

TABLE 55

Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2017

(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	2,349	1,703	646	1,609	1,186	423	740	517	223
Manufacturing industries	31-33	1,352	1,018	334	916	693	223	436	325	111
Food	311	35	20	15	23	13	9	12	6 i	6
Beverage and tobacco products	312	7	4	3	4	3	2	3	2	1
Textile, apparel, and leather products	313-16	8	4	4	7	4	3	1	1	*
Wood products	321	3	3	*	3	3	*	*	*	0
Paper	322	12	9	3	8	6	2	4	3	1
Printing and related support activities	323	3	2	1	3	2	1	*	*	*
Petroleum and coal products	324	3	2	1	2	2	*	1	*	*
Chemicals	325	245	132	113	174	95	79	70	37	34
Basic chemicals	3251	23	16	7	16	11	5	7	5	2
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	7	5	1	4	3	1	3	2	1
Pesticide, fertilizer, and other agricultural chemicals	3253	7	5	3	5	3	2	2	1	1
Pharmaceuticals and medicines	3254	170	82	88	127	64	63	43	18	25
Soap, cleaning compound, and toilet preparation	3256	18	9	9	12	6	6	6	3	3
Paint, coating, adhesive, and other chemicals	3255, 3259	20	15	5	11	8	3	9	7	2
Plastics and rubber products	326	35	27	8	28	22	6	7	5	2
Nonmetallic mineral products	327	8	7	1	7	6	1	2	1	*
Primary metals	331	10	9	1	8	7	1	2	2	*
Fabricated metal products	332	31	27	4	26	24	3	4	3	1
Machinery	333	120	105	15	85	75	10	35	30	5
Agricultural implement	33311	14	13	1	9	8	1	5	4	1
Semiconductor machinery	333242	16	14	2	10	9	1	6	5	1
Engine, turbine, and power transmission equipment	3336	16	14	2	11	9	1	5	5	1
Other machinery	other 333	74	65	9 i	55	49	6	19	16 i	3 i
Computer and electronic products	334	419	337	82 i	258	210	48	160	127 i	34 i
Communications equipment	3342	75	61	13	45	37	8	30	24	6
Semiconductor and other electronic components	3344	148	121 i	28 i	88	72 i	16 i	60	49 i	12 i
Navigational, measuring, electromedical, and control instruments	3345	101	77 i	23 i	69	54	15	32	23 i	8 i
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	20	13 i	7 i	13	9 i	4 i	7	5 i	2 i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	39	32 i	7 i	33	27	6	6	5 i	1 i
Other measuring and controlling device	other 3345	42	32	10	23	18	5	19	14	5
Other computer and electronic products	other 334	95	78	18	57	47	10	38	30 i	8 i
Electrical equipment, appliances, and components	335	60	49 i	11 i	29	25 i	5 i	31	24 i	7 i
Transportation equipment	336	253	210	43	172	141	31	81	69	13

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		Total	Male	Female	Total	Male	Female	Total	Male	Female
Automobiles, bodies, trailers, and parts	3361-63	131	107	25	92	75	17	40	32	8
Aerospace products and parts	3364	107	92	15	67	57	10	40	36	4
Aircraft, aircraft engine, and aircraft parts	336411-13	95	82	13	55	47	8	40	36	4
Guided missile, space vehicle, and related parts	336414-15, 336419	12	10	2	12	10	2	*	*	0
Military armored vehicle, tank, and tank components	336992	*	*	*	*	*	*	0	0	0
Other transportation	other 336	14	10	4	13	9	4	2	1	*
Furniture and related products	337	5	4	1	5	4	1	*	*	*
Miscellaneous manufacturing	339	95	67	28	73	52	21	22	15	7
Medical equipment and supplies	3391	72	49	23	53	36	17	19	13	6
Other miscellaneous manufacturing	3399	23	18	5	20	15	4	3	2	1
Nonmanufacturing industries	21-23, 42-81	997	685	312	693	494	200	303	191	112
Mining, extraction, and support activities	21	15	12	3	13	10	2	3	2	1
Utilities	22	3	2	1	3	2	1	*	*	*
Wholesale trade	42	10	7	2	8	7	2	1	1	*
Electronic shopping and electronic auctions	454111-12	71	42	28	41	25	16	30	18	12
Transportation and warehousing	48-49	7	5	2	7	5	2	*	*	*
Information	51	438	328	110	305	231	74	133	97	36
Publishing	511	224	164	60	135	100	35	90	64	26
Newspaper, periodical, book, and directory publishers	5111	1	*	*	1	*	*	*	*	*
Software publishers	5112	224	164	60	134	100	34	90	64	26
Telecommunications	517	32	24	7	31	24	7	1	1	*
Data processing, hosting, and related services	518	110	83	28	81	61	20	29	22	8
Other information	other 51	72	57	15	59	46	12	13	11	2
Finance and insurance	52	47	28	18	36	22	14	10	6	4
Real estate and rental and leasing	53	7	5	2	7	5	2	*	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	3	2	1	3	2	1	*	*	*
Other real estate and rental and leasing	other 53	4	3	1	4	3	1	*	*	*
Professional, scientific, and technical services	54	358	224	134	235	158	76	123	65	58
Architectural, engineering, and related services	5413	46	36	10	45	35	9	1	*	*
Computer systems design and related services	5415	130	100	30	78	61	17	52	39	13
Scientific research and development services	5417	148	62	86	86	43	43	62	19	43
Biotechnology research and development	541711	32	12	20	19	8	11	13	4	9
Physical, engineering, and life sciences (except biotechnology) research and development	541712	106	45	60	57	30	27	49	16	34
Social sciences and humanities research and development	541720	11	5	5	11	5	5	*	*	*
Other professional, scientific, and technical services	other 54	34	25	9	25	18	7	9	7	2

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Health care services	621-23	7	3	4	6	3	4	*	*	*
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	35	29	7	32	26	6	4	3	1
All companies (number of domestic employees)	-	2,349	1,703	646	1,609	1,186	423	740	517	223
Small companies										
10-19 ^a	-	28	22	5	26	21	5	2	1	*
20-49	-	85	66	19	78	61	17	7	5	2
Medium companies										
50-99	-	80	64	17	74	59	15	6	5	1
100-249	-	129	100	28	111	87	23	18	13	5
Large companies										
250-499	-	116	88	28	87	66	20	29	22	7
500-999	-	120	92	28	90	69	21	30	23	7
1,000-4,999	-	411	301	109	275	203	72	136	98	38
5,000-9,999	-	310	200	110	185	125	60	125	75	50
10,000-24,999	-	367	257	110	248	177	71	119	80	39
25,000 or more	-	704	512	192	437	318	119	267	195	72

* = 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 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 R&D.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.