

SIDEBAR

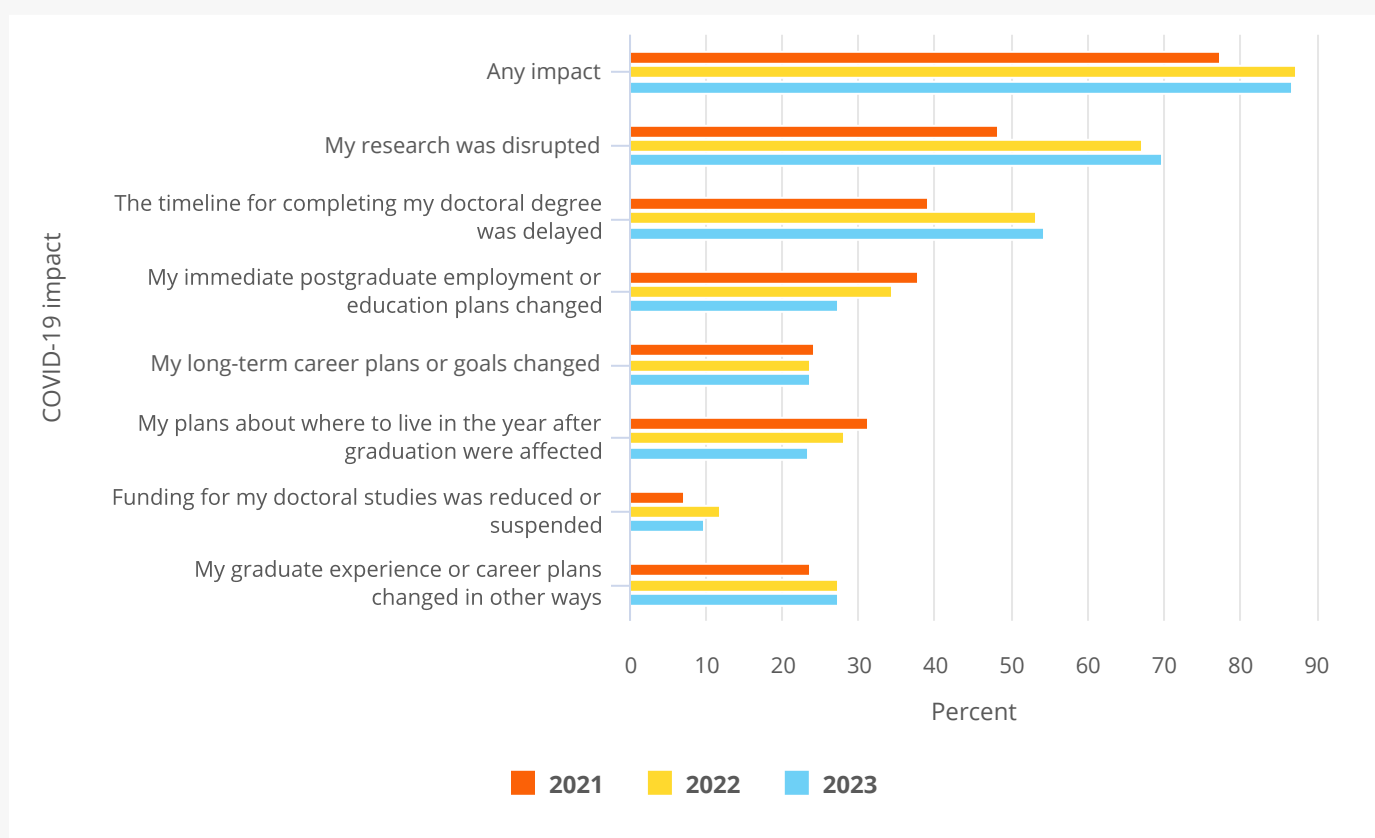
COVID-19 pandemic impacts on doctorate recipients

The COVID-19 pandemic that began in 2019 and spread rapidly in the United States in the first quarter of 2020 disrupted many aspects of the education and training of 2023 doctorate recipients.* Doctorate recipients were asked whether they experienced one of six impacts as a result of the pandemic: delay in their doctoral degree completion timeline; disruption in their research; reduction or suspension of funding for their doctoral studies; change in their immediate postgraduate employment or education plans; change in longer-term career plans or goals; and change in their plans about where to live in the year after graduation. Doctorate recipients were also asked to report any other changes in their graduate experience or career plans. This section summarizes the impacts of COVID-19 on doctorate recipients and is limited to the 51,173 doctorate recipients in 2023 who were asked the COVID-19 questions.

