

TABLE 30. Domestic R&D employment, by occupation, sex, industry, and company size: 2008

(Thousands of employees)

Industry and company size	NAICS code	Engineers and their managers			Scientists and their managers			Technicians and technologists			Support staff (clerical and others)		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All industries	21–23, 31–33, 42–81	799	672	128	188	120	68	244	177	67	194	101	93
Manufacturing industries	31–33	470	410	60	126	80	47	137	104	33	116	61	55
Food	311	2	2	1	5	3	2	4	2	2	3	1	1
Beverage and tobacco products	312	1	1	*	1	1	*	1	*	*	*	*	*
Textiles, apparel, and leather products	313–316	2	2	*	*	*	*	2	1	1	3	1	2
Wood products	321	1	1	*	1	*	*	1	1	*	*	*	*
Paper	322	3	2	1	3	2	1	1	1	*	1	*	*
Printing and related support activities	323	1	1	*	*	*	* i	1	*	*	1 i	1 i	* i
Petroleum and coal products	324	2 i	2 i	1 i	1 i	1 i	* i	1 i	1 i	* i	* i	* i	* i
Chemicals	325	24	18	6	87	50	37	33	20	13	30	11	20
Basic chemicals	3251	3	2	1	8	6	2	6 i	5 i	2 i	2 i	1	1
Resin, synthetic rubber, fibers, and filaments	3252	1	1	*	1	1	*	1	1	*	*	*	*
Pesticide, fertilizer, and other agricultural chemical	3253	* i	* i	* i	3 i	2 i	1 i	1 i	1 i	* i	* i	* i	* i
Pharmaceuticals and medicines	3254	11	8	4	67	36	31	20	10	10	26	9	17
Soap, cleaning compound, and toilet preparation	3256	4	2	1	5	3	2	1	1	1	1	*	1
Paint, coating, adhesive, and other chemical	3255, 3259	4	4	1	4	3	1	3	2	1	1	*	*
Plastics and rubber products	326	8	7	1	1	1	*	5	4	1	3	2	1
Nonmetallic mineral products	327	4 i	4	* i	1 i	1 i	* i	3	3	* i	1	1	*
Primary metals	331	2	2	*	*	*	*	2	2	*	3	2	1
Fabricated metal products	332	15	14	1	1	1	*	8	7	1	5	4	1
Machinery	333	42	38	4	2 i	2 i	* i	10	9	1	6	4	2
Agricultural implements	33311	6	5	*	*	*	*	1	1	*	*	*	*
Semiconductor machinery	333295	5	4	*	*	*	*	1	1	*	1	*	*
Engine, turbine, and power transmission equipment	3336	4	4	*	*	*	*	2 i	2	*	1 i	*	* i
Other machinery	other 333	27	25	2 i	1 i	1 i	* i	6	6	*	4	3	1
Computer and electronic products	334	212	184	27	12	9	2	24	19	5	28	14	14
Communications equipment	3342	44	38	6	*	*	* i	3	2	*	8	5	2
Semiconductor and other electronic components	3344	82	72	10	2	2	*	9	7	2	6	3	2
Navigational, measuring, electromedical, and control instruments	3345	48	42	6	8	6	2	10	8	2	11	3	8
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	12	10	2	3	2	1	3	2	1	2	1	1
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	22 i	20 i	3 i	4	3	1	4 i	3 i	1 i	7 i	1 i	6 i
Other measuring and controlling instruments	other 3345	13	12	1	2	1	*	3	2	*	2	1	1
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	38	32	6 i	1	1	*	3	2	1 i	5	3	2
Electrical equipment, appliances, and components	335	13	12	1	1 i	1 i	* i	4	3	1	2	1	1
Transportation equipment	336	113	100	14	4	3	1	25	21	3	23 i	15 i	8 i
Automobiles, bodies, trailers, and parts	3361–3363	44	38	6	2	2	*	8	7	1	3	2	1
Aerospace products and parts	3364	67	60	8	2	2	*	16	13	2 i	19 i	12 i	7 i

