# TABLE 12

# Total number of R&D workers for companies with 1-4 employees, by industry: 2016

(Number)

ndustry	NAICS code	R&D worke
All industries	21-23, 31-33, 42-81	105,90
Manufacturing industries	31-33	11,80
Food	311	
Beverages and tobacco products	312	
Textiles, apparel, and leather products	313-16	
Wood products	321	
Paper	322	
Printing and related support activities	323	
Petroleum and coal products	324	
Chemicals	325	1,2
Basic chemicals	3251	,
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	
Pesticides, fertilizers, and other agricultural chemicals	3253	
Pharmaceuticals and medicines	3254	4
Soaps, cleaning compounds, and toilet preparations	3256	3
Paints, coatings, adhesives, and other chemicals	3255, 3259	
Plastics and rubber products	3233, 3239	2
Nonmetallic mineral products	320	4
Primary metals	327	
Fabricated metal products	331	1 (
		1,2
Machinery	333	2,0
Agricultural implements	33311	
Semiconductor machinery	333242	
Engines, turbines, and power transmission equipment	3336	
Other machinery	other 333	1,5
Computer and electronic products	334	2,4
Communications equipment	3342	1
Semiconductors and other electronic components	3344	4
Navigational, measuring, electromedical, and control instruments	3345	1,7
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	2
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	
Other measuring and controlling devices	other 3345	7
Other computer and electronic products	other 334	6
Electrical equipment, appliances, and components	335	4
Transportation equipment	336	(
Automobiles, bodies, trailers, and parts	3361-63	4
Aerospace products and parts	3364	
Aircraft, aircraft engines, and aircraft parts	336411-13	
Guided missiles, space vehicles, and related parts	336414-15, 336419	
Military armored vehicles, tanks, and tank components	336992	
Other transportation	other 336	
Furniture and related products	337	
Miscellaneous	339	1,8
Medical equipment and supplies	3391	e e
Other miscellaneous manufacturing	3399	
Nonmanufacturing industries	21-23, 42-81	94,0
Mining, extraction, and support activities	21 20, 42 01	
Utilities	22	
Wholesale trade	42	11,6
Electronic shopping and electronic auctions	42 454111-12	
Transportation and warehousing	48-49	5,8

### TABLE 12

## Total number of R&D workers for companies with 1-4 employees, by industry: 2016

(Number)

Industry	NAICS code	R&D workers
Publishing	511	1,939
Newspaper, periodical, book, and directory publishers	5111	0
Software publishers	5112	1,939
Telecommunications	517	299
Data processing, hosting, and related services	518	1,433
Other information	other 51	2,151
Finance and insurance	52	500
Real estate and rental and leasing	53	S
Lessors of nonfinancial intangible assets (except copyrighted works)	533	s
Other real estate and rental and leasing	other 53	s
Professional, scientific, and technical services	54	71,987
Architectural, engineering, and related services	5413	10,928
Computer systems design and related services	5415	26,669
Scientific research and development services	5417	9,525
Biotechnology research and development	541711	3,304
Physical, engineering, and life sciences (except biotechnology) research and development	541712	5,700
Social sciences and humanities research and development	541720	520
Other professional, scientific, and technical services	other 54	24,865
Health care services	621-23	1,036
Other nonmanufacturing	23, 44–45 (excluding 454111– 12), 55–56, 624, 71–72, 81	S

D = data withheld to avoid disclosing operations of individual companies; s = suppressed for reliability; standard error exceeds publication standards.

NAICS = 2012 North American Industry Classification System.

#### Note(s)

Detail may not add to total because of rounding. Industry classification based on sample NAICS code. Statistics are representative of companies located in the United States that performed or funded R&D.

#### Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Microbusiness R&D and Innovation Survey, 2016.