Foreign-born STEM Workers in the United States

Workers in STEM fields (science, technology, engineering, and math) play an increasingly important role in the U.S. economy. STEM occupations are critical to the country's innovation, and STEM workers are responsible for many of the cutting-edge ideas and technologies that create jobs and raise the living standards of U.S. households. Foreign-born workers make up a growing share of the country's STEM workforce.

Using data from the American Community Survey (ACS) and two different definitions of STEM occupations, this fact sheet provides an overview of the occupational, gender, educational, and geographic distribution of foreign-born STEM workers in the United States. As of 2015, the foreign-born comprised one-fifth to one-quarter of the STEM workforce, depending on what occupations are included within the definition of STEM. Notably, the total number of foreign-born STEM workers in the U.S. workforce has increased dramatically since 1990, both in absolute numbers and as a share of the total workforce. This is true at the national and state levels. Foreign-born workers make up an increasing share of STEM workers in all occupational categories. Foreign-born STEM workers are more highly educated than their U.S.-born co-workers. Furthermore, the share of foreign-born STEM workers who are female has increased since 1990, but women remain underrepresented in the STEM workforce.

Who are STEM Workers?

Foreign-born STEM workers have made important contributions to the U.S. economy in terms of productivity and innovation. The foreign-born are more likely than the native-born to obtain a patent,[1] and they account for rising shares of U.S. patents in computing, electronics, medical devices, and pharmaceuticals.[2] Twenty-five percent of high-tech companies founded between 1995 and 2005 had at least one immigrant founder,[3] and over 40 percent of companies in the Fortune 500 in 2010 were founded by an immigrant or the child of an immigrant.[4]

As the demand for STEM workers continues to increase, foreign-born STEM workers will likely continue to complement U.S. workers and play a key role in U.S. productivity and innovation. The Bureau of Labor Statistics (BLS) has projected that STEM occupations will grow approximately 13 percent to more than 9 million between 2012 and 2022—an increase of about 1 million over 2012. This growth rate is greater than the 11 percent projected for all occupations during the same period.[5]

According to a 2012 report by the President's Council of Advisors on Science and Technology, the United States will need approximately one million more STEM professionals than it will produce at the current rate over the next decade. To meet that growing demand, the United States will need to increase the number of students who receive undergraduate STEM degrees by about 34 percent annually over current rates.[6] The President's Council of Advisors provided recommendations for increasing recruitment and retention of

students in STEM majors, including women and members of minority groups, who are underrepresented in STEM undergraduate degrees.[7] And while increasing the number of native-born Americans in STEM fields is critical, foreign-born STEM students and workers may still be needed if the United States is to be prepared for future labor needs and continue to excel globally.

Two Definitions of STEM Occupations

There is no standard definition of a STEM occupation, but most analysts would probably agree that "STEM workers use their knowledge of science, technology, engineering, or math to try to understand how the world works and to solve problems."[8] While some occupations—like mathematician or aerospace engineer—are clearly STEM occupations, the inclusion of others is not as straightforward. For example, no consensus exists about including health-care professionals and social scientists. Research results can vary a great deal depending on which occupations are included in the researcher's definition of STEM occupations.

This fact sheet includes two sets of STEM occupations and examines them side-by-side to highlight the differences encountered when different definitions are used. For more detailed information on the occupations included in each definition, see the Methodology.

- Narrow STEM definition: This is a set of 46 STEM occupations that are classified into four different categories: computer and mathematics; engineering and surveying; physical and life science; and managerial. This list is based on a Department of Commerce list of STEM occupations.[9] Higher education, health care, and social scientists are not included.

- STEM plus health and social sciences definition: This is a set of 87 occupations that is based on the Bureau of Labor Statistics (BLS) list of 96 STEM occupations, which is divided into six categories: management; computer and mathematics; architecture and engineering; life, physical, and social sciences; education, training, and library; and sales and related.[10] However, our list of occupations differs from the BLS list as follows.
  - We include health care occupations: physicians, nurses, therapists, and technicians.
  - We include social science occupations: economists, psychologists, and other social scientists and researchers.
  - We exclude STEM occupations in higher education.

