

TABLE 46. Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2012
(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	2,065	1,542	524	1,469	1,108	361	597	434	163
Manufacturing industries	31-33	1,261	960	301	886	681	205	375	280	95
Food	311	32	19	13	24	15	9	8	4	4
Beverage and tobacco products	312	6	4	3	3	2	1	3	2	1
Textile, apparel, and leather products	313-16	8	4 i	4 i	7	3 i	4 i	1	*	*
Wood products	321	8 i	7 i	1 i	8 i	7 i	1 i	*	*	*
Paper	322	8	7	1	7	6	1	1	1	*
Printing and related support activities	323	5	4 i	1 i	4	4 i	1 i	*	*	*
Petroleum and coal products	324	6	4	1	4	3	1	1	1	*
Chemicals	325	220	123	97	162	92	70	58	30	27
Basic chemicals	3251	20	14	6	15	11	4	5	4	2
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	8	7	2	6	5	1	3	2	*
Pesticide, fertilizer, and other agricultural chemical	3253	8	5	3	6	4	2	2	1	1
Pharmaceuticals and medicines	3254	151	76	74	114	60	55	36	17	20
Soap, cleaning compound, and toilet preparation	3256	18	9	8	11	6	5	7	3	3
Paint, coating, adhesive, and other chemicals	3255, 3259	15	11	4	10	7	2	5	4	1
Plastics and rubber products	326	36	29 i	7 i	30	24 i	5 i	6	4	2
Nonmetallic mineral products	327	12	9 i	3	8	6 i	2	4	3 i	1
Primary metals	331	8	7	1	7	6	1	*	*	*
Fabricated metal products	332	33	30 i	3 i	31	28 i	3 i	2	2	*
Machinery	333	131	113	18	89	78	11	43	35	8
Agricultural implement	33311	13	11	1	8	7	1	5	4	*
Semiconductor machinery	333295	9	8	1	7	6	1	2	2	*
Engine, turbine, and power transmission equipment	3336	41	34	8	24	20	4	18	14	4
Other machinery	other 333	68	60	8	50	45 i	5 i	18	15	3
Computer and electronic products	334	426	334	92	267	212	55	158	122	37
Communications equipment	3342	79	62	17	53	42	11	26	20	6
Semiconductor and other electronic components	3344	175	137	38 i	101	81	20 i	75	57	18 i
Navigational, measuring, electromedical, and control instruments	3345	98	75 i	23 i	76	58	18 i	22	17 i	5 i
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	26	20	6 i	22	17	5 i	4	3	1 i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	33	23	10 i	30	21	9 i	3	2	1 i
Other measuring and controlling device	other 3345	39	32 i	7 i	24	20 i	4 i	16	12 i	3 i
Other computer and electronic products	other 334	73	59	14	37	31	6	36	28	8
Electrical equipment, appliances, and components	335	42	36	6	25	22	3	17	14	3
Transportation equipment	336	202	173	29	147	126	22	55	48	7
Automobiles, bodies, trailers, and parts	3361-63	110	96	14	64	56	8	46	40	6
Aerospace products and parts	3364	82	68	13 i	73	61	12 i	9	7	1
Aircraft, aircraft engine, and aircraft parts	336411-13	76	64	13 i	68 i	56 i	12 i	9	7	1
Guided missile, space vehicle, and related parts	336414-15, 336419	5	5	1	5	5	1	*	*	*

