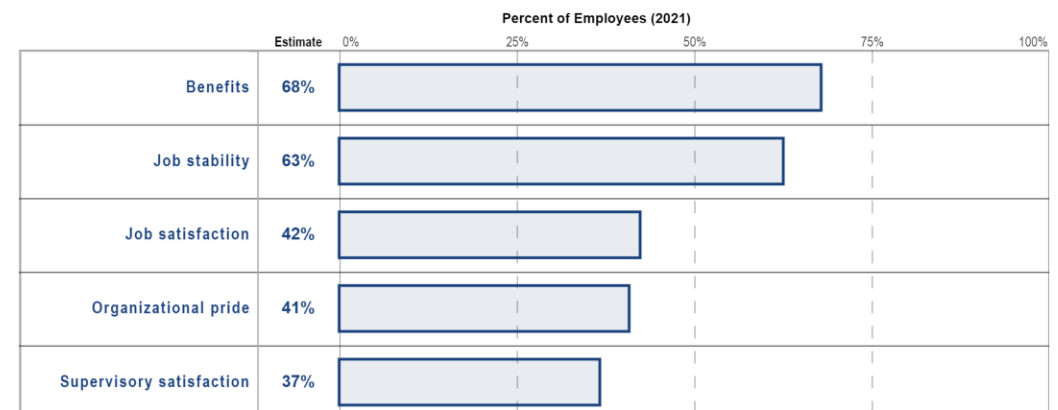
## REASONS FOR LEAVING

LAB PROFESSIONALS: ALL EMPLOYEES



## REASONS FOR STAYING

LAB PROFESSIONALS: ALL EMPLOYEES



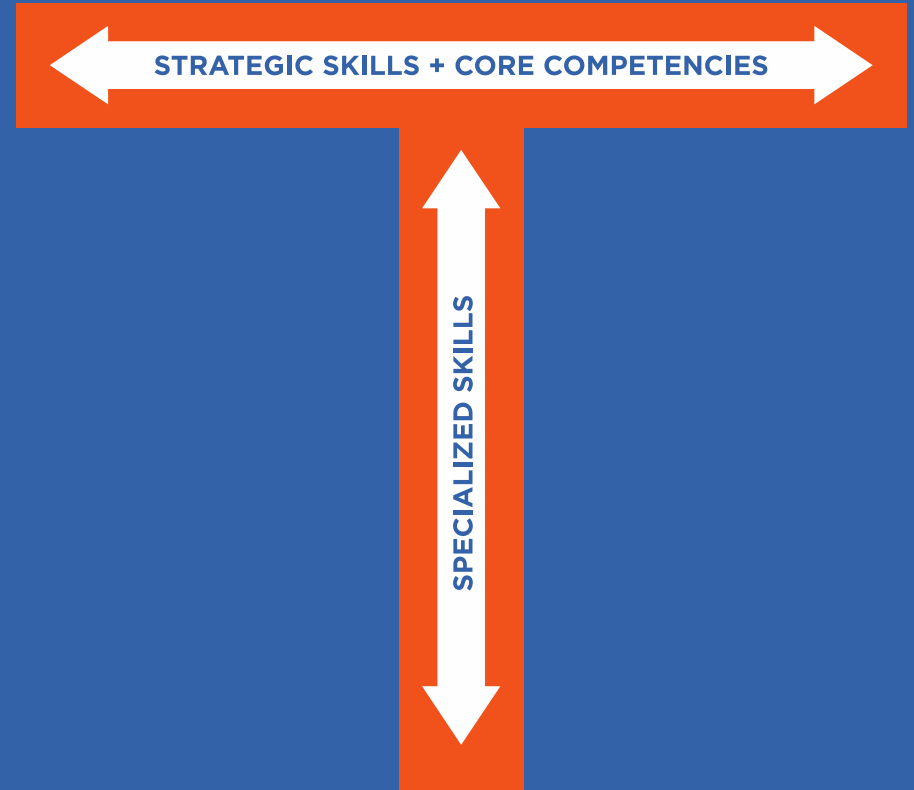
# 2021 KEY FINDINGS: TRAINING NEEDS

- PH WINS respondents were asked to rate the day-to-day importance of and their own proficiency with 25-26 skill items, tailored for their supervisory level.
- Skills were collapsed into 10 strategic skill categories.
- A **training need** is a skill item reported as having **high importance, but low proficiency**.
- Identifying training needs can help support strategies to produce T-employees, or those who have depth in technical skills and breadth in strategic skills.

**FIGURE 2.**

**The Public Health T:**  
Complementing  
Specialized Skills  
with a Cohesive  
Cross-Cutting Skill  
Framework

Note: T-shaped employees have depth in specialized skills related to a specific program or topic area (e.g., communicable disease control, environmental public health, etc.) and breadth in cross-cutting skills that include the Strategic Skills and Core Competencies.



Source: de Beaumont Foundation. "Adapting and Aligning Public Health Strategic Skills,". March 2021.