The total number of STEM workers in the United States has nearly doubled since 1990.

Regardless of which definition of STEM is used, the total number of STEM workers in the U.S. workforce has increased dramatically since 1990, both in absolute numbers and as a share of the total workforce. As seen in Table 1, using the narrow definition, STEM workers increased from 4.3 million to 8.1 million between 1990 and 2015. STEM workers as a share of the total workforce increased from 3.4 percent in 1990 to 5.2 percent in the year 2000 and then experienced a dip before rising to 5.0 percent in 2015.

If we use the broad definition of STEM, the number of STEM workers is much larger due to the inclusion of health and social science occupations. The total number of STEM workers increased steadily between 1990 and 2015, from 11.5 million to 20.4 million. In 1990 STEM workers comprised 9.2 percent of the total workforce, and that share increased to 12.6 percent in 2015.

TABLE 1: Total STEM workforce, 1990-2015

Year	Narrow Definition		STEM + Health and Social Science	
	STEM workers	Share of workforce	STEM workers	Share of workforce
1990	4,288,362	3.4%	11,512,049	9.2%
2000	7,198,481	5.2%	14,891,026	10.8%
2010	7,423,441	4.7%	18,260,896	11.6%
2015	8,145,964	5.0%	20,443,243	12.6%

Source: American Immigration Council analysis of American Community Survey data.

Since 1990, the share of foreign-born workers in the STEM workforce has doubled.

The share of foreign-born workers in STEM occupations has grown significantly in recent years. As shown in Table 2, using the narrow definition of STEM occupations, the number of foreign-born STEM workers increased from 509,000 (11.9 percent of the STEM workforce) in 1990 to nearly 2 million (24.3 percent of the STEM workforce) in 2015.

Using the STEM plus health and social science definition, the number of foreign-born STEM workers increased from 1.2 million to 3.9 million between 1990 and 2015—from 10.6 percent of the STEM workforce to 19.3 percent.

TABLE 2: Foreign-born in STEM workforce, 1990-2015

Year	Narrow STEM Definition		STEM + Health and Social Science	
	Foreign-born STEM workforce	Foreign-born as share of STEM workforce	Foreign-born STEM workforce	Foreign-born as share of STEM workforce
1990	508,659	11.9%	1,228,057	10.6%
2000	1,341,451	18.6%	2,277,730	15.3%
2010	1,653,206	22.3%	3,279,195	18.0%
2015	1,976,722	24.3%	3,945,759	19.3%

Source: American Immigration Council analysis of American Community Survey data.

Because immigrant STEM workers tend to possess skills that complement those of their native-born co-workers, the presence of immigrants in the workplace increases the productivity (and therefore the wages) of natives. Moreover, innovation by immigrant workers increases the revenue of the firms in which they work, which enables employers to hire more workers.[11] One study found that an additional 100 foreign-born workers in STEM fields with advanced degrees from U.S. universities led to an additional 262 jobs for U.S.-born workers.[12] The overall share of workers who are foreign-born and hold advanced degrees from either a U.S. or a foreign university was also associated with higher levels of employment among natives. A 10 percent increase in the share of foreign-born workers with advanced degrees working in STEM boosted the U.S.-born employment rate by 0.03 percent. This means that every additional 100 foreign-born workers with an advanced degree working in a STEM occupation creates roughly 86 jobs for U.S. workers.[13]

Foreign-born STEM workers make up a growing share of workers in all occupational categories.

When STEM occupations are broken into categories, there is quite a bit of variation (See Methodology for a full list of occupations included in each category). The share of foreign-born workers has increased since 1990 in computer and math; engineering; life, physical, and social sciences; and health occupations. The largest increase was in computer and math fields, which jumped from 11.9 percent foreign-born in 1990 to 26.1 percent in 2015.

