COVID-19 Survey of NIH and Extramural Staff – Preliminary Findings

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Presentation Overview

1. Background
2. NIH Workforce COVID-19 Impact Survey Topline Results
3. Extramural COVID-19 Impact Surveys Progress Update
5. Questions & Discussion
COVID-19 Substantially Affects our Workforce

- COVID-19 has changed the landscape of our work environment, within and outside of NIH
  - Remote work and/or physical distance may affect research productivity or trainee career development
  - Unanticipated burden of caretaking, particularly among women, may inhibit productivity
  - Added burden of mental health challenges, stress, and trauma, particularly among underrepresented groups (URGs)

- SWD was tasked with recommending **data-driven approaches** to:
  - Support the NIH workforce
  - Protect crucial advances in scientific workforce diversity made in recent decades
NIH Workforce COVID-19 Impact Survey

TOPLINE RESULTS
NIH Survey Overview

- Administered July 14 to July 28, 2020
- NIH federal staff, students and trainees, postdoctoral researchers, volunteers, and contractors
- 16,892 valid responses (51.2% response rate)
- Executive Summary released November 19, 2020

Survey Goals

1. Understand impact of COVID-19 on the NIH workforce
2. Identify groups that may be newly vulnerable due to factors related to COVID-19
3. Assess impact of COVID-19 on URGs
4. Enable NIH to implement interventions to mitigate the impact of COVID-19 on its workforce
Key Finding 1: Caretaking is Common in the NIH Workforce

- **43.9%** had caretaking responsibilities for individuals who live in their household or family members who do not live with them

- **One in five** indicated that caretaking responsibilities have made work responsibilities *substantially more difficult* to complete
  - **15.7%** among extramural respondents
  - **23.3%** among intramural respondents
Key Finding 2: COVID-19 Has Impacted Job Productivity

Among all respondents, one in four experienced lower productivity

- **69.4%** among trainees
- **40.3%** among intramural respondents (relative to **8.7%** among extramural)
Key Finding 3: Attention to Mental Health May Positively Impact Productivity

• **18.1%** indicated awareness/attention to mental health positively impacted productivity

• Among all respondents, **79.5%** did not use NIH resources to cope with stress and mental health (e.g., Employee Wellness Workshops, Employee Assistance Program)

![Impact of Attention to Mental Health on Productivity (n=15,613)](image)
Key Finding 4: Over Half Uncomfortable Returning Onsite

- **52.9%** uncomfortable with returning onsite (n=16,255)
- Extramural respondents were more likely than intramural respondents to be uncomfortable (71.8% vs. 38.0%)
- **Top concerns:**
  - 69.2% - Acquiring COVID-19 infection
  - 59.6% - Transmitting COVID-19 infection to household members
  - 52.7% - Ability to maintain physical distancing

Note: Percentages do not add to 100 due to removal of response groups of five or less for privacy
Extramural COVID-19 Impact Surveys

PROGRESS UPDATE
Extramural Surveys Overview

• NIH and SWD developed and fielded two surveys:
  1) **Institutions Survey:** > 200 research leaders
  2) **Researchers Survey:** 45,000 scientists who have been designated as personnel on NIH applications and/or awards

• Data collection concluded November 13, 2020
Response Data

- 32% response rate
- 67% at a Doctorate Granting University
- Minority Serving Institutions accounted for 12% of institutions invited to participate, and 18% of total responses received

Factors that Most Negatively Impacted Research Functions (n=222)

- Reduced access to on-site laboratories: 61.6%
- Institutional hiring freezes: 31.7%
- Increased virtual meetings: 22.3%
Extramural COVID-19 Impact Surveys

Institutions Survey: Preliminary Findings (cont’d)

• **Increased expenses involved in ensuring safety** had the most substantial impact; **maintaining a healthy environment** was priority for restoring research operations.
Researchers Survey: Preliminary Findings

Response Data

- 19% response rate
- 77% at academic institutions
- 53% faculty members

Factors that have Negatively Impacted Research* (n=36,183)

* Note: Number displayed may change upon data cleaning
Scientists/medical meeting participation was the top activity respondents spent less time; societal and/or political events most negatively impacted mental health.

