

Table 48. Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2024

(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	3,298	2,298	1,000	2,130	1,495	635	1,168	803	365
Manufacturing industries	31–33	1,598	1,135	463	1,032	735	297	566	400	166
Food	311	42	23	19	29	16	12	13	6 i	7
Beverage and tobacco products	312	11	6	5	7	4	3	4	2	2
Textile, apparel, and leather products	313–16	6	3	3	5	3	2	1	1	1
Wood products	321	5	4	1	5	4	1	*	*	*
Paper	322	7	5	2	6	4	1	1	1	*
Printing and related support activities	323	3	2	1	3	2	1	*	* i	* i
Petroleum and coal products	324	6	4	2	4	3	1	2	1	1
Chemicals	325	304	153	151	227	116	111	77	37	40
Basic chemicals	3251	28	17	10	20	13	7	7	4	3 i
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	10	8	3	6	5	2	4	3	1
Pesticide, fertilizer, and other agricultural chemicals	3253	4	3	2	4	2	1	1	*	*
Pharmaceuticals and medicines	3254	231	108	122	176	84	92	54	24	30
Soap, cleaning compound, and toilet preparations	3256	17	7	9	10	5	6	7	3	4
Paint, coating, adhesive, and other chemicals	3255, 3259	14	10	5	10	7	3	4	3	1
Plastics and rubber products	326	22	17	5	18	14	4	4	3	1
Nonmetallic mineral products	327	11	8	2 i	9	7	2	1 i	1 i	* i
Primary metals	331	10	9	1	8	7	1	2	2	1
Fabricated metal products	332	36	29	7	28	23	5	8	5	2
Machinery	333	166	138	27	101	86	15	64	52	12
Agricultural implement	33311	19	16	3	10	9	2	8	7	1
Semiconductor machinery	333242	31 i	26 i	5 i	17 i	14 i	3 i	14 i	11 i	2 i
Engine, turbine, and power transmission equipment	3336	30	25	5	17	15	3	13	10	2
Other machinery	other 333	86	71	14	56	48	8	29	23 i	7
Computer and electronic products	334	527	394	133	272	205	67	254	189	66
Communications equipment	3342	73	58	15	36	29	7	37	29	8
Semiconductor and other electronic components	3344	244	177	67 i	104	77	27 i	139	100	40 i
Navigational, measuring, electromedical, and control instruments	3345	88	67	21	60	46	14	28	21	7
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	11	8	4	8	6 i	3 i	3	2	1 i
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	36	28	7	29	23	6	6	5	1
Other measuring and controlling devices	other 3345	41	32	10	22	17	5	19	14	5
Other computer and electronic products	other 334	122	91	31	72	52	19	50	39	11
Electrical equipment, appliances, and components	335	39	31	8	25	20	5	14	11	3 i
Transportation equipment	336	277	226	51	197	162	36	79	64	15
Motor vehicles, bodies, trailers, and parts	3361–63	169	139 i	30	111	91 i	20	58	48	10 i
Aerospace products and parts	3364	91	74	17	73	59 i	13	19	15	4
Aircraft, aircraft engine, and aircraft parts	336411–13	D	53 i	D	53	D	D	D	D	D

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Guided missile, space vehicle, and related parts	336414–15, 336419	D	22	D	20	D	D	D	D	D
Military armored vehicle, tank, and tank components	336992	*	*	*	*	*	*	0	0	0
Other transportation	other 336	16	13	3	13	11	2	3 i	2 i	1 i
Furniture and related products	337	4	3	1 i	4	3	1	1	* i	* i
Miscellaneous	339	124	80	44	84	55	29	40	25	15
Medical equipment and supplies	3391	105	68	37	69	45	25	36	23 i	13 i
Other miscellaneous manufacturing	3399	18	12	6	14	10	4	4	2	2
Nonmanufacturing industries	21–23, 42–81	1,700	1,163	537	1,098	761	338	602	402	199
Mining, quarrying, oil and gas extraction, and support activities	21	D	D	2	5	4	1	D	D	1
Utilities	22	7	5	2	7	5	2	*	*	*
Wholesale trade	42	24 i	18 i	6 i	22 i	17 i	6 i	2 i	1 i	1 i
Electronic shopping and electronic auctions	454111–12	D	D	11 i	28 i	20 i	7 i	D	D	4 i
Transportation and warehousing	48–49	36	28	8	35	27	8	1	1	*
Information	51	839	614	224	502	363	139	337	252	86
Publishing	511	300	222	77	153	114	39	146	108	38
Newspaper, periodical, book, and directory publishers	5111	5 i	2 i	3 i	5 i	2 i	3 i	* i	* i	* i
Software publishers	5112	294	220	74	148	112	36	146	108	38
Telecommunications	517	17	11	6	15	10	5	1	1	*
Data processing, hosting, and related services	518	310	220	91	174	119	55	136	101	36
Other information	other 51	212	162	51	159	120	39	53	42	12
Finance and insurance	52	130	83 i	47 i	90	58	32 i	40	25 i	15 i
Real estate and rental and leasing	53	6	4 i	2 i	6	4 i	2 i	1	* i	* i
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	*	*	*	*	0	0	0
Other real estate and rental and leasing	other 53	6	4 i	2 i	6	4 i	2 i	1	* i	* i
Professional, scientific, and technical services	54	554	336	218	354	227	127	200	108	92
Architectural, engineering, and related services	5413	71	53	18	70	52	18	1	1	*
Computer systems design and related services	5415	175	130	44	111	84	28	63	46	17
Scientific research and development services	5417	248	112	136	124	59	65	124	53 i	71
Research and development in nanotechnology	541713	2	1	1	2	1	1	*	*	*
Research and development in biotechnology (except nanobiotechnology)	541714	61	28	33	30	14	16	31	15	17
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	177 i	80 i	97	85 i	42 i	43 i	92 i	38 i	54
Research and development in the social sciences and humanities	541720	8	2	6	8	2	6	*	*	*
Other professional, scientific, and technical services	other 54	61	40 i	20 i	49	33 i	16 i	11	8	4
Health care services	621–23	9	5	5	8	4	4	1	1	*

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		Total	Male	Female	Total	Male	Female	Total	Male	Female
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	45	34	11	43	32	11	2	2	1
All companies (number of domestic employees)	–	3,298	2,298	1,000	2,130	1,495	635	1,168	803	365
Small companies										
10–19 ^a	–	36	28	8	26	21	6	9	7	3
20–49	–	86	68	19	74	58	16	12	10	2
Medium companies										
50–99	–	103	80	23	87	67	20	16	13	3
100–249	–	158	118	40	130	97	33	27	20	7
Large companies										
250–499	–	154	114	40	112	82	30	42	32	10
500–999	–	166	120	46	122	88	34	44	32	12
1,000–4,999	–	611	423	188	381	261	119	231	162	69
5,000–9,999	–	307	213	94	203	140	62	105	73	32
10,000–24,999	–	599	396	203	323	216	107	276	180	96
25,000 or more	–	1,077	738	339 i	671	464 i	207 i	406	274	132 i

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

NAICS = 2017 North American Industry Classification System.

^a The Business Enterprise 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 \$50,000 or more of R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2024.