Table 3: Foreign-born as share of STEM workers, by occupational category, 1990-2015

Occupational category	1990	2000	2010	2015
Managers	N/A*	19.7%	15.3%	17.6%
Computer and math	11.9%	20.6%	23.8%	26.1%
Engineering	11.9%	16.7%	19.0%	20.2%
Life, physical, social sciences	12.5%	16.6%	22.9%	23.5%
Health	9.5%	12.2%	15.0%	15.9%
Foreign born in labor force, all occupations (STEM+non-STEM)	10.0%	14.1%	17.2%	17.9%

Source: American Immigration Council analysis of American Community Survey data.
* The 1990 Census data does not include any of the STEM management occupations.

Computer and math: Within the computer and math category, software engineer is by far the largest single occupation. Foreign-born workers comprised 39.2 percent of all software engineers in 2015 (Table 4). In fact, software engineers made up 41.4 percent of all foreign-born workers in the computer and math category in 2015. Foreign-born computer software engineers made up 5.9 percent of the total number of STEM workers in the United States, but 12.1 percent of all foreign-born STEM workers.

Table 4: Foreign-born workers in the computer and math occupational category, 2015

	Total	Foreign-born	Share of workers in occupation who are foreign-born
Software engineers	1,216,215	476,458	39.2%
Computer programmers	453,707	124,228	27.4%
Computer systems analysts	499,501	122,648	24.6%
All other occupations in category	2,234,505	426,436	19.1%
TOTAL	**4,403,928**	**1,149,770**	**26.1%**

Source: American Immigration Council analysis of American Community Survey data.

Computer programmers and computer systems analysts are the other occupations that make up a significant share of the foreign-born in the computer and math category. Together, in 2015, these three occupations accounted for more than 723,000 foreign-born STEM workers, or 62.9 percent of all foreign-born workers in the computer and math category.

Engineering: In the engineering category, foreign-born workers are prominent in nuclear and electrical engineering. In 2000, there were only 2,577 foreign-born nuclear engineers, but they accounted for 30.6 percent of all nuclear engineers. In 2015, there were 142,223 foreign-born nuclear engineers, making up one-quarter (25.7 percent) of all nuclear engineers (see Table 5). In 2015, the total number of foreign-born electrical engineers was 62,105, but they made up 28.4 percent of all electrical engineers.

Table 5: Foreign-born workers in the engineering occupational category, 2015

	Total	Foreign-born	Share of workers in occupation who are foreign-born
Nuclear engineers	553,571	142,223	25.7%
Electrical and electronic engineers	218,768	62,105	28.4%
All other occupations in category	2,043,427	364,332	17.8%
TOTAL	**2,815,766**	**568,660**	**20.2%**

Source: American Immigration Council analysis of American Community Survey data.

Management: Within this category, computer and information systems managers is the largest occupation. In 2015, nearly 128,000 computer and systems managers were foreign-born, or 21.5 percent of all workers in this occupation (Table 6). Medical and health service managers was the next largest occupation for foreign-born workers, with more than 87,000, or 12.9 percent, of all workers in this occupation.

Table 6: Foreign-born workers in the management occupational category, 2015

	Total	Foreign-born	Share of workers in occupation who are foreign-born
Computer and information system managers	594,235	127,996	21.5%
Medical and health service managers	673,513	87,217	12.9%
All other occupations in category	176,673	39,381	22.3%
TOTAL	1,444,421	254,594	17.6%

Source: American Immigration Council analysis of American Community Survey data.

Life, physical, and social sciences: In the life, physical, and social sciences category, physical scientists and medical scientists are the largest occupations for foreign-born workers. In 2015, foreign-born physical scientists and medical scientists comprised 41.8 percent and 46.0 percent of all workers in those occupations, respectively. Together, there were 166,772 foreign-born physical and medical scientists making up over half (52.2 percent) of all foreign-born workers in the life, physical, and social sciences category.

