

TABLE 55

Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2016

(Thousands)

Industry and company size	NAICS code	Worldwide			Domestic			Foreign		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
All industries	21-23, 31-33, 42-81	2,195	1,601	594	1,522	1,122	399	674	479	194
Manufacturing industries	31-33	1,318	992	326	912	690	222	406	302	104
Food	311	38	21	17	24	14	10	14	7	7
Beverages and tobacco products	312	9	5	4	6	4	3	3	1	1
Textiles, apparel, and leather products	313-16	9	6	4	8	5	3	1	1	*
Wood products	321	3	2	1	3	2	*	*	*	*
Paper	322	8	6	2	6	4	1	2	2	*
Printing and related support activities	323	4	3	1	4	3	1	*	*	*
Petroleum and coal products	324	2	2	1	2	1	*	*	*	*
Chemicals	325	236	128	108	173	95	77	63	32	31
Basic chemicals	3251	19	13	6	14	10	4	5	3	2
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	8	6	2	5	4	1	3	2	1
Pesticides, fertilizers, and other agricultural chemicals	3253	7	5	3	5	3	2	2	1	1
Pharmaceuticals and medicines	3254	161	78	83	123	62	61	39	17	22
Soaps, cleaning compounds, and toilet preparations	3256	21	11	10	13	7	6	7	4	4
Paints, coatings, adhesives, and other chemicals	3255, 3259	20	15	5	13	10	3	7	5	2
Plastics and rubber products	326	37	27	10	29	22	8	8	5	3
Nonmetallic mineral products	327	9	7	2	7	6	1	1	1	*
Primary metals	331	8	7	1	7	6	1	1	1	*
Fabricated metal products	332	33	29	4	30	27	3	3	2	*
Machinery	333	113	99	14	78	70	9	35	29	5
Agricultural implements	33311	15	14	1	9	8	1	6	5	1
Semiconductor machinery	333242	14	12	2	9	8	1	5	4	1
Engine, turbine, and power transmission equipment	3336	12	11	1	7	7	1	4	4	*
Other machinery	other 333	73	63	10	53	47	6	20	16	4
Computer and electronic products	334	424	343	81	264	215	48	160	128	32
Communications equipment	3342	77	64	13	48	40	8	29	24	5
Semiconductors and other electronic components	3344	156	127	29	96	79	17	61	49	12
Navigational, measuring, electromedical, and control instruments	3345	100	78	22	69	55	14	30	23	7
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	19	13	6	12	8	4	7	5	2
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	33	27	6	29	24	5	4	3	1
Other measuring and controlling devices	other 3345	47	38	10	28	23	5	20	15	5

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Other computer and electronic products	other 334	90	74	16	50	42	8	40	32	8
Electrical equipment, appliances, and components	335	51	42	9	28	23	4	23	18	5
Transportation equipment	336	236	196	41	168	138	30	68	58	11
Automobiles, bodies, trailers, and parts	3361-63	135	114	21	92	78	14	43	36	7
Aerospace products and parts	3364	85	69	16	61	49	12	24	20	4
Aircraft, aircraft engines, and aircraft parts	336411-13	73	59	14	50	39	10	24	20	4
Guided missiles, space vehicles, and related parts	336414-15, 336419	11	10	1	11	10	1	*	*	*
Military armored vehicles, tanks, and tank components	336992	*	*	*	*	*	*	0	0	0
Other transportation	other 336	17	12	4	15	11	4	2	2	*
Furniture and related products	337	5	4	1	5	3	1	*	*	*
Miscellaneous manufacturing	339	92	65	27	70	50	20	22	15	7
Medical equipment and supplies	3391	65	45	20	47	33	14	17	12	6
Other miscellaneous manufacturing	3399	27	20	7	23	17	6	5	3	1
Nonmanufacturing industries	21-23, 42-81	878	610	268	610	433	177	268	177	91
Mining, extraction, and support activities	21	14	11	3	12	9	3	2	2	*
Utilities	22	3	2	1	3	2	1	*	*	*
Wholesale trade	42	12	9	2	11	9	2	*	*	*
Electronic shopping and electronic auctions	454111-12	6	4	2	5	3	2	1	1	1
Transportation and warehousing	48-49	3	1	2	3	1	2	*	*	*
Information	51	414	313	102	277	211	67	137	102	35
Publishing	511	241	178	64	143	106	36	98	71	27
Newspaper, periodical, book, and directory publishers	5111	1	1	*	1	1	*	*	*	*
Software publishers	5112	240	177	63	142	106	36	98	71	27
Telecommunications	517	25	19	6	24	18	5	1	1	*
Data processing, hosting, and related services	518	87	67	20	62	47	14	25	19	6
Other information	other 51	61	49	12	49	39	10	13	11	2
Finance and insurance	52	47	28	20	37	22	16	10	6	4
Real estate and rental and leasing	53	3	2	*	2	2	*	*	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	*	*	*	*	*	*	*
Other real estate and rental and leasing	other 53	2	2	*	2	2	*	*	*	*
Professional, scientific, and technical services	54	355	224	130	240	160	80	114	64	50
Architectural, engineering, and related services	5413	52	40	12	46	36	10	6	5	1
Computer systems design and related services	5415	140	108	31	92	71	20	48	37	11

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		Total	Male	Female	Total	Male	Female	Total	Male	Female
Scientific research and development services	5417	133	57	76	79	38	40	55	19	36
Biotechnology research and development	541711	35	13	23	21	8	13	14	4	10
Physical, engineering, and life sciences (except biotechnology) research and development	541712	92	42	51	52	28	24	40	14	26
Social sciences and humanities research and development	541720	6	3 i	3 i	6	3 i	3 i	*	* i	* i
Other professional, scientific, and technical services	other 54	30	19 i	11 i	24	15 i	10 i	6	4 i	1 i
Health care services	621-23	4	2	2 i	4	2	2 i	*	* i	*
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	18	14 i	4 i	16	12 i	3 i	2	1	1
All companies (number of domestic employees)	-	2,195	1,601	594	1,522	1,122	399	674	479	194
Micro companies ^a										
5-9	-	17	12 i	5 i	15	11 i	4 i	2	2	1 i
Small companies										
10-19	-	40	30 i	10 i	37	28 i	9 i	3	2 i	1 i
20-49	-	82	64 i	18 i	75	59 i	16 i	7	5	2
Medium companies										
50-99	-	76	58 i	18 i	69	53 i	16 i	7	5	2
100-249	-	116	91	26	101	79	22 i	15	12	3
Large companies										
250-499	-	94	73	21	75	58	17	18	14	4
500-999	-	98	77	22	74	57	17	24	19	5
1,000-4,999	-	440	321	119	278	204	73	163	117	46
5,000-9,999	-	237	170	67	159	116	44	78	55	23
10,000-24,999	-	373	250	124	243	169	74	130	81	50
25,000 or more	-	621	457	164	395	289	106	226	168	58

* = 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 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, 2016.