

TABLE 51

Domestic total employment, R&D employment, and level of education of researchers, by activity, industry, and company size: 2020

(Thousands)

Industry and company size	NAICS code	Total employment	Total R&D employment	Researchers ^a		R&D technicians and equivalent staff	Other R&D supporting staff
				Total	With PhD		
All industries	21-23, 31-33, 42-81	22,034	1,936	1,312	129	443	181
Manufacturing industries	31-33	10,065	985	668	82	204	112
Food	311	1,125	28	14	3	9	5
Beverage and tobacco products	312	237	5	3	*	1	1
Textile, apparel, and leather products	313-16	238	6	3	1	3	1
Wood products	321	110	3	1	*	2	*
Paper	322	190	6	4	*	1	1
Printing and related support activities	323	136	4	2	* i	1	1
Petroleum and coal products	324	101	6	2	1	3	1
Chemicals	325	1,459	193	127	36	34	32
Basic chemicals	3251	281	12	7	2	4	1
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	79	6	4	1	2	1
Pesticide, fertilizer, and other agricultural chemicals	3253	64	5	3	1	1	1
Pharmaceuticals and medicines	3254	606	146	96	30	23	27
Soap, cleaning compound, and toilet preparation	3256	249	11	8	1	2	2
Paint, coating, adhesive, and other chemicals	3255, 3259	180	12	9	1	2	1
Plastics and rubber products	326	499	27	13	1	10	4
Nonmetallic mineral products	327	165	6	4	*	2	1
Primary metals	331	138	8	2	*	2	3
Fabricated metal products	332	414	40	17	1	16	7
Machinery	333	899	101	63	4	29	10
Agricultural implement	33311	89	11	7	*	3	1
Semiconductor machinery	333242	37	13	9	2	3	1
Engine, turbine, and power transmission equipment	3336	94	7	5	1	1	*
Other machinery	other 333	679	70	42	2	21	7
Computer and electronic products	334	1,337	264	219	23	27	18
Communications equipment	3342	177	41	32	2	6	3
Semiconductor and other electronic components	3344	275	91	79	10	8	4
Navigational, measuring, electromedical, and control instruments	3345	549	67	54	6	9	3
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	68	8	6	1	1	*
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	310	35	30	3	4	1
Other measuring and controlling device	other 3345	172	24	18	3	4	1
Other computer and electronic products	other 334	337	64	53	5	5	7

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Electrical equipment, appliances, and components	335	296	27	18	1 i	6	3
Transportation equipment	336	1,638	174	125	6	32	16
Motor vehicles, bodies, trailers, and parts	3361-63	832	101	77	3	15	9
Aerospace products and parts	3364	636	62	42	2	13	6
Aircraft, aircraft engine, and aircraft parts	336411-13	605	54	38	2	12	5
Guided missile, space vehicle, and related parts	336414-15, 336419	31	7	5	* i	2	1
Military armored vehicle, tank, and tank component	336992	2	*	*	*	*	0
Other transportation	other 336	168	11	6	*	3	2
Furniture and related products	337	156	4	2	*	2	1
Miscellaneous	339	926	84	51	4	24	8
Medical equipment and supplies	3391	635	65	40	4	19	6
Other miscellaneous manufacturing	3399	291	19	11 i	1 i	5	2
Nonmanufacturing industries	21-23, 42-81	11,970	952	643	46 i	239	69
Mining, quarrying, oil and gas extraction, and support activities	21	141	8	4	0-2 i	2 i	1
Utilities	22	340	0-20	0-2	*	0-20	0-12
Wholesale trade	42	366 i	13	6	0-1 i	5	2
Electronic shopping and electronic auctions	454111-12	58-4,017	58-80	40-64	*	14	3
Transportation and warehousing	48-49	1,041	13	11	* i	1 i	1 i
Information	51	2,244	422	317	24 i	83	23
Publishing	511	452	113	93	7 i	14	6
Newspaper, periodical, book, and directory publishers	5111	5	1	*	*	*	* i
Software publishers	5112	447	113	93	7 i	14	6
Telecommunications	517	552	21	10 i	1 i	11 i	*
Data processing, hosting, and related services	518	839	171	120	3 i	37	13
Other information	other 51	401	117	93	12	21	3
Finance and insurance	52	1,751	66	33-47	1 i	10-31	0-10
Real estate and rental and leasing	53	27	5	4	*	1 i	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	2 i	*	*	*	* i	* i
Other real estate and rental and leasing	other 53	25	5	4	*	1 i	*
Professional, scientific, and technical services	54	1,308	300	176	19 i	95	29

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Architectural, engineering, and related services	5413	276	55	35	2	16	5
Computer systems design and related services	5415	428	94	65	4 i	22	7
Scientific research and development services	5417	257	107	54	11	39	14
Research and development in nanotechnology	541713	2 i	1 i	1 i	* i	* i	* i
Research and development in biotechnology (except nanobiotechnology)	541714	88	30	14	3	15	1
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	159	70	36	7 i	23 i	11 i
Research and development in the social sciences and humanities	541720	8	7	3	1	1	3
Other professional, scientific, and technical services	other 54	347	43	22	2 i	18	3
Health care services	621-23	700	8	4	0-2 i	2	2
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	39-3,998	40	8-41	0-1	0-30	0-12
All companies (number of domestic employees)	-	22,034	1,936	1,312	129	443	181
Small companies							
10-19 ^b	-	75	32	21	4	9	3
20-49	-	319	94	54	8	30	10
Medium companies							
50-99	-	394	89	52	6	29	8
100-249	-	789	145	83	8	44	18
Large companies							
250-499	-	750	112	76	6	26	10
500-999	-	910	96	60	5	26	10
1,000-4,999	-	2,899	327	221	20	71	35
5,000-9,999	-	1,815	169	114	12	33	21
10,000-24,999	-	3,345	277	173	22	72	31
25,000 or more	-	10,739	595	457	37 i	103	35

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

NAICS = 2017 North American Industry Classification System.

^a Researchers include R&D scientists and engineers and their managers.^b The Business Enterprise Research and Development Survey does not include companies with fewer than 10 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 \$50,000 or more of R&D and are not comparable with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2020.