Table 7: Foreign-born workers in the life, physical and social sciences occupational category, 2015

	Total	Foreign-born	Share of workers in occupation who are foreign-born
Physical scientists	226,688	94,844	41.8%
Medical scientists	156,441	71,928	46.0%
All other occupations in category	980,412	153,008	15.6%
TOTAL	1,363,541	319,780	23.5%

Source: American Immigration Council analysis of American Community Survey data.

In 2015, physical scientists made up 16.6 percent of all workers in life, physical, and social sciences, and foreign-born physical scientists accounted for 29.7 percent of all foreign-born workers in the category. At the same time, medical scientists made up 11.5 percent of all workers in life, physical, and social sciences and foreign-born medical scientists accounted for 22.5 percent of all foreign-born workers in the category.

Health: In the health category, foreign-born physicians, surgeons, and nurses make up a large share of all workers. In 2015, 29.4 percent of all physicians and surgeons were foreign-born (Table 8). That year, physicians and surgeons accounted for 8.8 percent of workers in the health category, but foreign-born physicians and surgeons accounted for 16.4 percent of all foreign-born workers in health.

Nurses make up the next largest occupations for foreign-born health workers. Foreign-born registered nurses and licensed practical nurses made up 16.9 percent and 15.1 percent of all nurses in those occupations, respectively.

Together, there were more than 900,000 foreign-born physicians and surgeons and nurses in 2015, comprising more than half of all foreign-born workers in the health category.

Table 8: Foreign-born workers in the Health occupational category, 2015

	Total	Foreign-born	Share of workers in occupation who are foreign-born
Physicians and surgeons	921,693	271,365	29.4%
Registered nurses	3,125,523	529,156	16.9%
Licensed practical and licensed vocational nurses	856,212	129,021	15.1%
All other workers in category	5,512,159	723,413	13.1%
TOTAL	10,415,587	1,652,955	15.9%

Source: American Immigration Council analysis of American Community Survey data.

The share of foreign-born STEM workers who are female has increased since 1990, but women are underrepresented in the STEM workforce.

Nationally, foreign-born women are underrepresented in the overall labor force. Women make up slightly more than half of the total foreign-born population, but immigrant women participate in the labor force at a lower rate than either native-born or immigrant men, and at a rate slightly below that of native-born women.[14]

Table 9: Foreign-born STEM Workers by Gender, 1990-2015

Year	Narrow STEM Definition		STEM + Health and Social Sciences	
	Share of all STEM workers who are female	Share of foreign-born STEM workers who are female	Share of STEM workers who are female	Share of foreign-born STEM workers who are female
1990	19.1%	18.7%	43.0%	39.4%
2000	24.9%	25.5%	44.9%	40.2%
2010	24.9%	26.2%	48.4%	43.3%
2015	24.6%	25.3%	48.9%	43.1%

Source: American Immigration Council analysis of American Community Survey data.

In the STEM fields, women are underrepresented. While the share of STEM workers who are female has increased slightly since 1990, as of 2015, only about one-quarter of all STEM workers were female (See Table 9). Using the narrow definition, since 2000, foreign-born female STEM workers have been slightly overrepresented when compared to all females. While far fewer women are in STEM fields compared to men, the share of foreign-born female STEM workers is slightly higher than the share of all females in STEM fields.

However, using the broader definition that includes health and social science occupations, women play a larger role. This is likely due to the fact that women, including immigrant women, play key roles in healthcare.[15] Table 4 shows that in 2015, just under half (48.9 percent) of all STEM workers were female, but foreign-born female STEM workers were slightly underrepresented (43 percent).

Foreign-born STEM workers have high levels of educational attainment.