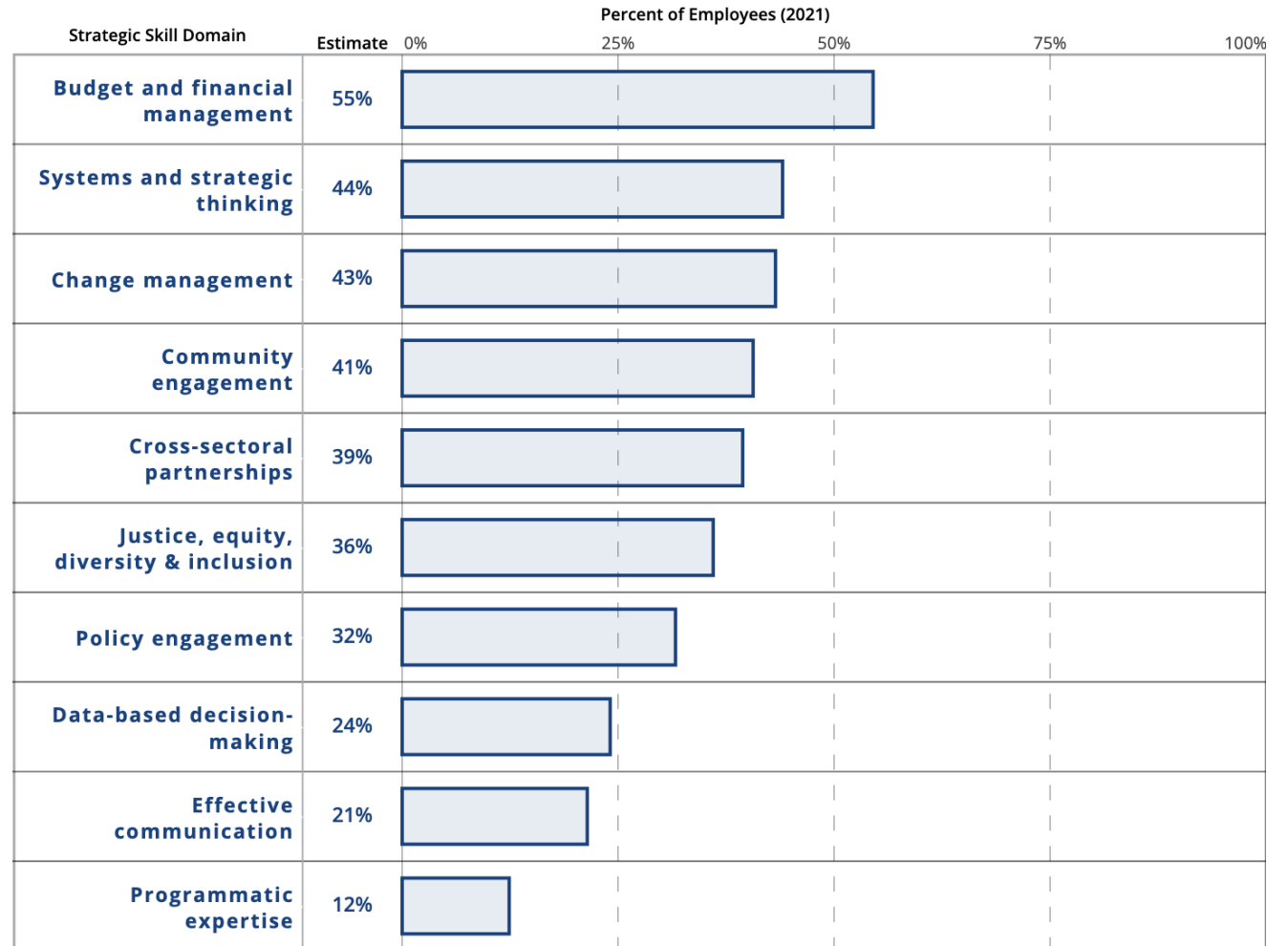
# TRAINING NEEDS: OVERALL

The top 5 areas of training needs **across all supervisory levels** are:

- Budget and financial management
- Systems and strategic thinking
- Change management
- Community engagement
- Cross-sectoral partnerships

