

TABLE 26

Companies with domestic R&D paid for by the company and others and performed by the company in the health or medical application areas, by industry and company size: 2019

(Millions of U.S. dollars and number)

Industry and company size	NAICS code	Domestic R&D		Health or medical R&D							
		Companies ^a (number)	Amount	Total		Paid for by the company		Paid for by others			
				Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount		
All industries	21-23, 31-33, 42-81	28,270	492,956	7,230	i 133,765	6,440	i 108,075	1,400	i 25,691	i	
Manufacturing industries	31-33	15,180	285,674	4,310	i 108,787	4,080	i 99,047	650	i 9,740	i	
Food	311	870	4,180	90	i 225	90	i 170	i 10		55	
Beverage and tobacco products	312	350	1,082	10		10		10	i 36	i	
Textile, apparel, and leather products	313-16	240	904	30	i 21	30	i 21	0		0	
Wood products	321	80	186	10	*	10	*	0		0	
Paper	322	90	1,064	40	i 95	40	i 95	0		0	
Printing and related support activities	323	200	420	i 10		10		0		0	
Petroleum and coal products	324	80	1,306	0		0		0		0	
Chemicals	325	2,330	97,063	1,370	i 84,796	1,310	i 75,949	260	i 8,848	i	
Basic chemicals	3251	240	2,360	90	i 167	90	i 164	10		3	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	180	1,172	40	i 46	40	i 46	0		0	
Pesticide, fertilizer, and other agricultural chemicals	3253	150	1,822 - 1,846	10	*	10	*	0		0	
Pharmaceuticals and medicines	3254	1,060	87,619	1,010	84,406	960	75,561	260	i 8,845	i	
Soap, cleaning compound, and toilet preparation	3256	270	2,760	80	i 156	80	i 156	0		0	
Paint, coating, adhesive, and other chemicals	3255, 3259	460	1,305 - 1,333	170	i 22	170	i 22	10		*	
Plastics and rubber products	326	790	2,856	230	i 621	200	i 584	40	i 36	i	
Nonmetallic mineral products	327	170	1,508	i 20	i 152	20	i 151	10	i 1	i	
Primary metals	331	200	665	30	i 92	30	i 91	10		1	
Fabricated metal products	332	1,840	2,885	360	i 158	i 330	i 130	30		27	
Machinery	333	2,240	15,184	370	i 285	360	i 262	i 20		23	
Agricultural implement	33311	190	1,921	10		10		0		0	
Semiconductor machinery	333242	80	4,459	10	*	10	*	0		0	
Engine, turbine, and power transmission equipment	3336	110	1,301	30	i 59	i 30	i 59	0		0	
Other machinery	other 333	1,880	7,503	340	i 225	330	i 202	20		23	
Computer and electronic products	334	2,280	86,729	750	i 7,697	i 670	i 7,296	i 160	i 401		
Communications equipment	3342	300	12,595	50	i 171	40	i 169	10		1	
Semiconductor and other electronic components	3344	640	35,183	i 250	i 2,050	i 200	i 1,904	i 70	i 146		

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				Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount					
Navigational, measuring, electromedical, and control instruments	3345	1,140	17,562	430	i	3,953	i	410	i	3,702	i	90	i	251
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	230	3,342	210	i	2,876	i	200	i	2,660	i	50	i	216
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	190	9,662	10		40		10		19		10		21
Other measuring and controlling device	other 3345	740	4,558	230	i	1,037	i	210	i	1,023	i	40	i	14
Other computer and electronic products	other 334	220	21,388	30	i	1,523		30	i	1,520		10	i	3
Electrical equipment, appliances, and components	335	900	5,263	190	i	183	i	190	i	182	i	10		1
Transportation equipment	336	1,090	45,375	70	i	531	i	60		400		10	i	131
Motor vehicles, bodies, trailers, and parts	3361-63	540	24,117	50	i	473	i	50		357		10	i	117
Aerospace products and parts	3364	380	18,358	20		58		20		44		10		14
Aircraft, aircraft engine, and aircraft parts	336411-13	200	16,891	20		40		20		26		10		14
Guided missile, space vehicle, and related parts	336414-15, 336419	190	1,467	10	i	18	i	10	i	18		10	i	*
Military armored vehicle, tank, and tank component	336992	30	35	0		0		0		0		0		0
Other transportation	other 336	150	2,865	0		0		0		0		0		0
Furniture and related products	337	190	409	30	i	18	i	30	i	18	i	0		0
Miscellaneous	339	1,310	18,596	790	i	13,864		760	i	13,683		130	i	181
Medical equipment and supplies	3391	790	16,014	760	i	13,659		730	i	13,492		120	i	167
Other miscellaneous manufacturing	3399	520	2,582	30		205		30		191		10		14
Nonmanufacturing industries	21-23, 42-81	13,100	207,283	2,930	i	24,978	i	2,360	i	9,028		760	i	15,950
Mining, quarrying, oil and gas extraction, and support activities	21	160	2,717	0		0		0		0		0		0
Utilities	22	40	275	0		0		0		0		0		0
Wholesale trade	42	1,560	1,191	180	i	85	i	180	i	83	i	10		2
Electronic shopping and electronic auctions	454111-12	60	3,131 - 15,818	10	i	42		10	i	42		0		0
Transportation and warehousing	48-49	130	9,890	10		83	i	10		83	i	0		0

