

TABLE 32. Domestic R&D paid for by others and performed by the company in health or medical, defense, and agricultural application areas, by industry and company size: 2012
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total domestic R&D	Application areas		
			Health or medical	Defense	Agriculture
All industries	21–23, 31–33, 42–81	54,970	11,145	24,515 i	513 i
Manufacturing industries	31–33	38,218	5,464	19,211 i	360 i
Food	311	171	84	0	3
Chemicals	325	6,359	4,490	53 i	288 i
Basic chemicals	3251	380 i	*	15 i	0
Pharmaceuticals and medicines	3254	5,552	4,318	14	17
Other chemicals	other 325	426	171 i	24 i	271 i
Plastics and rubber products	326	338 i	34 i	21 i	10 i
Nonmetallic mineral products	327	D	D	D	D
Fabricated metal products	332	114 i	2 i	77 i	*
Machinery	333	960	46	318	53
Agricultural implement	33311	43	0	0	40
Semiconductor machinery	333295	73	0	0	0
Engine, turbine, and power transmission equipment	3336	579	31	286	0
Other machinery	other 333	265 i	15 i	32 i	13 i
Computer and electronic products	334	8,391	225 i	4,163	2
Semiconductor and other electronic components	3344	1,375	138 i	110 i	1
Other electronic products	other 334	7,017	87	4,054	1
Electrical equipment, appliances, and components	335	187	*	28 i	0
Transportation equipment	336	20,961 i	159 i	14,483 i	0
Automobiles, bodies, trailers, and parts	3361–63	D	D	25 i	0
Other transportation	other 336	D	D	14,458 i	0
Miscellaneous manufacturing	339	D	415	D	D
Other manufacturing	312–16, 321–24, 331, 337	D	D	D	D
Nonmanufacturing industries	21–23, 42–81	16,752	5,681	5,305 i	153 i
Mining, extraction, and support activities	21	372	0	0	0
Utilities	22	103	0	0	0
Wholesale trade	42	245 i	127 i	0	2 i
Information	51	954	74 i	7 i	0
Publishing	511	734	20	7 i	0
Telecommunications	517	56	1 i	* i	0
Data processing, hosting, and related services	518	112	52 i	0	0
Other information	other 51	52 i	1 i	* i	0
Professional, scientific, and technical services	54	14,143	5,222	5,270 i	151 i
Architectural, engineering, and related services	5413	1,390 i	59 i	747 i	1
Scientific research and development services	5417	9,756	5,004	3,138 i	140 i
Biotechnology research and development	541711	3,017	2,628	40	8
Other scientific research and development	other 5417	6,738	2,376 i	3,098 i	132 i
Other professional, scientific, and technical services	other 54	2,997	158 i	1,385 i	10 i
Health care services	621–23	259 i	257 i	8 i	0
Other nonmanufacturing	23, 44–45, 48–49, 52–53, 55–56, 624, 71–72, 81	677	1	20	*
All companies (number of domestic employees)	–	54,970	11,145	24,515 i	513 i
Small companies ^a					
5–499	–	10,573 i	3,088 i	3,609 i	100 i
5–99	–	6,259 i	1,863 i	2,270 i	78 i
5–49	–	4,365 i	1,387 i	1,655 i	66 i
5–9	–	959 i	435 i	259 i	5 i
10–24	–	1,930 i	578 i	755 i	24 i
25–49	–	1,476	374 i	641	38
50–99	–	1,894 i	476 i	615 i	12 i
100–249	–	2,581	720	936 i	8 i
250–499	–	1,733	505	402	14 i
Medium and large companies					
500–999	–	1,257	349	274 i	30
1,000–4,999	–	7,666	3,007	847 i	241 i

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5,000–9,999	–	6,662	3,152	1,371 i	39 i
10,000–24,999	–	6,373	1,218	1,652 i	84
25,000 or more	–	22,440 i	331	16,763 i	19

* = 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 = 2007 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. The 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: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2012.