**Activities that Respondents have Spent Less Time On**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific or medical Laboratory or animal meeting participation research or support for these activities</td>
<td>54.8%</td>
</tr>
<tr>
<td>Receiving mentorship or supervision</td>
<td>38.0%</td>
</tr>
</tbody>
</table>

**Factors that have Negatively Impacted Mental Health**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal and/or political events</td>
<td>63.0%</td>
</tr>
<tr>
<td>Physical and/or social isolation</td>
<td>60.0%</td>
</tr>
<tr>
<td>Disruption of promotion or tenure timeline/next career steps</td>
<td>34.2%</td>
</tr>
</tbody>
</table>

*Note: Number displayed may change upon data cleaning*
Mitigating Impact of COVID-19 on DEI

ACD WGD SUGGESTIONS
ACD WGD Suggestions

Mitigating Impact of COVID-19 on DEI

LEVERAGE NIH RESOURCES
1. Collect data on COVID-19 impacts (focus on URGs)
2. Reformat current funding mechanisms to address financial strains and workforce issues
3. Expand existing programs/trainings (e.g., Distinguished Scholars Program, Diversity Program Consortium, MOSAIC)
4. Promote visibility of successful NIH researchers from URGs

DEVELOP NEW INITIATIVES
1. Promote elevated inclusive excellence during times of crisis
2. Create better standards for hiring diverse faculty and staff
3. Provide trainings, resources, and support (e.g., mentoring guidance, career development)
4. Consider long-term impacts of the pandemic on the future biomedical workforce
Great Minds Think Differently.
NIH Workforce COVID-19 Impact Survey

DATA APPENDIX
**Objective 1. Assess Impact of COVID-19 on NIH Workforce**

**Perceived Career Impacts Vary by Employment Type**

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Agreed or Strongly Agreed Pandemic Will Probably Have Negative Impact on Career Trajectory (n=16,079)

- Strongly Agree
- Agree

**38.0% of intramural respondents agreed/strongly agreed (vs. 18.2% of extramurals)**

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>Strongly Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH Employee</td>
<td>17.0%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Federal Government Employee*</td>
<td>12.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Volunteer/Special Volunteer</td>
<td>28.6%</td>
<td></td>
</tr>
<tr>
<td>Guest Researcher</td>
<td>38.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Trainee**</td>
<td>25.5%</td>
<td>18.1%</td>
</tr>
</tbody>
</table>

*Excludes NIH employees

**Includes postbac, special volunteer, predoctoral student, postdoctoral researchers, research fellow, and clinical fellows**

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www.diversity.nih.gov
Groups Highly Impacted by COVID-19

Respondents in the following categories reported *higher-than average responses* to questions indicating negative impacts of COVID-19:

- Respondents who perform research
- Early career researchers
- Respondents involved in clinical care
- Respondents who care for young children
- Men in caretaker roles
- Trainees on visas
Objective 2. Identify Newly Vulnerable Groups due to COVID-19 Factors

Respondents who perform research or clinical care and early career researchers reported *higher-than average responses* to questions indicating negative impacts of COVID-19.

<table>
<thead>
<tr>
<th>Hypothesized Group, proportion of respondents out of whole</th>
<th>Proportion Reporting That…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Job Productivity is Lower</td>
</tr>
<tr>
<td>All Respondents, 100%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Respondents working on site, 8.5%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Tenure-track researchers, and early career researchers, 28.1%</td>
<td>44.8% (ACI)</td>
</tr>
<tr>
<td></td>
<td>65.7% (TTI)</td>
</tr>
<tr>
<td></td>
<td>69.8% (Trainee)</td>
</tr>
<tr>
<td>Respondents whose work involves research, 36.9%</td>
<td>50.2%</td>
</tr>
<tr>
<td>Respondents whose work involves clinical care, 7.7%</td>
<td>28.4%</td>
</tr>
<tr>
<td>Respondents whose work involves infrastructure support, 1.6%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

Note: ACI = assistant clinical investigators; TTI = tenure-track investigators
Objective 2. Identify Newly Vulnerable Groups due to COVID-19 Factors

Respondents who care for young children (0-12), men in caretaker roles, and trainees on visas reported higher-than average responses to questions indicating negative impacts of COVID-19.

