

TABLE 11

Domestic R&D performed by the company, by selected industry, for companies with 1–9 employees: 2019–22

(Thousands of U.S. dollars)

Industry	NAICS code	2019	2020	2021	2022
All selected industries	31–33, 42, 51, 5413, 5415, 5417	5,218,911	5,600,668	6,124,669	5,710,570
Manufacturing industries	31–33	622,220	627,387	747,124	694,247
Food, beverage, and tobacco products	311–12	5,896	9,614	18,270	17,426
Textile, apparel, and leather products	313–16	236	472	7,096	9,268
Wood products	321	4,065	0	134	0
Paper	322	0	0	0	898
Printing and related support activities	323	555	0	0	0
Petroleum and coal products	324	0	0	739	159
Chemicals	325	178,170	160,031	132,255	168,564
Pharmaceuticals and medicines	3,254	117,508	77,054	96,666	125,474
Chemicals, excluding pharmaceuticals	other 325	60,661	82,977	35,589	43,090
Plastics and rubber products	326	6,261	18,099	6,427	14,467
Nonmetallic mineral products	327	5,860	133	3,638	3,608
Primary metals	331	2,353	9,077	2,117	3,214
Fabricated metal products	332	20,518	37,292	11,983	44,875
Machinery	333	22,057	62,840	64,109	44,334
Computer and electronic products	334	227,158	189,225	279,203	171,928
Semiconductor and other electronic components	3,344	38,305	36,372	71,280	46,427
Navigational, measuring, electromedical, and control instruments	3,345	161,373	135,652	164,799	94,814
Other computer and electronic products	other 334	27,480	17,201	43,124	30,686
Electrical equipment, appliances, and components	335	9,592	24,958	40,032	14,597
Transportation equipment	336	24,577	38,247	33,911	36,738
Aerospace products and parts	3,364	11,859	19,307	13,003	19,882
Other transportation equipment	other 336	12,718	18,940	20,908	16,856
Furniture and related products	337	0	124	1,471	212
Miscellaneous manufacturing	339	114,922	77,276	145,741	163,959
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	4,596,691	4,973,281	5,377,544	5,016,323
Wholesale trade	42	225,813	392,416	143,063	305,962
Information	51	598,684	689,766	756,657	653,665
Software publishers	5,112	327,921	468,557	535,950	478,466
Information, excluding software publishers	51 less 5112	270,764	221,209	220,707	175,199
Architectural, engineering, and related services	5,413	454,913	574,367	606,186	388,846
Computer systems design and related services	5,415	1,435,159	1,122,622	1,616,190	1,414,970
Scientific research and development services	5,417	1,882,122	2,194,110	2,255,449	2,252,879
Research and development in nanotechnology	541,713	175,639	162,996	172,582	137,272
Research and development in biotechnology (except nanobiotechnology)	541,714	645,887	913,514	868,580	1,010,361
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541,715	1,026,911	1,099,371	1,193,678	1,085,263
Social sciences and humanities research and development	541,720	31,464	18,229	12,047	19,984

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, 2023 Annual Business Survey: Data Year 2022.