

TABLE 25

**Foreign R&D paid for by the company and others and performed by the company, by type of R&D, selected industry, and location: 2020**

(Millions of U.S. dollars)

Industry and location	NAICS code	Total foreign R&D performance	Research (basic and applied)	Development
<b>All locations</b>				
All industries	21-23, 31-33, 42-81	109,705	17,011	92,694
Manufacturing industries	31-33	66,243	11,111	55,132
Chemicals	325	19,362	4,810	14,552
Pharmaceuticals and medicines	3254	16,761	4,012	12,749
Computer and electronic products	334	26,567	2,769	23,798
Semiconductor and other electronic components	3344	13,023	1,450	11,573
Nonmanufacturing industries	21-23, 42-81	43,462	5,900	37,563
Information	51	22,900	1,999	20,901
Software publishers	5112	7,683	696	6,987
Professional, scientific, and technical services	54	13,744	3,581	10,163
Scientific research and development services	5417	10,070	2,863	7,207
<b>Africa</b>				
All industries	21-23, 31-33, 42-81	481	86	395
Manufacturing industries	31-33	265	77	189
Chemicals	325	88	22	65
Pharmaceuticals and medicines	3254	37 - 59	0 - 16	32 - 51
Computer and electronic products	334	46	43	2
Semiconductor and other electronic components	3344	0 - 44	0 - 44	0
Nonmanufacturing industries	21-23, 42-81	215	9	206
Information	51	51 - 104	4	47 - 100
Software publishers	5112	34	3	31
Professional, scientific, and technical services	54	112	5	107
Scientific research and development services	5417	97	2	95
<b>Asia and Pacific</b>				
All industries	21-23, 31-33, 42-81	36,070	4,592	31,478
Manufacturing industries	31-33	22,366	3,175	19,191
Chemicals	325	4,539	1,128	3,411
Pharmaceuticals and medicines	3254	3,824	931	2,893
Computer and electronic products	334	11,673	1,141	10,532
Semiconductor and other electronic components	3344	6,648	713	5,935
Nonmanufacturing industries	21-23, 42-81	13,703	1,417	12,286
Information	51	7,102	680	6,422
Software publishers	5112	2,784	228	2,556
Professional, scientific, and technical services	54	3,482	571	2,911
Scientific research and development services	5417	2,214	289	1,925
<b>Canada</b>				
All industries	21-23, 31-33, 42-81	7,586	1,136	6,450
Manufacturing industries	31-33	3,693	603	3,090
Chemicals	325	587	124	463
Pharmaceuticals and medicines	3254	540	109	431
Computer and electronic products	334	1,934	268	1,666
Semiconductor and other electronic components	3344	833	67	766
Nonmanufacturing industries	21-23, 42-81	3,893	533	3,360
Information	51	2,534	173	2,361
Software publishers	5112	1,219	97	1,122
Professional, scientific, and technical services	54	942	333	609
Scientific research and development services	5417	532	283	249
<b>Europe</b>				

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Industry and location	NAICS code	Total foreign R&D performance	Research (basic and applied)	Development
All industries	21-23, 31-33, 42-81	52,624	9,630	42,994
Manufacturing industries	31-33	30,846	6,161	24,684
Chemicals	325	12,790	3,181	9,608
Pharmaceuticals and medicines	3254	11,224	2,694	i 8,530
Computer and electronic products	334	7,525	908	6,617
Semiconductor and other electronic components	3344	2,509	323	i 2,186
Nonmanufacturing industries	21-23, 42-81	21,778	3,469	i 18,309
Information	51	10,891	894	9,997
Software publishers	5112	2,974	293	2,681
Professional, scientific, and technical services	54	8,175	i 2,471	i 5,704
Scientific research and development services	5417	6,712	i 2,240	i 4,472
<b>Latin America and OWH</b>				
All industries	21-23, 31-33, 42-81	4,594	567	i 4,026
Manufacturing industries	31-33	3,461	502	2,959
Chemicals	325	845	206	i 639
Pharmaceuticals and medicines	3254	703	167	i 536
Computer and electronic products	334	1,369	i 78	i 1,291
Semiconductor and other electronic components	3344	479	i 43 - 79	i 400 - 435
Nonmanufacturing industries	21-23, 42-81	1,133	i 66	i 1,067
Information	51	442	34	i 408
Software publishers	5112	53 - 65	0 - 12	54
Professional, scientific, and technical services	54	472	i 28	i 445
Scientific research and development services	5417	374	i 11	363
<b>Middle East</b>				
All industries	21-23, 31-33, 42-81	7,174	842	i 6,332
Manufacturing industries	31-33	4,612	467	i 4,144
Chemicals	325	398	102	296
Pharmaceuticals and medicines	3254	333	83	250
Computer and electronic products	334	3,503	314	i 3,190
Semiconductor and other electronic components	3344	2,507	255	i 2,251
Nonmanufacturing industries	21-23, 42-81	2,562	375	2,187
Information	51	1,764	205	1,559
Software publishers	5112	589	66	523
Professional, scientific, and technical services	54	507	152	356
Scientific research and development services	5417	106	i 22	i 84
<b>Puerto Rico<sup>a</sup></b>				
All industries	21-23, 31-33, 42-81	533	i 67	466
Manufacturing industries	31-33	512	i 62	449
Chemicals	325	76 - 118	14 - 50	61 - 73
Pharmaceuticals and medicines	3254	77	15	i 62
Computer and electronic products	334	137 - 408	i 0 - 20	i 120 - 388
Semiconductor and other electronic components	3344	2	0	2
Nonmanufacturing industries	21-23, 42-81	21	4	17
Information	51	0 - 18	0 - 3	i 0 - 16
Software publishers	5112	0 - 17	*	0 - 16
Professional, scientific, and technical services	54	3 - 22	1 - 5	1 - 18
Scientific research and development services	5417	4	2	2

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

NAICS = 2017 North American Industry Classification System; OWH = other Western Hemisphere.

<sup>a</sup> Puerto Rico is not included in the U.S. total due to its classification as a U.S. territory.

**Note(s):**

Detail within a select location may not add to total because of rounding. Sum of locations does not equal all locations due to the undistributed portion not being published. 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 and also performed foreign R&D and are not comparable with estimates published for years prior to 2018. 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, 2020.