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Military armored vehicle, tank, and tank component	336992	*	*	*	*	*	*	0	0	0
Other transportation	other 336	11	9 i	2 i	10	9 i	1 i	1	*	* i
Furniture and related products	337	5	4 i	1 i	5	4 i	1 i	*	*	* i
Miscellaneous manufacturing	339	75	55	20	57	42	15	18	13	5
Medical equipment and supplies	3391	52	38	15	40	29	11	12	9	3
Other miscellaneous manufacturing	3399	23	17	5	17	13	4	6	5	2
Nonmanufacturing industries	21–23, 42–81	804	582 i	223 i	583	427 i	155 i	222	154 i	67
Mining, extraction, and support activities	21	13	11	2	9	8	1	3	3 i	* i
Utilities	22	2	2	*	2	1	*	*	*	*
Wholesale trade	42	26 i	21 i	5 i	25 i	20 i	4 i	2 i	1 i	* i
Electronic shopping and electronic auctions	454111–12	11	11	*	9	9	*	2	2	* i
Transportation and warehousing	48–49	4	2 i	2 i	3	2 i	1 i	*	0	* i
Information	51	326	252 i	74	225	175 i	50 i	100	77	23
Publishing	511	233	179 i	54	148	114 i	34 i	85	65	20
Newspaper, periodical, book, and directory publishers	5111	3 i	2 i	1 i	2 i	2 i	1 i	* i	* i	* i
Software publishers	5112	230	177 i	53	146	113 i	33 i	85	65	20
Telecommunications	517	14 i	11 i	3 i	13 i	10 i	3 i	1	1	* i
Data processing, hosting, and related services	518	41	31	10	33	25	8	8	6	2
Other information	other 51	37	31	6	31	26	5	6	5	1
Finance and insurance	52	31	18	12	26	15	10	5	3	2
Real estate and rental and leasing	53	2	1	*	1	1	* i	*	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	1	1	*	1	1	*	*	*	*
Other real estate and rental and leasing	other 53	1 i	* i	* i	1 i	* i	* i	*	0	* i
Professional, scientific, and technical services	54	353	238 i	115 i	248	173 i	75 i	105 i	64 i	40 i
Architectural, engineering, and related services	5413	42	34 i	9 i	39	31 i	8 i	3	3	1
Computer systems design and related services	5415	162 i	126 i	37 i	101	80 i	22 i	61 i	46 i	15 i
Scientific research and development services	5417	107	48	59	75	38	37	32	10	22
Biotechnology research and development	541711	32	13	18	25	11	13	7	2	5
Physical, engineering, and life sciences (except biotechnology) research and development	541712	72	33	39	46	24	22	26	8	17
Social sciences and humanities research and development	541720	4	2 i	2 i	4	2 i	2 i	*	* i	* i
Other professional, scientific, and technical services	other 54	41	31 i	10 i	33	25 i	8 i	8 i	6 i	3 i
Health care services	621–23	6	2 i	4 i	6	2 i	4 i	* i	* i	* i
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	31	23 i	8 i	28	20 i	8 i	3	3	1
All companies (number of domestic employees)	–	2,065	1,542	524	1,469	1,108	361	597	434	163
Small companies ^a										
5–499	–	494	383 i	112 i	437	342 i	95 i	57	41	16 i
5–99	–	286	220 i	66 i	258	202 i	56 i	28	18 i	10 i
5–49	–	201	153 i	48 i	181	141 i	40 i	19	11 i	8 i
5–9	–	42	31 i	11 i	38	30 i	8 i	4	1 i	3 i

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10-24	-	76	59 i	17 i	73	57 i	16 i	3	2	1 i
25-49	-	83	63 i	20 i	70	54 i	16 i	13	9 i	4 i
50-99	-	86	67 i	18 i	77	61 i	16 i	9	7	2
100-249	-	116	91 i	25 i	101	79 i	21 i	15	11	4
250-499	-	93	72	21	79	61	18	14	11	3
Medium and large companies										
500-999	-	83	64	19	67	52	15	16	12	4
1,000-4,999	-	335	251	84	226	170	57	108	81	27
5,000-9,999	-	247	167	80	138	96	41	109	70	39
10,000-24,999	-	263	193	70	198	146	53	65	47	17
25,000 or more	-	643	484	159	401	302	99	242	182	59

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

NAICS = 2007 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. The 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: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2012.