## TRAINING NEEDS

### LAB PROFESSIONALS: ALL EMPLOYEES

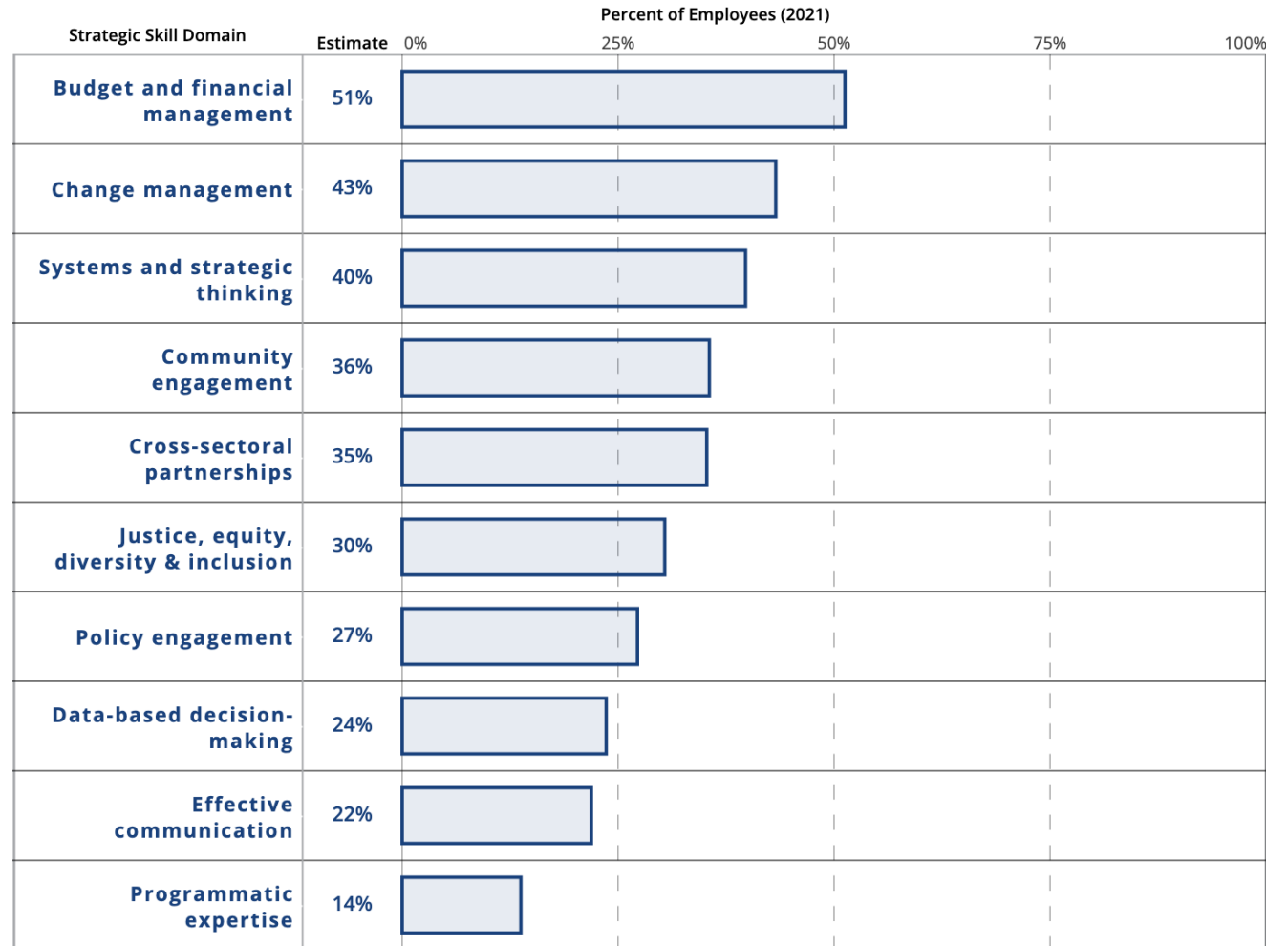


# TRAINING NEEDS: NON-SUPERVISORS

The top 5 areas of training needs **among non-supervisors** are:

- Budget and financial management
- Change management
- Systems and strategic thinking
- Community engagement
- Cross-sectoral partnerships