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				Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount			
Information	51	3,090	110,227	510	i	2,812	500	i	2,782	10		29
Publishing	511	1,080	33,019	280	i	1,554	280	i	1,527	10		27
Newspaper, periodical, book, and directory publishers	5111	40	61	0		0	0		0	0		0
Software publishers	5112	1,040	32,958	280	i	1,554	280	i	1,527	10		27
Telecommunications	517	210	3,733	10		2	10		2	0		0
Data processing, hosting, and related services	518	1,480	30,558	220		1,186	220		1,184	10		2
Other information	other 51	340	42,917	20		69	20		69	0		0
Finance and insurance	52	220	8,917	30		591	30		591	0		0
Real estate and rental and leasing	53	50	1,371	10		1	10		1	0		0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	20	45	0		0	0		0	0		0
Other real estate and rental and leasing	other 53	30	1,326	10		1	10		1	0		0
Professional, scientific, and technical services	54	6,500	53,233	1,600	i	19,211	1,110	i	3,609	670	i	15,602
Architectural, engineering, and related services	5413	1,450	4,207	310	i	466	170	i	132	160	i	334
Computer systems design and related services	5415	3,020	21,046	340	i	1,607	330	i	1,546	20	i	61
Scientific research and development services	5417	1,230	21,669	810	i	16,508	510	i	1,653	450	i	14,855
Research and development in biotechnology	541711	310	6,457	260	i	5,879	160	i	658	150		5,221
Research and development in the physical, engineering, and life sciences (except biotechnology)	541712	900	14,446	i	540	i	10,243	i	977	300	i	9,266
Research and development in the social sciences and humanities	541720	30	766	20		386	10		18	10		368
Other professional, scientific, and technical services	other 54	810	6,312	150	i	630	110	i	279	60	i	351
Health care services	621–23	680	2,265	560		2,075	490		1,758	80		317
Other nonmanufacturing	23, 44–45 (excluding 454111– 12), 55–56, 624, 71– 72, 81	680	1,380 - 14,067	60	i	78	60	i	78	0		0

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		Companies ^a (number)	Amount	Total		Paid for by the company		Paid for by others					
				Companies ^b (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount				
All companies (number of domestic employees)	–	28,270	492,956	7,230	i	133,765	6,440	i	108,075	1,400	i	25,691	i
Small companies													
10–19 ^c	–	5,490	5,501	1,720	i	2,561	1,500	i	2,100	360	i	461	i
20–49	–	7,980	12,418	1,860	i	4,206	1,630	i	3,415	390	i	791	i
Medium companies													
50–99	–	4,960	14,021	1,220	i	6,210	1,120	i	5,216	180	i	994	
100–249	–	4,580	19,793	1,100	i	7,054	990	i	5,819	230	i	1,235	
Large companies													
250–499	–	2,140	18,883	560		6,416	520		5,239	80		1,177	
500–999	–	1,230	23,969	240		7,351	230		6,505	40		846	
1,000–4,999	–	1,330	75,671	400		18,070	320		13,674	100		4,396	i
5,000–9,999	–	240	50,811	80		18,646	70		14,705	20		3,941	
10,000–24,999	–	220	88,263	60		37,476	60		28,676	20	i	8,799	i
25,000 or more	–	130	183,626	40		25,775	40		22,725	20		3,050	

* = amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Beginning in survey year 2018, these statistics include an adjustment to the weight to account for unit nonresponse; beginning in survey year 2019, these company count estimates reflect a change in rounding methodology.^b Beginning in survey year 2018, these statistics include an adjustment to the weight to account for unit nonresponse; beginning in survey year 2019, these company count estimates reflect a change in rounding methodology. These company count estimates also reflect an 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.^c The Business Enterprise Research and Development Survey does not include companies with fewer than 10 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. Companies could report R&D in one, more than one, or no application area. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2019.