

TABLE 3

Total R&D cost, by selected industry and employment size, for companies with 1–9 employees: 2018

(Number of companies and thousands of U.S. dollars)

Industry	NAICS code	All companies		1–4 employees		5–9 employees	
		Companies (number)	Amount	Companies (number)	Amount	Companies (number)	Amount
All selected industries	31–33, 42, 51, 5413, 5415, 5417	12,975	6,467,338	7,843	2,644,204	5,133	3,823,134
Manufacturing industries	31–33	1,889	702,414	1,006	283,315	884	419,098
Food, beverage, and tobacco products	311–12	D	D	D	D	0	0
Textile, apparel, and leather products	313–16	10	1,147	D	D	D	D
Wood products	321	0	0	0	0	0	0
Paper	322	0	0	0	0	0	0
Printing and related support activities	323	D	D	D	D	0	0
Petroleum and coal products	324	D	D	0	0	D	D
Chemicals	325	274	149,323	136	59,785	139	89,538
Pharmaceuticals and medicines	3254	165	116,392	83	34,982	83	81,410
Chemicals, excluding pharmaceuticals	other 325	110	32,931	54	24,803	55	8,128
Plastics and rubber products	326	0	0	0	0	0	0
Nonmetallic mineral products	327	15	5,500	D	D	D	D
Primary metals	331	0	0	0	0	0	0
Fabricated metal products	332	18	2,929	D	D	D	D
Machinery	333	135	51,732	103	21,535	32	30,197
Computer and electronic products	334	998	349,148	436	101,257	564	247,891
Semiconductor and other electronic components	3344	201	71,181	81	19,253	121	51,928
Navigational, measuring, electromedical, and control instruments	3345	533	226,247	245	63,345	286	162,902
Other computer and electronic products	other 334	266	51,720	111	18,660	157	33,060
Electrical equipment, appliances, and components	335	173	32,218	112	13,087	62	19,131
Transportation equipment	336	41	14,537	26	6,596	14	7,940
Aerospace products and parts	3364	33	11,210	20	4,183	12	7,027
Other transportation equipment	other 336	D	D	D	D	D	D
Furniture and related products	337	0	0	0	0	0	0
Miscellaneous manufacturing	339	212	91,811	162	74,866	51	16,944
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	11,085	5,764,924	6,836	2,360,889	4,248	3,404,035
Wholesale trade	42	505	232,405	185	91,329	320	141,077
Information	51	1,801	660,724	908	249,646	894	411,078
Software publishers	5112	1,268	497,414	612	193,662	656	303,751
Information, excluding software publishers	51, excluding 5112	534	163,311	296	55,983	237	107,327
Architectural, engineering, and related services	5413	1,256	488,940	888	270,447	369	218,493
Computer systems design and related services	5415	4,639	1,311,905	3,013	566,128	1,625	745,776
Scientific research and development services	5417	2,883	3,070,951	1,840	1,183,340	1,042	1,887,611
Research and development in nanotechnology	541713	572	351,183	350	150,936	223	200,247

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Research and development in biotechnology (except nanobiotechnology)	541714	838	1,481,240	535	512,808	302	968,432
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,408	1,201,469	919	513,868	488	687,601
Social sciences and humanities research and development	541720	32	14,839	18	2,864	12	11,976

D = withheld to avoid disclosing data for individual companies; data are included in higher-level totals. r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.