## TRAINING NEEDS: NON-SUPERVISORS LAB PROFESSIONALS: ALL EMPLOYEES

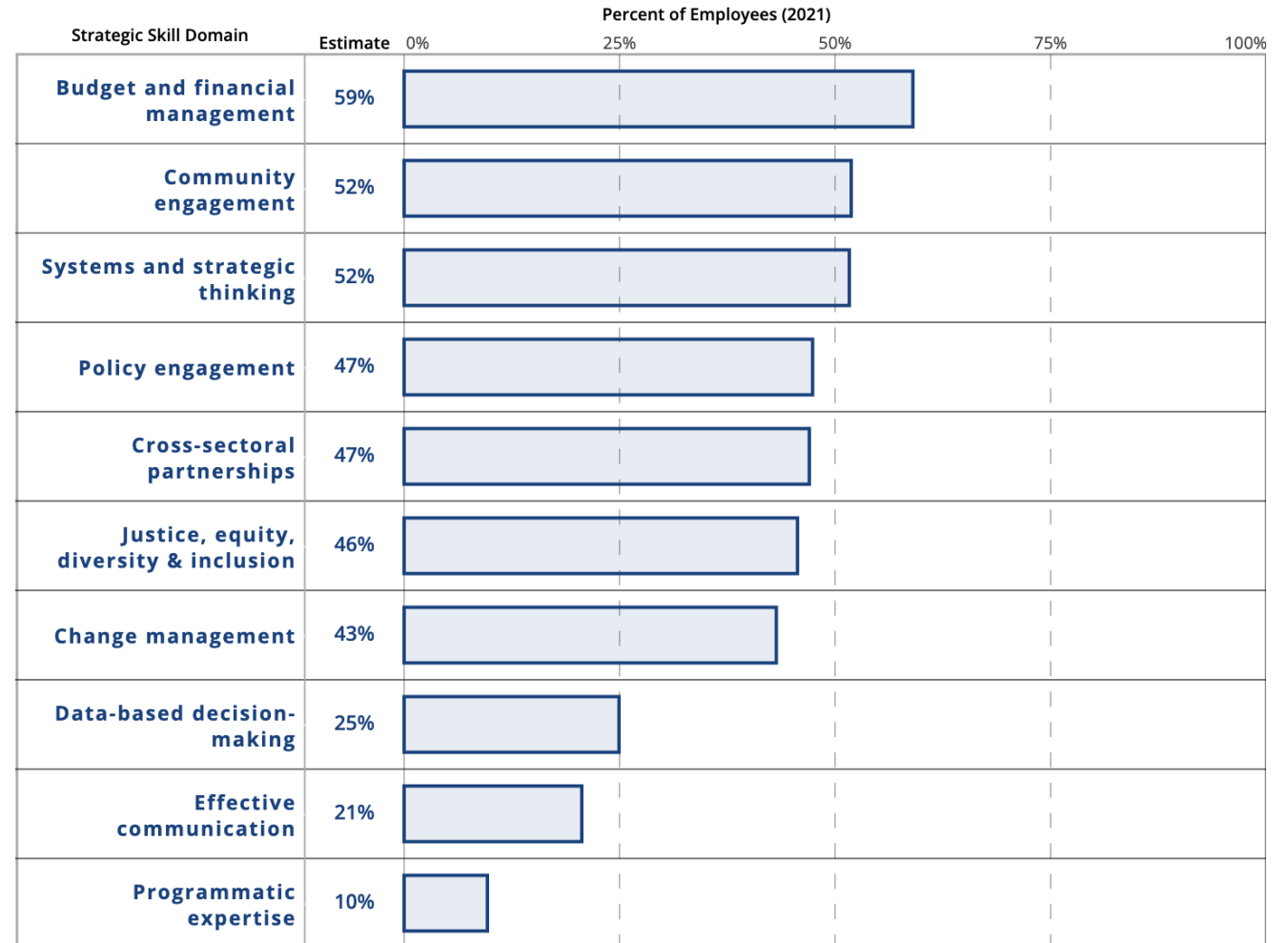


# TRAINING NEEDS: SUPERVISORS, MANAGERS, & EXECUTIVES

The top 5 areas of training needs **among supervisors, managers, & executives** are:

- Budget and financial management
- Community engagement
- Systems and strategic thinking
- Policy engagement
- Cross-sectoral partnerships

## TRAINING NEEDS: SUPERVISORS, MANAGERS, & EXECUTIVES LAB PROFESSIONALS: ALL EMPLOYEES



# 2021 KEY FINDINGS: ENGAGEMENT & SATISFACTION

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PH WINS respondents were asked to rate their agreement with several statements related to:

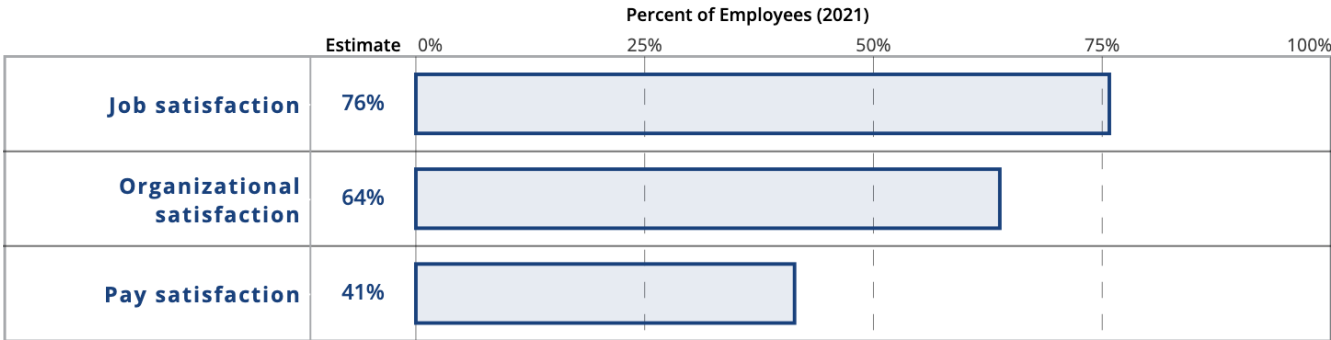
- Job, organizational, and pay satisfaction
- Perceptions about their workplace
- Perceptions about their supervisors
- Perceptions about their organization



# SATISFACTION

- Laboratory professionals are **largely satisfied** with their **job** (76%) and **organization** (64%).
- 41% are satisfied with their pay.

