

TABLE 49

Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2020

(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	2,847	2,050	797	1,936	1,419	517	910	631	280
Manufacturing industries	31-33	1,457	1,083	373	985	736	249	472	347	125
Food	311	44	25	19	28	17	11	17	9	8
Beverage and tobacco products	312	7	4	3	5	3	2	3	1	1
Textile, apparel, and leather products	313-16	8	5	3	6	4	2	1	1	1
Wood products	321	3	3	1	3	3	1	*	*	*
Paper	322	8	6	2	6	4	1	2	1	1
Printing and related support activities	323	5	3	1	4	3	1	*	*	*
Petroleum and coal products	324	8	6	2	6	5	2	2	2	1
Chemicals	325	266	139	127	193	102	91	73	37	36
Basic chemicals	3251	19	13	6	12	9	3	7	4	3
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	10	7	2	6	5	2	4	3	1
Pesticide, fertilizer, and other agricultural chemicals	3253	5	4	2	5	3	2	1	* i	*
Pharmaceuticals and medicines	3254	193	93	100	146	71	75	47	22	25
Soap, cleaning compound, and toilet preparation	3256	17	8	9	11	6	5	6	3	3
Paint, coating, adhesive, and other chemicals	3255, 3259	21	14	7	12	8	4	9	6	3
Plastics and rubber products	326	32	26	6 i	27	22	5	5 i	4 i	1 i
Nonmetallic mineral products	327	7	6	1	6	5	1	1 i	1 i	* i
Primary metals	331	8	7	1	8	7	1	*	*	*
Fabricated metal products	332	42	38	4	40	36	4	2	2	*
Machinery	333	153	131	22	101	87	14	52	44	8
Agricultural implement	33311	18 i	15 i	2 i	11	10	1	7 i	6 i	1 i
Semiconductor machinery	333242	22	18	3	13	11	2	9	8	1
Engine, turbine, and power transmission equipment	3336	12	10	2	7	6	1	4	4	1
Other machinery	other 333	102	87	15	70	60	10	32	27	5
Computer and electronic products	334	459	369	89	264	214	50	195	156	39
Communications equipment	3342	75	62	13	41	34	7	34	28	6
Semiconductor and other electronic components	3344	177	143	34	91	74	17	86	69	17
Navigational, measuring, electromedical, and control instruments	3345	96	76	20	67	54	13	29	22	7
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	10	7	3	8	6	2	3 i	2	1 i
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	40	33	7	35	29	6	5	4	1
Other measuring and controlling device	other 3345	46	36	10	24	19	5	22	17	5
Other computer and electronic products	other 334	111	88	23	64	51	13	46	36	10
Electrical equipment, appliances, and components	335	51 i	40 i	11 i	27	22	5	24 i	18 i	6 i

TABLE 49

Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2020

(Thousands)

Industry and company size	NAICS code	Worldwide			Domestic			Foreign		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Transportation equipment	336	234	193	41	174	144	30	60	49	11
Motor vehicles, bodies, trailers, and parts	3361-63	151	125	26	101	84	17	50	41	9
Aerospace products and parts	3364	69	58	11	62	52	10	7	6	1
Aircraft, aircraft engine, and aircraft parts	336411-13	61	51	10	54	46	9	7	6	1
Guided missile, space vehicle, and related parts	336414-15, 336419	8	6	1	7	6	1	*	*	*
Military armored vehicle, tank, and tank component	336992	*	*	*	*	*	*	0	0	0
Other transportation	other 336	14	11	3	11	9	3	3 i	2 i	*
Furniture and related products	337	5	4	1	4	3	1	*	*	*
Miscellaneous	339	117	78	39	84	56	27	34	22	12
Medical equipment and supplies	3391	94	61	33	65	43	22	29	19	10
Other miscellaneous manufacturing	3399	23	17	6 i	19	14	5 i	5	3 i	1 i
Nonmanufacturing industries	21-23, 42-81	1,390	967	423	952	683	268	438	283	155
Mining, quarrying, oil and gas extraction, and support activities	21	9 i	8 i	2 i	8	6-8	0-2	1 i	0-2 i	0-2 i
Utilities	22	0-20	0-20	*	0-20	0-20	0-1	*	0-1	0-1
Wholesale trade	42	13	11	2	13	10-12	1-3	*	0-1	0-1
Electronic shopping and electronic auctions	454111-12	58-147	26-128	0-51	58-80	26-80	0-32	0-70	0-48	0-24
Transportation and warehousing	48-49	13	10 i	3	13	9-11 i	2-4	*	0-1	0-1
Information	51	626	468	158	422	317	105	204	151	53
Publishing	511	188	137	51	113	86	28 i	74	51	23
Newspaper, periodical, book, and directory publishers	5111	1	*	*	1	*	*	0	0	0
Software publishers	5112	187	136	50	113	85	28 i	74	51	23
Telecommunications	517	23	17 i	5	21	16 i	5	2	1	*
Data processing, hosting, and related services	518	271	201	69	171	125	45	100	76 i	24
Other information	other 51	146	113	33	117	90	27	29	23	6
Finance and insurance	52	88	55	33	66	41	26	22	15	7
Real estate and rental and leasing	53	6	4	2	5	3-5	1-3	*	0-1	0-1
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	*	*	0-1	0-1 i	*	0-1	0-1
Other real estate and rental and leasing	other 53	5	4	2	5	3-4	1-2	*	0-1	0-1
Professional, scientific, and technical services	54	443	270	173	300	200	100	144	71	73 i
Architectural, engineering, and related services	5413	56	43	13	55	42	13	*	*	*
Computer systems design and related services	5415	136	107	29	94	74	20	42	33	9
Scientific research and development services	5417	203	88	115 i	107	55	53	95 i	33 i	62 i
Research and development in nanotechnology	541713	1 i	1 i	* i	1 i	1 i	* i	* i	* i	* i
Research and development in biotechnology (except nanobiotechnology)	541714	62	27	35	30	13	17	32	13	19

TABLE 49

Worldwide, domestic, and foreign R&D employment, by sex, industry, and company size: 2020

(Thousands)

Industry and company size	NAICS code	Worldwide			Domestic			Foreign		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	133 i	58 i	74 i	70	39 i	31 i	63 i	20 i	43 i
Research and development in the social sciences and humanities	541720	7	2	5	7	2	5	*	*	*
Other professional, scientific, and technical services	other 54	49	33	16	43	29	14	6	4	2 i
Health care services	621-23	8	4	4	8	3-5	3-5	*	0-1	0-1
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	39-110	7-89	0-51	40	7-41	0-32	0-70	0-48	0-24
All companies (number of domestic employees)	-	2,847	2,050	797	1,936	1,419	517	910	631	280
Small companies										
10-19 ^a	-	36	28	8	32	25	7	4	3	1
20-49	-	102	81	22	94	74	20	8	7	2
Medium companies										
50-99	-	102	81	21	89	71	18	13	10	3
100-249	-	165	126	39	145	111	34	20	14	5
Large companies										
250-499	-	135	104	31	112	86	26	23	18	5
500-999	-	135	103	33	96	73	24	39	30	9
1,000-4,999	-	484	350	134	327	236	91	157	114	43
5,000-9,999	-	265	186	79	169	121	48	96	64	31
10,000-24,999	-	494	324	170	277	185	91	217	139	78 i
25,000 or more	-	928	668	261	595	436	159	333	232	101

* = amount < 500 employees; 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 and are not comparable with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2020.