

TABLE 33. Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2011
(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	2,025	1,521	504	1,471	1,118	352	554	403	151
Manufacturing industries	31-33	1,211	917	294	865	663	202	345	254	91
Food	311	36	21	15	29	17	12	7	4	4
Beverage and tobacco products	312	6	3	2	4	2	2	2	1	1
Textile, apparel, and leather products	313-316	8	5	3	7	4	3	1	*	*
Wood products	321	3	3	1	3	3	1	*	*	0
Paper	322	13	10	3	9	7	2	5	3	1
Printing and related support activities	323	3	2	1	3	2	1	*	*	*
Petroleum and coal products	324	6	5	1	5	4	1	1	1	*
Chemicals	325	225	126	99	160	91	70	65	36	30
Basic chemicals	3251	27	19	8	18	13	5	9	6	3
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	8	6	2	6	4	1	3	2	1
Pesticide, fertilizer, and other agricultural chemical	3253	8	5	3	6	4	2	2	1	1
Pharmaceuticals and medicines	3254	147	75	73	107	55	52	40	20	21
Soap, cleaning compound, and toilet preparation	3256	21	11	10	14	7	7	7	3	3
Paint, coating, adhesive, and other chemicals	3255, 3259	15	11	4	10	8	2	5	3	1
Plastics and rubber products	326	25	21	4	22	19	3	3	3	1
Nonmetallic mineral products	327	12	9	3	8	6	2	4	3 i	1
Primary metals	331	7	6	1	6	5	1	1	1	*
Fabricated metal products	332	33	29	3	31	28	3	2	1	*
Machinery	333	121	104	17	88	78	10	33	26	7
Agricultural implement	33311	9	9	1	7	7	1	2	2	*
Semiconductor machinery	333295	9	8	1	7	6	1	2	2	*
Engine, turbine, and power transmission equipment	3336	D	31	D	25	21	4	D	10	D
Other machinery	other 333	D	57	D	49	44	5	D	12	D
Computer and electronic products	334	392	304	88	258	202	56	133	101	32
Communications equipment	3342	79	62	17	52	41	11	27	21	6
Semiconductor and other electronic components	3344	153	118	35	87	69	18	66	50	17 i
Navigational, measuring, electromedical, and control instruments	3345	91	67	24 i	74	55	19	17	12	5 i
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	26	20	6 i	22	17	5 i	3	2	1 i
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	33	22	11 i	31	21	10	3	2	1 i
Other measuring and controlling device	other 3345	32	25	7	21	17	4	11	8	3
Other computer and electronic products	other 334	68	56	12	45	37	7	23	19	5
Electrical equipment, appliances, and components	335	53	45	7	29	25	4	24	20	4
Transportation equipment	336	198	172	26	145	126	20	53	46	7
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	106	92	13	61	54	8	44	38	6
Aerospace products and parts	3364	80	68	11 i	72	62	10 i	7	7	1
Aircraft, aircraft engine, and aircraft parts	336411-13	74	64 i	11 i	67 i	57 i	10 i	7	6	1
Guided missile, space vehicle, and related parts	336414-15, 336419	5	5	1	5	5	1	*	*	*
Military armored vehicle, tank, and tank component	336992	*	*	*	*	*	*	0	0	0
Other transportation equipment	other 336	13	11	2 i	11	10	2	1	1	* i
Furniture and related products	337	5	4	1	4	4	1	*	*	*

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Miscellaneous manufacturing	339	66	49	17	54	41	13	12	8	3
Medical equipment and supplies	3391	39	28	10	33	24	9	6	4	2
Other miscellaneous manufacturing	3399	27	21	6	21	17	5	6	4	2 i
Nonmanufacturing industries	21–23, 42–81	814	604	210	606	456	150	209	149	60
Mining, extraction, and support activities	21	14	12	2	11	9	2	3	2	*
Utilities	22	2	2	*	2	2	*	*	*	*
Wholesale trade	42	21 i	17 i	4 i	16 i	13 i	3 i	4 i	3 i	1 i
Electronic shopping and electronic auctions	454111–12	5	4 i	1 i	4	3 i	1 i	*	* i	*
Transportation and warehousing	48–49	1	1	*	1	1	*	* i	* i	* i
Information	51	326	255	71	232	181	51	94	74	20
Publishing	511	229	179	50	147	115	32	83	65	18
Newspaper, periodical, book, and directory publishers	5111	4	3 i	1	4	3 i	1	*	* i	*
Software publishers	5112	225	176	49	143	112	31	82	64	18
Telecommunications	517	24 i	18 i	6 i	22 i	17 i	5 i	1	1	*
Data processing, hosting, and related services	518	37	27	9	33	24	9	4	3	1
Other information	other 51	36	30	6	30	25	5	7	5	1
Finance and insurance	52	31	20	12	26	17	10	5	3	2
Real estate and rental and leasing	53	2	1	*	1	1	*	1	*	*
Lessors of nonfinancial intangible assets (except copyrighted works)	533	2	1	*	1	1	*	1	*	*
Other real estate and rental and leasing	other 53	*	*	*	*	*	*	*	*	*
Professional, scientific, and technical services	54	369	260	109	270	197	73	99	63	36
Architectural, engineering, and related services	5413	66	55	11	62	52	10	4	3	1
Computer systems design and related services	5415	156	124	32	103	82	21	53	42	11
Scientific research and development services	5417	97	50	48	73	41	31	25	8	16
Biotechnology research and development	541711	21	11	10	20	10	9	1	*	1
Physical, engineering, and life sciences (except biotechnology) research and development	541712	72	37	35	49	29	20	23	8	15
Social sciences and humanities research and development	541720	4	2 i	2 i	4	2 i	2 i	*	*	*
Other professional, scientific, and technical services	other 54	50	32	18	33	22	11	17	10 i	7
Health care services	621–23	9	4	4	9	4	4	* i	* i	* i
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	35	29	6	33	27	6	3	2	*
All companies (number of domestic employees)	–	2,025	1,521	504	1,471	1,118	352	554	403	151
Small companies ^a										
5–499	–	529	423	105	481	385	96	47	38	9
5–99	–	297	238	59	274	219	55	22	18	4
5–49	–	204	163	41	189	151	37	16	12	3
5–9	–	38	30	8	37	30	7	1	*	1
10–24	–	84	67	17	74	59	15	10	8	2
25–49	–	83	66	16	77	62	16	5	4	1
50–99	–	92	74	18	86	68	17	7	6	1
100–249	–	123	100	23	113	92	21	10	8	2

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250-499	-	109	85	23	94	74	20	15	12	3
Medium and large companies										
500-999	-	76	58	18	61	46	15	15	12	3
1,000-4,999	-	346	258	88	233	173	59	114	85	29
5,000-9,999	-	199	136	63	113	80	33	86	56	30
10,000-24,999	-	273	197	77	204	147	57	70	49	20
25,000 or more	-	602	450	152	379	287	92	223	163	60

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies; i = value > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

^a Upper bound based on U.S. Small Business Administration's definition of a small business; 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. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, 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, 2011.