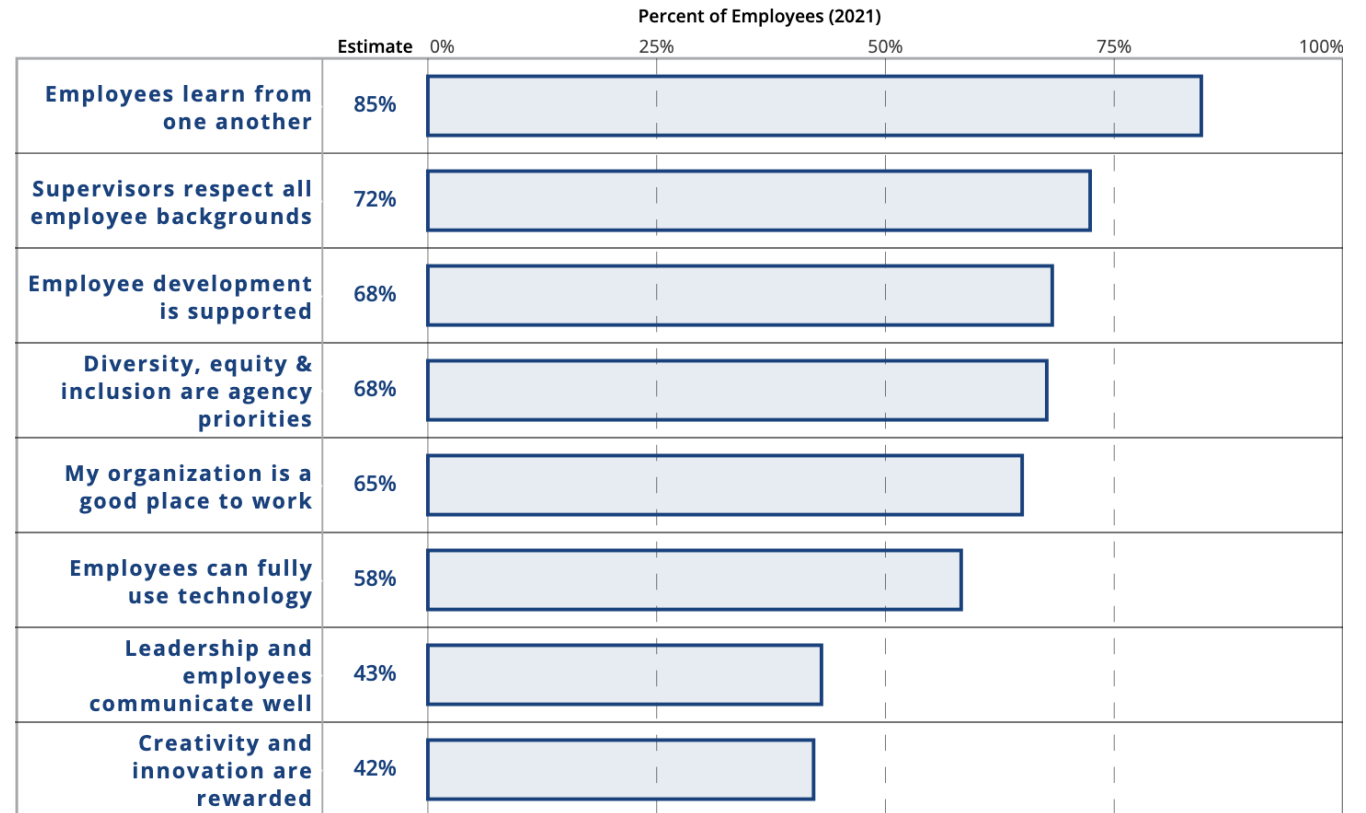
## EMPLOYEE SATISFACTION LAB PROFESSIONALS: ALL EMPLOYEES



# PERCEPTIONS ABOUT ORGANIZATION

- Laboratory professionals' **overall perceptions of their organizations are positive.**
- However, there is room for improvement:
  - 43% of the workforce agrees that leadership staff and employees communicate well.
  - 42% agree that creativity and innovation are rewarded.

## PERCEPTIONS ABOUT ORGANIZATION LAB PROFESSIONALS: ALL EMPLOYEES



# 2021 KEY FINDINGS: WELL-BEING

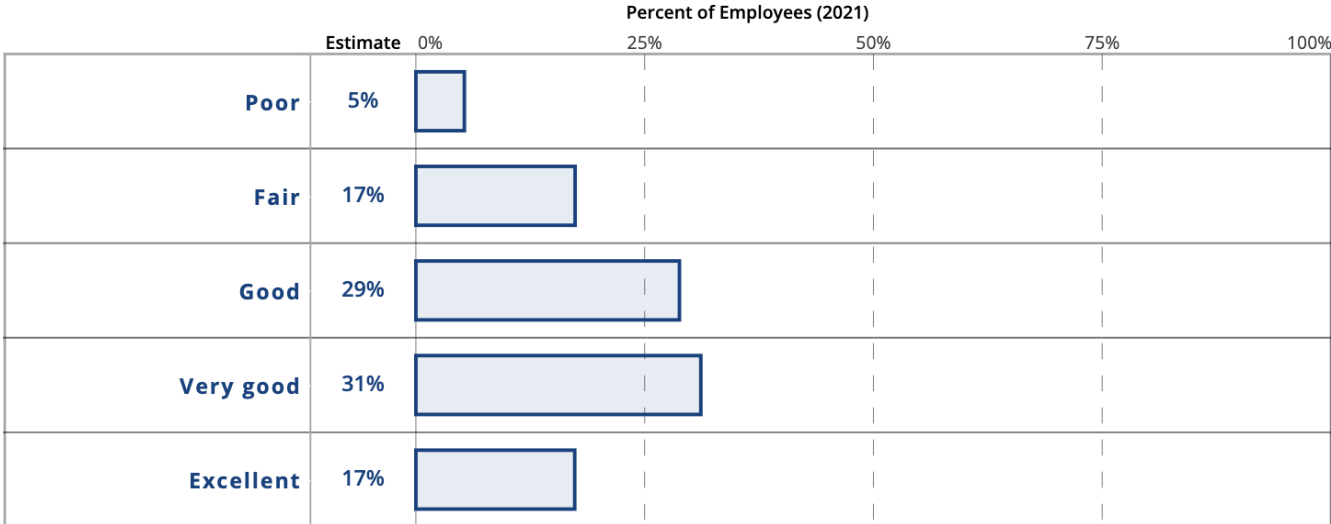
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- The 2021 PH WINS survey included questions specifically about employees' mental and emotional well-being.