<table>
<thead>
<tr>
<th>Hypothesized Group, proportion of respondents out of whole</th>
<th>Job Productivity is Lower</th>
<th>Pandemic Will Have Negative Impact on Career Trajectory</th>
<th>Job Satisfaction is Lower</th>
<th>They Are Uncomfortable Physically Returning to Work</th>
<th>Caretaking Has Made it Substantially More Difficult to be Productive</th>
<th>Being Separated from Co-Workers Has Negatively Impacted Workdays</th>
<th>Attention to Mental Health has Negative Impact on Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents, 100%</td>
<td>25.7%</td>
<td>28.5%</td>
<td>18.0%</td>
<td>52.9%</td>
<td>19.4%</td>
<td>26.5%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Older respondents (65+), 7.8%</td>
<td>21.2% (65-74)</td>
<td>17.2% (65-74)</td>
<td>16.8% (65-74)</td>
<td>51.7% (65-74)</td>
<td>6.7% (65-74)</td>
<td>29.3% (65-74)</td>
<td>3.7% (65-74)</td>
</tr>
<tr>
<td></td>
<td>30.1% (75+)</td>
<td>22.8% (75+)</td>
<td>17.1% (75+)</td>
<td>46.9% (75+)</td>
<td>n/a (75+)</td>
<td>42.7% (75+)</td>
<td>n/a (75+)</td>
</tr>
<tr>
<td>Caretaker, men, 14.0%</td>
<td>31.6%</td>
<td>36.1%</td>
<td>20.3%</td>
<td>50.1%</td>
<td>19.6%</td>
<td>31.5%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Caretaker, women, 27.9%</td>
<td>21.9%</td>
<td>25.3%</td>
<td>16.3%</td>
<td>64.0%</td>
<td>19.3%</td>
<td>21.5%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Caretakers with young children (0-12), 25.4%</td>
<td>37.3% (under 5)</td>
<td>38.3% (under 5)</td>
<td>22.2% (under 5)</td>
<td>56.5% (under 5)</td>
<td>38.8% (under 5)</td>
<td>28.4 (under 5)</td>
<td>7.5% (under 5)</td>
</tr>
<tr>
<td></td>
<td>27.3% (5-12)</td>
<td>30.1% (5-12)</td>
<td>18.7% (5-12)</td>
<td>57.8% (5-12)</td>
<td>26.4% (5-12)</td>
<td>26.4% (5-12)</td>
<td>6.8% (5-12)</td>
</tr>
<tr>
<td>Trainee on visa, 5.3%</td>
<td>69.5%</td>
<td>76.0%</td>
<td>38.6%</td>
<td>19.0%</td>
<td>33.1%</td>
<td>44.1%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Individuals at increased COVID-19 risk, 42.5%</td>
<td>18.8%</td>
<td>24.9%</td>
<td>15.5%</td>
<td>66.0%</td>
<td>15.3%</td>
<td>22.2%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
52.9% of respondents said they are not comfortable returning to the workforce, with respondents who have a disability and Black or African American respondents reporting the highest levels of discomfort.

**Comfort with Returning to Onsite Work by Race (n=14,916)**

- **White**: 24.8% Comfortable, 51.0% Neither Comfortable nor Uncomfortable, 17.9% Uncomfortable
- **Black or African American**: 12.8% Comfortable, 67.9% Neither Comfortable nor Uncomfortable, 29.6% Uncomfortable
- **Asian**: 23.8% Comfortable, 45.2% Neither Comfortable nor Uncomfortable, 20.7% Uncomfortable
- **Other***: 21.8% Comfortable, 55.2% Neither Comfortable nor Uncomfortable, 20.7% Uncomfortable

*Contains American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and Other
Objective 3. Assess Impact of COVID-19 on URGs

Caretaking Inhibited Work, Particularly Among Vulnerable Groups

64.5% of respondents reported that caretaking responsibilities have made it more difficult to complete work responsibilities, with trainees, other gender identities, and bisexual respondents reporting the greatest impact.

Caretaking Responsibilities Made Work Responsibilities More Difficult to Complete (n=7,315)

- Trainee*: 14.1%
- NIH employee: 35.3%
- Federal Government Employee**: 48.4%
- Volunteer/Special Volunteer: 25.9%
- Contractor: 42.3%

* Includes postbac, special volunteer, predoctoral student, postdoctoral researchers, research fellow, and clinical fellows
**Excludes NIH employees
Objective 3. Assess Impact of COVID-19 on URGs

Certain Groups Experienced Heightened Productivity

Respondents who have disabilities and Black/African-American respondents were more likely to indicate higher than normal productivity since the pandemic began.

Change in Productivity Since Pandemic Began (n=15,298)

- **Has a Disability**
  - Lower than Normal: 30.6%
  - No Change: 18.0%
  - Higher than Normal: 51.4%

- **Does Not Have a Disability**
  - Lower than Normal: 36.7%
  - No Change: 26.8%
  - Higher than Normal: 36.5%