

TABLE 31

Companies with domestic R&D paid for and performed by the company in health or medical, defense, and agricultural application areas, by industry and company size: 2016

(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Health or medical		Defense		Agriculture		
		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	
All industries	21–23, 31–33, 42–81	29,999	317,731	7,712	i 78,699	4,301	i 10,369	2,163	i 5,705	i
Manufacturing industries	31–33	18,634	211,660	5,448	i 72,245	2,538	i 8,372	1,885	i 5,518	i
Food	311	1,153	4,611	267	i 252	0	0	258	i 1,552	i
Chemicals	325	2,640	64,165	1,325	i 55,881	253	i 157	406	i 1,482	i
Basic chemicals	3251	284	2,284	96	i 176	48	i 69	107	i 63	
Pharmaceuticals and medicines	3254	960	55,983	893	55,474	27	45	224	i 424	
Other chemicals	other 325	1,397	5,898	336	i 231	178	i 42	76	994	i
Plastics and rubber products	326	1,201	3,584	364	i 388	103	i 60	192	i 566	
Nonmetallic mineral products	327	409	1,274	78	i 56	36	i 17	D	2	
Fabricated metal products	332	2,229	2,127	592	i 162	i 430	i 159	i 311	i 40	i
Machinery	333	2,648	11,699	456	i 137	i 238	i 236	391	i 1,175	
Agricultural implements	33311	190	1,552	D	* i	D	* i	172	i 1,053	
Semiconductor machinery	333242	48	3,028	D	*	8	i 37	3	i 58	
Engines, turbines, and power transmission equipment	3336	125	1,901	3	6	6	1	40	i 30	
Other machinery	other 333	2,285	5,218	449	i 130	i D	198	177	i 34	i
Computer and electronic products	334	2,980	68,515	847	i 4,382	i 933	i 2,766	i 170	i 549	i
Semiconductors and other electronic components	3344	822	29,176	290	i 799	i 393	i 757	i 12	43	
Other electronic products	other 334	2,159	39,339	558	i 3,583	i 541	i 2,009	i 158	i 507	i
Electrical equipment, appliances, and components	335	719	4,302	195	i 150	i 144	i 214	i 50	i 67	i
Transportation equipment	336	1,114	32,905	26	1,172	155	4,573	14	21	
Automobiles, bodies, trailers, and parts	3361–63	738	19,293	D	D	12	14	5	6	
Other transportation	other 336	376	13,612	D	D	143	4,559	9	15	
Miscellaneous manufacturing	339	1,603	13,768	919	i 9,545	51	i 150	9	11	
Other manufacturing	312–16, 321–24, 331, 337	1,949	4,710	380	i 120	i 194	i 39	i D	54	
Nonmanufacturing industries	21–23, 42–81	11,366	106,071	2,264	i 6,454	i 1,763	i 1,996	i 278	i 187	i
Mining, extraction, and support activities	21	62	2,897	D	2	i 0	0	5	6	
Utilities	22	34	325	D	*	0	0	4	i 2	
Wholesale trade	42	1,642	442	i 4	10	D	*	5	6	
Information	51	2,327	70,075	401	i 2,020	i 248	i 824	i 17	23	
Publishing	511	1,341	33,174	306	i 1,600	i 200	i 704	i 6	6	
Telecommunications	517	121	3,530	i D	3	D	41	D	3	
Data processing, hosting, and related services	518	744	11,776	80	398	38	75	6	9	i

TABLE 31

Companies with domestic R&D paid for and performed by the company in health or medical, defense, and agricultural application areas, by industry and company size: 2016

(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Health or medical		Defense		Agriculture	
		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount
Other information	other 51	121	21,594	D	18	D	4	D	5
Professional, scientific, and technical services	54	6,385	20,845	1,764	i 3,621	1,502	i 1,157	240	i 146
Architectural, engineering, and related services	5413	1,354	1,816	101	i 37	182	i 50	70	i 21
Scientific research and development services	5417	1,480	2,811	964	i 1,703	456	i 288	153	i 111
Biotechnology research and development	541711	315	750	263	i 570	20	i 14	41	i 68
Other scientific research and development	other 5417	1,165	2,062	701	i 1,134	436	i 274	112	i 42
Other professional, scientific, and technical services	other 54	3,551	16,217	699	i 1,880	864	i 819	17	i 14
Health care services	621-23	241	782	59	i 746	D	*	0	0
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	676	10,706	33	i 56	D	15	6	5
All companies (number of domestic employees)	-	29,999	317,731	7,712	i 78,699	4,301	i 10,369	2,163	i 5,705
Micro companies ^c									
5 - 9	-	3,507	1,044	982	i 496	654	i 50	185	i 24
Small companies									
10 - 19	-	6,390	3,887	1,669	i 1,805	1,047	i 164	377	i 66
20 - 49	-	7,873	7,473	2,052	i 2,612	1,140	i 276	502	i 142
Medium companies									
50 - 99	-	4,519	7,728	1,131	i 3,120	587	i 410	364	i 144
100 - 249	-	3,909	11,722	1,000	i 4,307	437	i 461	368	i 290
Large companies									
250 - 499	-	1,567	11,438	325	i 3,466	164	i 222	120	i 162
500 - 999	-	840	13,525	216	2,811	94	382	86	224
1,000 - 4,999	-	926	53,305	221	13,699	111	1,533	114	755
5,000 - 9,999	-	226	35,887	44	6,460	29	1,070	21	134
10,000 - 24,999	-	146	53,384	44	21,601	24	2,021	18	2,785
25,000 or more	-	98	118,339	27	18,324	13	3,779	9	979

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^b Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. These company count estimates reflect a new imputation process implemented for survey year 2014. This change has affected the comparability of these company count estimates with estimates published for years prior to 2014. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the

total for the number of companies.

^c Business R&D and Innovation Survey does not include companies with fewer than five 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 R&D. Some R&D may be reported in more than one application area. Some R&D is not classified in any application area.

Source(s)

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