# WELL-BEING

- 22% of laboratory professionals rate their mental health as either “poor” or “fair.”

## OVERALL MENTAL & EMOTIONAL WELL-BEING LAB PROFESSIONALS: ALL EMPLOYEES



# 2021 KEY FINDINGS: HEALTH EQUITY CONCEPTS

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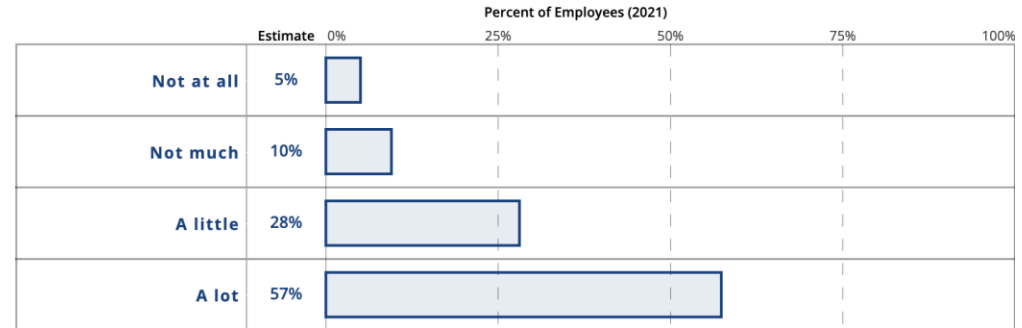
The 2021 PH WINS survey asked respondents to rate their level of awareness of and confidence in applying five health equity concepts:

- Health Equity
- Social Determinants of Equity
- Social Determinants of Health
- Structural Racism
- Environmental Justice

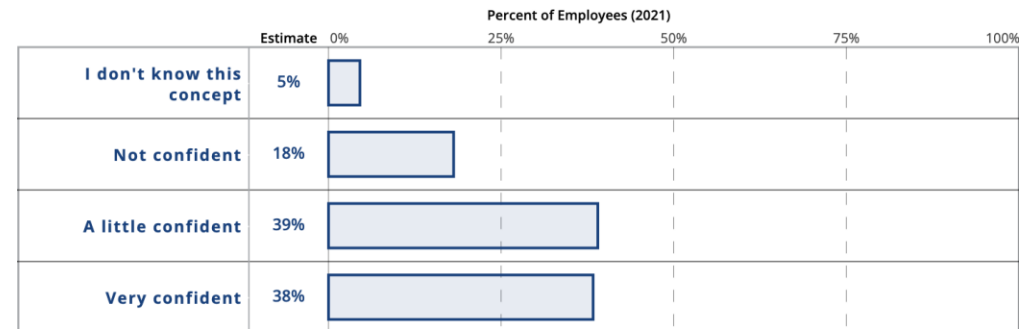
# HEALTH EQUITY CONCEPTS: HEALTH EQUITY

- **57%** of laboratory professionals rated their **awareness** of Health Equity as **a lot**.
- **38%** of laboratory professionals are **very confident** in applying the concept of Health Equity to their work.

## AWARENESS: HEALTH EQUITY LAB PROFESSIONALS: ALL EMPLOYEES



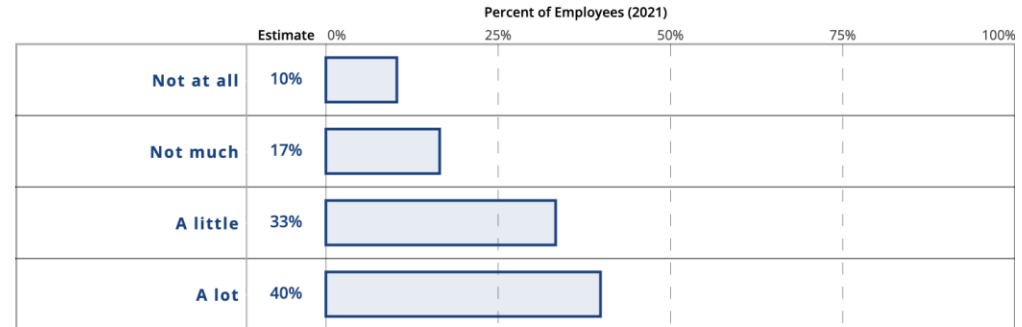
## CONFIDENCE: HEALTH EQUITY LAB PROFESSIONALS: ALL EMPLOYEES



