

TABLE 54

Domestic R&D employment and level of education of researchers, by occupation, industry, and company size: 2015

(Thousands)

Industry and company size	NAICS code	Total	Researchers ^a		R&D technicians and equivalent staff	Other R&D supporting staff
			Total	With PhD		
All industries	21-23, 31-33, 42-81	1,543	1,075	115	302	167
Manufacturing industries	31-33	916	652	72	161	103
Food	311	24	13	2	7	5
Beverages and tobacco products	312	4	3	1	1	1
Textiles, apparel, and leather products	313-16	7	3	1	3	1
Wood products	321	2	1	*	1	*
Paper	322	5	3	*	2	* i
Printing and related support activities	323	3	2	i *	1	i 1
Petroleum and coal products	324	2	1	*	1	* i
Chemicals	325	167	114	30	29	25
Basic chemicals	3251	14	9	4	4	2
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	7	5	1	2	*
Pesticides, fertilizers, and other agricultural chemicals	3253	9	5	2	3	1
Pharmaceuticals and medicines	3254	120	83	21	17	20
Soaps, cleaning compounds, and toilet preparations	3256	7	6	2	1	1
Paints, coatings, adhesives, and other chemicals	3255, 3259	10	6	1	2	2
Plastics and rubber products	326	24	13	i 1	6	i 5
Nonmetallic mineral products	327	7	5	i 1	2	i 1
Primary metals	331	6	2	*	2	i 2
Fabricated metal products	332	36	16	i *	12	i 8
Machinery	333	82	55	3	20	8
Agricultural implements	33311	9	6	*	2	1
Semiconductor machinery	333242	9	7	1	2	*
Engines, turbines, and power transmission equipment	3336	10	8	*	1	*
Other machinery	other 333	54	33	i 2	14	i 7
Computer and electronic products	334	263	219	19	27	17
Communications equipment	3342	58	49	2	5	3
Semiconductors and other electronic components	3344	97	84	10	7	5
Navigational, measuring, electromedical, and control instruments	3345	66	52	4	10	5
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	14	10	i 1	3	i 1
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	29	24	1	3	2
Other measuring and controlling devices	other 3345	23	18	1	4	2
Other computer and electronic products	other 334	42	34	i 3	5	i 3
Electrical equipment, appliances, and components	335	28	21	2	6	2
Transportation equipment	336	185	137	7	29	19

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Automobiles, bodies, trailers, and parts	3361-63	101	76	3	16	i 10
Aerospace products and parts	3364	70	54	4	10	6
Aircraft, aircraft engines, and aircraft parts	336411-13	58	46	3	7	5
Guided missiles, space vehicles, and related parts	336414-15, 336419	12	8	*	3	*
Military armored vehicles, tanks, and tank components	336992	*	*	*	*	* i
Other transportation	other 336	13	7	i *	3	i 3 i
Furniture and related products	337	5	3	i * i	1	i 1 i
Miscellaneous manufacturing	339	62	42	4	12	8
Medical equipment and supplies	3391	47	33	4	9	5
Other miscellaneous manufacturing	3399	15	9	i * i	3	i 3 i
Nonmanufacturing industries	21-23, 42-81	627	423	43	141	64 i
Mining, extraction, and support activities	21	15	8	2	5	2
Utilities	22	3	1	*	*	1
Wholesale trade	42	25	12	i * i	5	i 8 i
Electronic shopping and electronic auctions	454111-12	6	4	i * i	1	i 1 i
Transportation and warehousing	48-49	2	1	*	*	1 i
Information	51	279	207	16	51	21
Publishing	511	146	116	7	16	14
Newspaper, periodical, book, and directory publishers	5111	1	*	i * i	*	i * i
Software publishers	5112	145	115	7	16	14
Telecommunications	517	24	16	1	8	i 1
Data processing, hosting, and related services	518	56	35	1	15	5 i
Other information	other 51	53	40	7	12	*
Finance and insurance	52	32	10	*	16	5
Real estate and rental and leasing	53	2	1	*	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	*	*	i *
Other real estate and rental and leasing	other 53	1	1	*	*	*
Professional, scientific, and technical services	54	246	169	i 24	i 56	i 21 i
Architectural, engineering, and related services	5413	44	32	i 7	i 7	i 4 i
Computer systems design and related services	5415	92	76	i 6	i 10	6 i
Scientific research and development services	5417	82	44	10	29	10 i
Biotechnology research and development	541711	22	16	3	4	1
Physical, engineering, and life sciences (except biotechnology) research and development	541712	54	27	6	21	6
Social sciences and humanities research and development	541720	7	*	i * i	4	i 3 i
Other professional, scientific, and technical services	other 54	28	16	i 1	i 10	i 2 i

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			Total	With PhD		
Health care services	621-23	5	2 i	1 i	2 i	1 i
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	13	8 i	*	3 i	2
All companies (number of domestic employees)	-	1,543	1,075	115	302	167
Micro companies ^b						
5-9	-	26	18 i	2 i	4 i	4 i
Small companies						
10-19	-	50	34 i	4 i	10 i	6 i
20-49	-	91	61 i	6 i	18 i	11 i
Medium companies						
50-99	-	83	53 i	6 i	21 i	10 i
100-249	-	100	60	7	27	13 i
Large companies						
250-499	-	86	54	6	22	9
500-999	-	77	52	5 i	17	8
1,000-4,999	-	254	178	17 i	46	31
5,000-9,999	-	147	100	12 i	29	18
10,000-24,999	-	228	157	23	47	24
25,000 or more	-	402	309	29	60	33

* = amount < 500; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Researchers include R&D scientists and engineers and their managers.

^b Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2015.