Not all STEM occupations require a college degree, particularly some included in the health and social sciences fields in the broad definition (see Methodology). However, many STEM occupations require a high level of training and education, and workers in STEM fields tend to be highly educated. Among STEM workers, those in life, physical, and social sciences had the highest educational attainment—more than 95 percent had at least a bachelor's degree.[16]

Even among STEM workers, the foreign-born are among the most educated. For example, research has found that since the mid-2000s, immigrants have accounted for the majority of workers in STEM with doctoral degrees.[17] Many of these foreign-born advanced degree holders obtained their degrees in the United States.[18]

Table 10: STEM workers by educational attainment 2015

	Narrow STEM Definition		STEM + Health and Social Sciences	
	All STEM	Foreign-born STEM	All STEM	Foreign-born STEM
No college	10.4%	5.3%	11.6%	7.7%
1-2 years college	19.6%	8.5%	25.7%	14.7%
4 years college	43.5%	39.2%	35.7%	36.2%
5+ years college	26.4%	47.0%	26.9%	41.4%

Source: American Immigration Council analysis of American Community Survey data.

In both STEM definitions, more than half of all STEM workers had at least a college degree in 2015 (Table 10). The broad definition of STEM includes more occupations that do not require a college degree (e.g. some miscellaneous technicians), so the share of workers without a college degree is higher than under the narrow definition.

Foreign-born STEM workers were more likely to have more than 5 years of college in 2015 when compared to all STEM workers. Using the narrow definition, 47 percent of foreign-born STEM workers had 5+ years of college compared to only 26.4 percent of all STEM workers. Using the broad definition, 41.4 percent of foreign-born STEM workers had 5+ years of college, compared to 26.9 percent of all STEM workers (Table 10).

Foreign-born STEM workers tend to be slightly younger.

The mean age of all STEM workers has increased slightly since 1990, from 38 to 42 years old using the narrow definition, and from 38.5 to 43 when health and social science occupations are added. This suggests that the addition of workers in the health and social sciences categories raises the mean age slightly. The 1990 data show that the mean age for foreign-born STEM workers was slightly higher than for all STEM workers. Since 2000, however, foreign-born STEM workers have been slightly younger than all STEM workers.

Table 11: Mean age of STEM workers

Year	Narrow STEM Definition		STEM + Health and Social Sciences	
	All STEM	Foreign-born STEM	All STEM	Foreign-born STEM
1990	38.0%	38.3%	38.5%	39.2%
2000	39.0%	37.7%	40.4%	39.3%
2010	42.0%	40.6%	43.0%	42.0%
2015	42.1%	41.1%	43.0%	42.5%

Source: American Immigration Council analysis of American Community Survey data.

Other research has found that foreign-born STEM workers tend to arrive in the United States at age 21 or older, which is consistent with arriving on a work or student visa as opposed to immigrating through the family-based system.[19]

Foreign-born STEM workers in the states

Research has shown that states and localities that attract more high-skilled foreign workers see faster rates of growth in labor productivity.[20] Furthermore, college-educated workers, whether native- or foreign-born, have a positive effect on local economies and positively affect productivity and average wages. College-educated workers may also increase the quality of amenities in a city, such as better schools, medical facilities, and cultural institutions. Therefore, cities that retain their foreign-born college-educated workers are more attractive to both foreign- and native-born workers, and localities that fail to attract and retain college-educated workers are less attractive.[21]

STEM employment varies a great deal by state. For example, in 2015, using the narrow definition, the foreign-born made up more than 40 percent of all STEM workers in New Jersey (43.8 percent) and California (42.4 percent). In 16 other states, the foreign-born make up 20 percent or more of all STEM workers. And in every state except Wyoming, the foreign-born made up at least four percent of the STEM workforce (see Table 12).

When the health and social science occupations are added, foreign-born STEM workers make up slightly smaller shares of the STEM workforce in all but four states. In Alaska, Hawaii, North Dakota, and Wyoming, the share of STEM workers that is foreign-born is higher when using the broader definition of STEM occupations, indicating that foreign-born workers are more numerous in health care and education occupations. In 2015, using the broader definition of STEM, foreign-born workers made up more than 20 percent of the STEM workforce in 12 states. The states with the highest shares of foreign-born in STEM occupations were: California (36.8 percent); New Jersey (35.8 percent); and New York (29.4 percent). Foreign-born STEM workers made up at least 2.8 percent of the STEM workforce in all 50 states. (See Table 12).