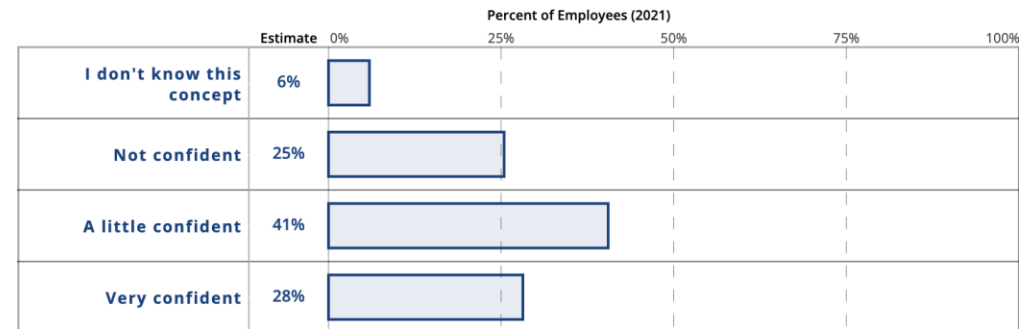
# HEALTH EQUITY CONCEPTS: SOCIAL DETERMINANTS OF EQUITY

- **40%** of laboratory professionals rated their **awareness** of Social Determinants of Equity as **a lot**.
- **28%** of laboratory professionals are **very confident** in applying the concept of Social Determinants of Equity to their work.

## AWARENESS: SOCIAL DETERMINANTS OF EQUITY LAB PROFESSIONALS: ALL EMPLOYEES



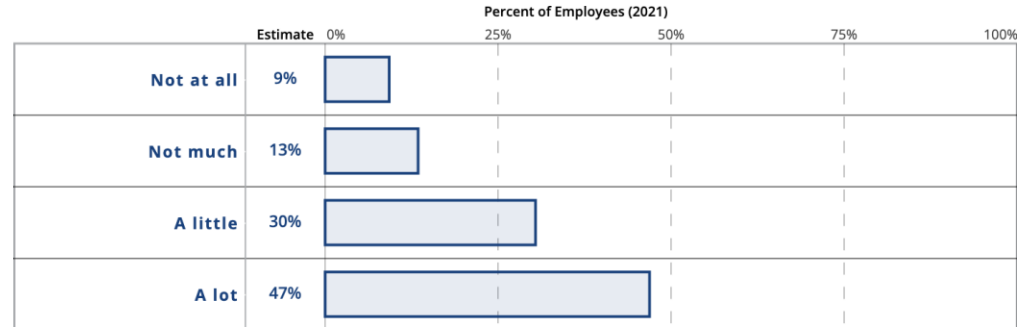
## CONFIDENCE: SOCIAL DETERMINANTS OF EQUITY LAB PROFESSIONALS: ALL EMPLOYEES



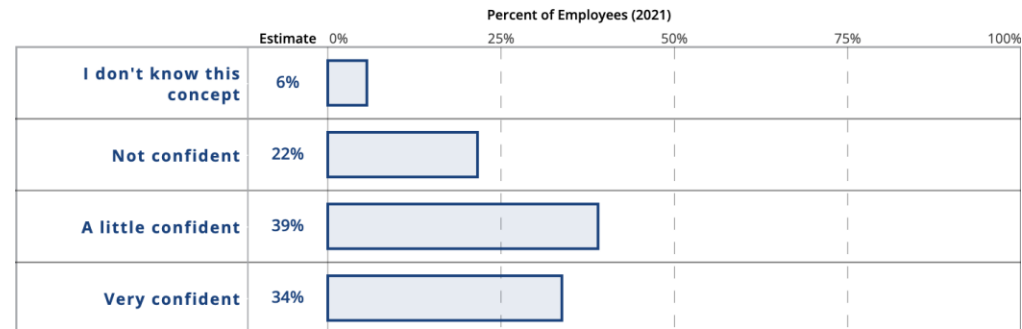
# HEALTH EQUITY CONCEPTS: SOCIAL DETERMINANTS OF HEALTH

- **47%** of laboratory professionals rated their **awareness** of Social Determinants of Health as **a lot**.
- **34%** of laboratory professionals are **very confident** in applying the concept of Social Determinants of Health to their work.

