

TABLE 6

**Total R&D cost, by selected industry and employment size, for companies with R&D expenditures and 1–9 employees: 2019**

(Number 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	15,401	7,245,649	9,774	3,215,024	5,627	4,030,625
Manufacturing industries	31–33	1,659	888,998	945	413,607	715	475,391
Food, beverage, and tobacco products	311–12	29	6,315	16 r	4,218 r	13	2,096 r
Textile, apparel, and leather products	313–16	3 r	236 r	3 r	236 r	0	0
Wood products	321	2 r	4,065 r	0	0	2 r	4,065 r
Paper	322	0	0	0	0	0	0
Printing and related support activities	323	4	555	2 r	141 r	2	414
Petroleum and coal products	324	0	0	0	0	0	0
Chemicals	325	374	345,503	261	163,854	114	181,649
Pharmaceuticals and medicines	3254	165	259,782	106	110,653	59	149,129
Chemicals, excluding pharmaceuticals	other 325	210	85,721	155	53,201	55	32,520
Plastics and rubber products	326	21	6,397	12	3,340	10	3,057 r
Nonmetallic mineral products	327	4 r	12,945 r	0	216	4 r	12,729 r
Primary metals	331	4 r	2,568 r	4 r	2,568 r	0	0
Fabricated metal products	332	57 r	20,594 r	13	9,950 r	44 r	10,644 r
Machinery	333	129	33,020	74	23,556	55	9,464
Computer and electronic products	334	710	279,725	401	146,657	308	133,068
Semiconductor and other electronic components	3344	130	44,841	78	26,337	51	18,504
Navigational, measuring, electromedical, and control instruments	3345	502	205,358	296	115,084	207	90,274
Other computer and electronic products	other 334	78	29,526	29	5,235	50	24,291
Electrical equipment, appliances, and components	335	50	11,053	26 r	6,214 r	25	4,839
Transportation equipment	336	70	31,730	43	24,976	27	6,754
Aerospace products and parts	3364	53	15,341	29	10,107	23	5,234
Other transportation equipment	other 336	16	16,389 r	14	14,869 r	2 r	1,520
Furniture and related products	337	0	0	0	0	0	0
Miscellaneous manufacturing	339	203	134,291	90	27,680	113	106,611 r
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	13,744	6,356,651	8,829	2,801,417	4,914	3,555,234
Wholesale trade	42	525	407,798 r	281	105,771	243	302,027 r
Information	51	2,252	708,356	1,239	314,081	1,013	394,274
Software publishers	5112	1,459	396,626	856	204,864	604	191,763
Information, excluding software publishers	51 less 5112	794	311,729	382	109,218	411	202,512
Architectural, engineering, and related services	5413	1,711	507,138	1,297	303,242	414	203,896
Computer systems design and related services	5415	5,918	1,848,169	3,987	910,750	1,931	937,419
Scientific research and development services	5417	3,338	2,885,189	2,027	1,167,572	1,312	1,717,617

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		Companies (number)	Amount	Companies (number)	Amount	Companies (number)	Amount
Research and development in nanotechnology	541713	326	208,661	220	96,558	107	112,103
Research and development in biotechnology (except nanobiotechnology)	541714	1,060	1,174,781	669	496,750	392	678,031
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,867	1,462,437	1,081	560,499	786	901,937
Social sciences and humanities research and development	541720	73	37,089	45	11,543	27	25,546

r = relative standard error &gt; 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, 2020 Annual Business Survey: Data Year 2019.