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		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Aircraft, aircraft engine, and aircraft parts	336411–336413	62	55	7	2	1	*	15	12	2 i	18 i	11 i	6 i
Guided missile, space vehicle, and related parts	336414, 336415, 336419	5	5	*	*	*	*	1 i	1 i	* i	1	1	*
Military armored vehicle, tank, and tank components	336992	*	*	*	*	*	0	*	*	0	*	*	*
Other transportation equipment	other 336	2	2	*	*	*	0	1	1	* i	1	*	*
Furniture and related products	337	3	2	*	*	*	*	2 i	1 i	*	1 i	1 i	* i
Miscellaneous manufacturing	339	23	20	3	4	3	1	11	8	3	7	3	3
Medical equipment and supplies	3391	13	11	2	4	2	1	5	4	2	4	2	2
Other miscellaneous manufacturing	3399	10	9	1 i	1	1	*	5	4	1	3	2	1
Nonmanufacturing industries	21–23, 42–81	329	262	67	62	40	22	107	72	34	78	40	38
Mining, extraction, and support activities	21	3	3	*	1	*	*	2	2	*	*	*	*
Utilities	22	*	*	*	* i	* i	* i	* i	* i	* i	*	*	*
Construction	23	1 i	1 i	* i	*	*	*	*	*	*	4	4	1
Wholesale trade	42	6 i	6 i	1 i	1 i	1 i	1 i	4 i	3 i	1 i	3 i	2 i	1 i
Retail trade	44, 45	4	3	1	0	0	0	*	*	*	*	*	*
Electronic shopping and mail-order houses	4541	3	2	1	0	0	0	*	*	*	*	*	*
Other retail trade	other 44, 45	1	1	*	0	0	0	*	*	*	*	0	*
Transportation and warehousing	48, 49	1	1	*	*	*	*	*	*	*	*	*	*
Information	51	174	136 i	38 i	7	6	1	27	21	6	16	10	6
Publishing	511	120	95	25 i	6	5	1	16	12	4	11	7 i	4 i
Newspaper, periodical, book, and directory publishers	5111	1 i	1 i	* i	* i	* i	*	* i	* i	* i	* i	* i	* i
Software publishers	5112	119	95	25 i	6	5	1	15	11	4	10	6 i	4 i
Telecommunications	517	25 i	21 i	4 i	* i	* i	* i	3 i	3 i	1 i	1 i	* i	* i
Internet service providers, Web search portals, and data processing services	518	27 i	18 i	9 i	1	1	*	7	6	2	1	1	1
Other information	other 51	2	2	*	*	*	*	1	1	*	3	2	1
Finance and insurance	52	5	4	2	* i	*	* i	1	1	*	1	* i	1
Real estate and rental and leasing	53	1	1	*	*	*	* i	1	*	*	1	*	*
Professional, scientific, and technical services	54	125	101	23	45	28	16	63	41	22	35	15	20
Architectural, engineering, and related services	5413	20	16	3	4	3	1	8	6	2	7	4	3
Computer systems design and related services	5415	64	51	13	5	4	1	25	20	6	6	3	3
Scientific R&D services	5417	25	20	4	31	18	13	21	9	12	18	6	12
Other professional, scientific, and technical services	other 54	16	13	3	5	4	1	9	6	3	5	1	3
Health care services	621–623	1	1	*	4	3	1	2	*	2	5	*	5
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	7 i	6 i	2 i	3	1	2	5 i	3 i	2 i	14	9	5
All companies	21–23, 31–33, 42–81	799	672	128	188	120	68	244	177	67	194	101	93
Small companies (number of domestic employees) ^a													
5–499	–	201	177	24	54	38	16	86	63	23	69	38	31
5–99	–	119	106	13	34	25	9	52	37	15	37	19	18
5–49	–	87	77	10	23	18	5	37	27	10	27	13	13

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		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
5-24	-	55	49	6	13	11	2	22	16	6	19	9	10
25-49	-	31	28	3	10	7	3	15	11	3	8	5	3
50-99	-	33	29	3	11	7	4	16	10	5	10	6	4
100-249	-	48	41	7	14	9	5	20	16	5	25	15	10
250-499	-	34	29	5	7	5	2	13	10	4	7	4	4
Medium and large companies (number of domestic employees)													
500-999	-	34	29	5	8	5	3	13	10	3	8	5	3
1,000-4,999	-	138	116	22	28	16	11	37	26	11	22	11	11
5,000-9,999	-	65	52	13	17	10	7	21	15	6	22	12	10
10,000-24,999	-	95	80	15	41	25	16	31	23	8	24	10	15
25,000 or more	-	266	218 i	48 i	41	25	15	55	40	15	49 i	26 i	23 i

* = amount < \$500,000; i = value > 50% of estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2002 North American Industry Classification System.

^a Upper bound based on U.S. Small Business Administration's definition of small business; Business R&D and Innovation Survey (BRDIS) does not include companies with fewer than five domestic employees. After 2008 BRDIS sample was selected and surveyed, an error was identified that resulted in excluding 226,884 single-establishment companies with five paid employees from sample frame. Most excluded establishments were classified in industries with low R&D intensities, such as construction, retail trade, and service sectors. Based on available information for these small single-establishment companies, their contribution to 2008 R&D estimates is estimated to be negligible.

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 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, 2008.