## AWARENESS: SOCIAL DETERMINANTS OF HEALTH LAB PROFESSIONALS: ALL EMPLOYEES



## CONFIDENCE: SOCIAL DETERMINANTS OF HEALTH LAB PROFESSIONALS: ALL EMPLOYEES

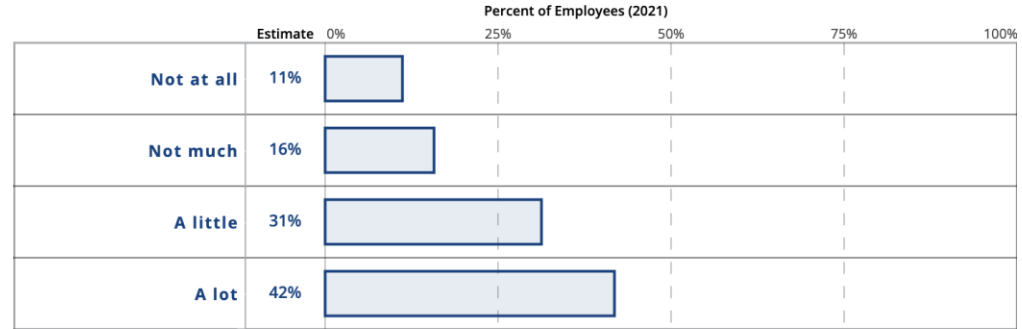




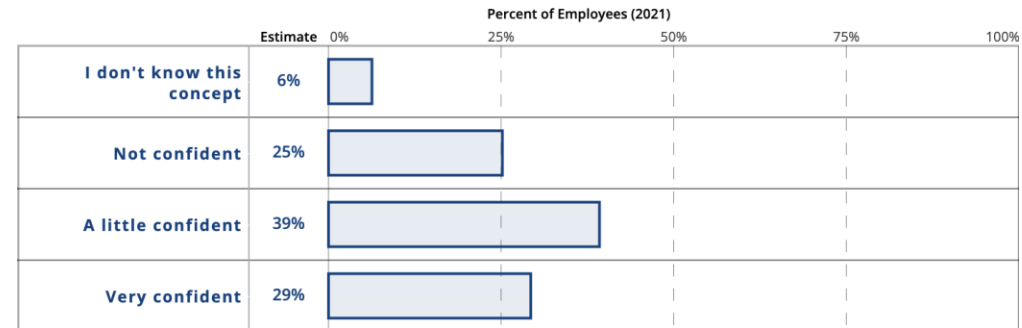
# HEALTH EQUITY CONCEPTS: STRUCTURAL RACISM

- **42%** of laboratory professionals rated their **awareness** of Structural Racism as **a lot**.
- **29%** of laboratory professionals are **very confident** in applying the concept of Structural Racism to their work.

## AWARENESS: STRUCTURAL RACISM LAB PROFESSIONALS: ALL EMPLOYEES



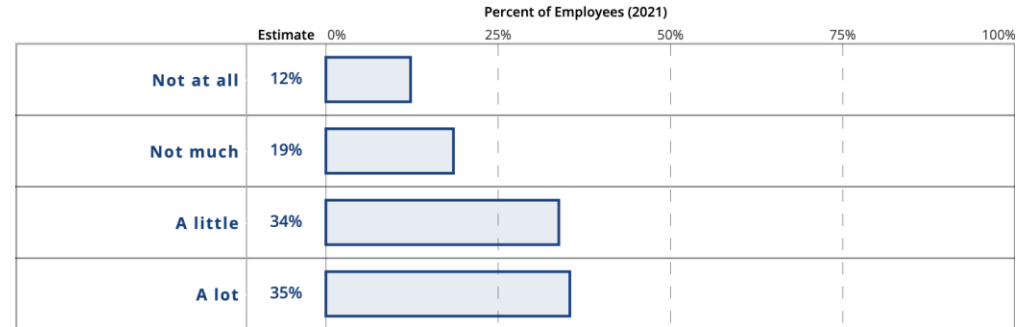
## CONFIDENCE: STRUCTURAL RACISM LAB PROFESSIONALS: ALL EMPLOYEES



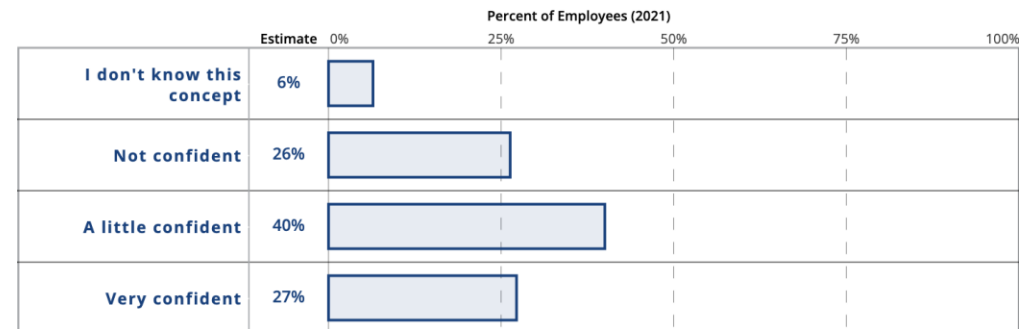
# HEALTH EQUITY CONCEPTS: ENVIRONMENTAL JUSTICE

- **35%** of laboratory professionals rated their **awareness** of Environmental Justice as **a lot**.
- **27%** of laboratory professionals are **very confident** in applying the concept of Environmental Justice to their work.

## AWARENESS: ENVIRONMENTAL JUSTICE LAB PROFESSIONALS: ALL EMPLOYEES



## CONFIDENCE: ENVIRONMENTAL JUSTICE LAB PROFESSIONALS: ALL EMPLOYEES



# FIND OUT MORE *(delete this slide before printing or presenting!)*

- **Looking for more data and graphs?**

- This report represents only a small portion of the data that are available from the 2021 PH WINS.
- Go to the **national PH WINS Dashboard** to view more data, download graph images, and more. You can find the dashboard at [www.phwins.org/national](http://www.phwins.org/national)

- **Want to learn more about the survey?**

- Go to <https://debeaumont.org/phwins/2021-findings/> for more information about PH WINS 2021, including key findings, links to publications and survey methods.

- **Have questions?**

- Contact the PH WINS team at: [phwins@debeaumont.org](mailto:phwins@debeaumont.org)

**Click the image to go to the national PH WINS Dashboard.**