In 2023, the vast majority of doctorate recipients (87%) reported that their graduate experience and career plans were affected by at least one of the impacts listed above—comparable to the proportion in 2022 (87%) and higher than the proportion in 2021, when 77% reported at least one impact (figure A).

Figure A

COVID-19 pandemic impacts among doctorate recipients: 2021–23

**Note(s):**

Percentages are based on the number of doctorate recipients who were asked about the COVID-19 impact questions (42,030 of 52,160 doctorate recipients in 2021; 50,948 of 57,448 doctorate recipients in 2022; and 51,173 of 57,862 doctorate recipients in 2023).

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2023.

Some impacts of the COVID-19 pandemic reported by 2023 doctorate recipients were more prevalent in 2023 than in previous years, while others remained stable or even abated. Disruption in research was the most frequent impact,

cited by 70% of doctorate recipients—an increase from 48% in 2021 and 67% in 2022 (figure A). Among doctorate recipients who reported their research had been disrupted, 81% indicated having had limited or no access to resources needed for research and 68% reported having had to make changes to their research plan (table A).[†] The second most frequently reported impact was a delayed timeline for completing the doctoral degree, cited by 54% of 2023 doctorate recipients—a higher percentage than in 2021 (39%) and close to the proportion in 2022 (53%).

Table A

Doctorate recipients who said their research was disrupted as a result of the COVID-19 pandemic, by type of disruption: 2023

(Percent)

Type of disruption	Percent
My research was disrupted (number)	35,707
Limited or no access to resources	80.5
Changed my research plan	68.2
Disrupted in other ways	17.6

Note(s):

Multiple responses allowed.

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2023.

The impacts of the COVID-19 pandemic on short-term postgraduation plans eased in 2023. About a quarter (27%) of the 2023 doctorate recipients indicated that their immediate postgraduation employment or education plans were affected by the pandemic in 2023—a decrease from 2022 (35%) and 2021 (38%) (figure A). Of the doctorate recipients who reported changes in their immediate postgraduate employment or education plans in 2023, 77% attributed the change to limited job opportunities and 38% to having had to accept a less-desirable job (table B).[‡] About a quarter (23%) of the 2023 doctorate recipients also reported that their plans about where to live in the year after graduation were affected—a decrease from 2022 (28%) and 2021 (31%).

Table B

Doctorate recipients who said their immediate postgraduate employment or education plans changed as a result of the COVID-19 pandemic, by type of change: 2023

(Percent)

Type of change	Percent
My immediate postgraduate employment or education plans changed (number)	13,913
Limited job opportunities	76.6
Had to accept a less-desirable job	37.7
Changed plans in other ways	19.6

Note(s):

Multiple responses allowed.

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2023.

The impact of the pandemic on long-term career plans or goals remained relatively stable over the past 3 years (24%). In 2023, over half of doctorate recipients responded that their long-term plans changed because they had to find a different type of employer (59%) or a different job or field (55%). For some, their long-term plans or goals changed because the pandemic provided new opportunities (46%) (table C).

Table C**Doctorate recipients who said their long-term career plans or goals changed as a result of the COVID-19 pandemic, by type of change: 2023**

(Percent)

Type of change	Percent
My long-term career plans or goals changed (number)	12,136
Different type of employer	58.7
Different type of job or field	55.1
New opportunities	45.5
Changed plans in other ways	13.1

Note(s):

Multiple responses allowed.

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2023.

Compared to the other measures, the financial impact of the pandemic on respondents—reduced or suspended funding for doctoral studies—was relatively small. This was the least reported impact in all 3 years the questions about pandemic impacts have been fielded. The proportion of doctorate recipients reporting an impact on funding was lower in 2023 than in 2022, but still higher than in 2021.

Sidebar footnotes

* To measure the impacts of the COVID-19 pandemic on new doctorate recipients' graduate experiences and postgraduation plans, a set of questions was designed, tested, and included as a new module starting with the 2021 Survey of Earned Doctorates (SED). See the SED 2022 "[Technical Notes](#)" for details about slight changes in the wording of the COVID-19 module questions between 2021 and 2022.

† Doctorate recipients were allowed to provide multiple responses as to how their research was disrupted.

‡ Doctorate recipients were allowed to provide multiple responses as to how their postgraduation employment or education plans changed.