

TABLE 20

Companies with domestic R&D paid for by the company and others and performed by the company in the biotechnology focus area, by industry and company size: 2016

(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Biotechnology 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	31,784	374,685	2,562	i 44,793	2,266	i 36,970	707	i 7,823		
Manufacturing industries	31-33	19,522	250,553	1,766	i 40,839	1,630	i 35,313	367	5,526		
Food	311	1,185	4,828	161	i 474	146	i 454	27	i 20		
Chemicals	325	2,907	73,575	946	i 35,277	857	30,271	255	5,005		
Basic chemicals	3251	346	2,545	120	i 397	81	i 233	52	i 163		
Pharmaceuticals and medicines	3254	1,089	64,628	734	34,251	688	29,526	196	4,725		
Other chemicals	other 325	1,473	6,402	92	i 629	87	i 512	7	117		
Plastics and rubber products	326	1,238	3,752	83	i 282	83	i 282	0	0		
Nonmetallic mineral products	327	416	1,289	12	i 5	12	i 5	0	0		
Fabricated metal products	332	2,406	2,239	6	6	6	6	D	*		
Machinery	333	2,780	12,585	38	i 17	38	i 12	D	5 i		
Agricultural implements	33311	198	1,565	0	0	0	0	0	0		
Semiconductor machinery	333242	50	3,411	D	1	D	1	0	0		
Engines, turbines, and power transmission equipment	3336	128	1,959	0	0	0	0	0	0		
Other machinery	other 333	2,405	5,650	D	16 i	D	11	D	5 i		
Computer and electronic products	334	3,090	77,385	239	i 3,230	228	i 2,837	29	i 393		
Semiconductors and other electronic components	3344	858	31,391	32	i 1,245	31	i 1,245	D	*		
Other electronic products	other 334	2,232	45,993	207	i 1,985	198	i 1,592	D	393		
Electrical equipment, appliances, and components	335	727	4,771	8	20	8	20	D	* i		
Transportation equipment	336	1,154	51,275	10	154	10	145	D	9		
Automobiles, bodies, trailers, and parts	3361-63	768	22,042	D	3	D	3	0	0		
Other transportation	other 336	386	29,234	D	151	D	142	D	9		
Miscellaneous manufacturing	339	D	D	237	i 1,253	216	i 1,164	47	i 89		
Other manufacturing	312-16, 321-24, 331, 337	D	D	27	i 121	26	i 118	D	3		
Nonmanufacturing industries	21-23, 42-81	12,263	124,132	796	i 3,954	636	i 1,657	340	i 2,297		
Mining, extraction, and support activities	21	69	3,296	5	14 i	5	14 i	0	0		
Utilities	22	34	351	D	1	D	1	D	*		
Wholesale trade	42	1,652	452	i 0	0	0	0	0	0		
Information	51	2,362	70,748	37	i 230	36	i 229	D	1		
Publishing	511	1,349	33,574	33	i 220	33	i 220	D	*		
Telecommunications	517	D	D	0	0	0	0	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
Data processing, hosting, and related services	518	765	11,914	4	10	3	10	D	1
Other information	other 51	D	D	0	0	0	0	0	0
Professional, scientific, and technical services	54	7,181	37,595	721	i 3,284	563	i 1,015	330	i 2,269
Architectural, engineering, and related services	5413	1,544	3,412	3	7	D	7	D	*
Scientific research and development services	5417	1,940	14,842	547	i 3,013	416	i 832	271	i 2,181
Biotechnology research and development	541711	411	4,464	329	i 2,283	257	i 541	169	i 1,742
Other scientific research and development	other 5417	1,529	10,378	217	i 730	159	i 291	102	i 439
Other professional, scientific, and technical services	other 54	3,697	19,341	171	i 264	D	176	D	88
Health care services	621-23	284	848	26	423	i 25	396	i 7	27
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	682	10,841	D	2	i D	2	i 0	0
All companies (number of domestic employees)	-	31,784	374,685	2,562	i 44,793	2,266	i 36,970	707	i 7,823
Micro companies ^c									
5 - 9	-	3,921	1,581	i 418	i 455	i 322	i 294	i 177	i 161
Small companies									
10 - 19	-	6,757	4,958	i 571	i 1,369	479	i 1,155	184	i 214
20 - 49	-	8,397	9,662	i 596	i 1,948	549	i 1,645	144	303
Medium companies									
50 - 99	-	4,712	9,298	332	i 2,319	314	i 1,991	58	328
100 - 249	-	4,062	14,875	318	i 3,761	298	i 3,138	66	623
Large companies									
250 - 499	-	1,623	13,092	96	i 2,758	89	i 2,416	21	342
500 - 999	-	868	14,450	67	1,673	65	1,539	9	i 134
1,000 - 4,999	-	959	63,971	89	11,570	81	8,667	22	2,902
5,000 - 9,999	-	235	40,633	27	1,940	23	792	9	1,149
10,000 - 24,999	-	153	65,594	33	13,225	i 32	12,232	i 9	993
25,000 or more	-	98	136,571	16	3,775	15	3,100	8	675

* = 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 = 2012 North American Industry Classification System.

^a Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^b Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include

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an adjustment to the weight to account for unit nonresponse. These company count estimates reflect a new 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. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^c Business R&D and Innovation Survey does not include companies with fewer than five 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. 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(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2016.