

TABLE 32-2

Involuntarily out-of-field rate among U.S. residing doctoral scientists and engineers, by occupation: 2021

(Percent and SE)

Occupation	Involuntarily out-of-field rate	
	Percent	SE
All occupations	2.8	0.10
Science occupations	2.0	0.15
Biological, agricultural, and other life scientists	0.9	0.15
Agricultural, food scientists	0.7	0.35
Biochemists, biophysicists	0.6	0.25
Biological scientists	1.0	0.35
Forestry, conservation scientists	D	D
Medical scientists	1.4	0.35
Postsecondary teachers, agricultural, other natural sciences	D	D
Postsecondary teachers, biological sciences	0.2	0.10
Other biological, agricultural, life scientists	1.6	0.60
Computer and information scientists	7.8	0.70
Computer and information scientists	9.1	0.80
Postsecondary teachers, computer science	0.7	0.35
Mathematical scientists	3.3	0.50
Mathematical scientists	5.5	0.85
Postsecondary teachers, mathematics, statistics	S	S
Physical scientists	1.4	0.30
Chemists, except biochemists	2.1	0.40
Earth, atmospheric, ocean scientists	1.1	0.55
Physicists, astronomers	1.0	0.40
Postsecondary teachers, chemistry	S	S
Postsecondary teachers, physics	D	D
Postsecondary teachers, other physical science	D	D
Other physical scientists	5.9	2.30
Psychologists	0.1	0.10
Psychologists	0.2	0.10
Postsecondary teachers, psychology	D	D
Social scientists	0.6	0.20
Economists	D	D
Political scientists	D	D
Postsecondary teachers, economics	D	D
Postsecondary teachers, political science	D	D
Postsecondary teachers, sociology	D	D
Postsecondary teachers, other social sciences	D	D
Sociologists, anthropologists	D	D
Other social scientists	3.6	1.20
Engineering occupations	1.9	0.25
Aerospace, aeronautical, astronautical engineers	2.3	0.65
Chemical engineers	2.0	0.70
Civil, architectural, sanitary engineers	1.6	0.70
Electrical engineers	1.8	0.40
Industrial engineers	7.0	2.65
Mechanical engineers	2.2	0.65
Postsecondary teacher, engineering	S	S
Other engineers	3.1	0.60
S&E-related occupations	3.5	0.25
Health occupations, except postsecondary teachers and managers	5.9	0.65
Postsecondary teacher, health and related science	0.7	0.30

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(Percent and SE)

Occupation	Involuntarily out-of-field rate	
	Percent	SE
S&E managers, including health	2.4	0.45
S&E precollege teachers	3.6	1.00
S&E technicians/ technologists	5.5	0.95
Other S&E-related occupations	13.5	6.40
Non-S&E occupations	5.7	0.35
Arts, humanities-related occupations	8.6	1.50
Management-related occupations	9.1	0.80
Non-S&E managers	2.6	0.45
Non-S&E postsecondary teachers	1.1	0.40
Non-S&E precollege/ other teachers	7.0	1.85
Sales, marketing occupations	13.9	2.05
Social service-related occupations	2.5	0.65
Other non-S&E occupations	12.2	1.55

D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering; SE = standard error.

Note(s):

Percentage rounded to the nearest 0.1%, standard error of the unrounded percentage (based on unrounded counts), rounded up to the nearest multiple of 0.05%. Involuntarily out-of-field rate is the percentage of employed individuals who reported, for their principal job, working in an area not related to their first doctoral degree at least partially because a job in their doctoral degree field was not available. If respondent was not employed during survey reference period, occupation when last employed was reported. Residence location is based on reported living location on 1 February 2021.

Source(s):

National Center for Science and Engineering Statistics, Survey of Doctorate Recipients, 2021.