Table 12: Foreign-born STEM workers by State and the District of Columbia, 2015

	Narrow STEM Definition		STEM + Health and Social Science	
State	Foreign-born STEM workers 2015	Foreign-born as a share of STEM workers 2015	Foreign-born STEM workers 2015	Foreign-born as a share of STEM workers 2015
Alabama	8,160	8.6%	17,339	6.3%
Alaska	1,637	11.3%	5,749	13.6%
Arizona	30,338	19.9%	63,369	16.6%
Arkansas	5,921	14.3%	11,151	7.3%
California	492,146	42.4%	909,416	36.8%
Colorado	25,842	12.8%	46,586	11.0%
Connecticut	26,428	25.3%	52,928	19.7%
Delaware	8,332	29.6%	14,029	20.4%
District of Columbia	9,362	26.8%	13,811	24.2%
Florida	97,449	27.4%	286,917	25.9%
Georgia	56,737	22.8%	101,943	17.1%
Hawaii	5,518	17.8%	15,260	18.1%
Idaho	2,413	7.2%	5,119	5.5%
Illinois	84,649	25.6%	175,592	20.8%
Indiana	16,370	12.6%	33,380	8.8%
Iowa	9,151	12.8%	13,451	7.0%
Kansas	9,093	12.0%	18,974	9.6%
Kentucky	6,249	8.8%	16,472	6.8%
Louisiana	7,973	10.4%	18,340	7.2%

Maine	2,124	7.6%	4,747	5.4%
Maryland	68,056	26.3%	129,790	24.9%
Massachusetts	81,258	29.6%	137,646	23.0%
Michigan	53,442	19.8%	92,398	14.4%
Minnesota	30,234	16.9%	55,159	12.7%
Mississippi	1,806	4.9%	4,110	2.8%
Missouri	16,030	12.3%	32,517	8.7%
Montana	822	4.1%	1,685	2.8%
Nebraska	6,025	15.4%	9,870	8.2%
Nevada	10,208	23.6%	25,115	21.0%
New Hampshire	8,244	15.3%	13,048	10.9%
New Jersey	120,827	43.8%	235,528	35.8%
New Mexico	6,969	16.7%	12,148	10.9%
New York	121,029	30.6%	351,787	29.4%
North Carolina	42,123	17.6%	73,960	11.7%
North Dakota	977	5.3%	3,166	6.6%
Ohio	36,546	13.7%	68,590	8.9%
Oklahoma	7,567	11.3%	14,436	7.6%
Oregon	24,028	20.3%	38,865	14.7%
Pennsylvania	47,414	15.2%	98,965	11.2%
Rhode Island	4,652	18.3%	9,962	13.6%
South Carolina	11,389	12.7%	21,790	8.1%
South Dakota	521	4.1%	1,487	3.1%

Tennessee	14,944	11.9%	30,710	8.1%
Texas	180,773	26.3%	357,561	21.8%
Utah	8,382	9.8%	15,983	8.7%
Vermont	1,316	7.2%	2,974	6.6%
Virginia	72,106	22.9%	126,294	19.8%
Washington	73,616	27.2%	116,949	22.0%
West Virginia	2,291	8.6%	5,119	4.9%
Wisconsin	17,157	11.1%	32,459	8.1%
Wyoming	78	0.8%	1,115	4.0%

Source: American Immigration Council analysis of American Community Survey data.

Methodology

The two definitions of STEM occupations (narrow STEM definition and STEM plus Health and Social Sciences definition) were created using lists of STEM occupations from the U.S. Department of Commerce (DOC) and the Bureau of Labor Statistics (BLS).[22] Both DOC and BLS utilize the Standard Occupational Classification, which is a U.S. government system of classifying occupations for the purpose of collecting, calculating, or disseminating data.[23] These classifications were converted to the U.S. Census Bureau's American Community Survey occupation codes.[24] While there are equivalents for nearly all occupations, some slight alterations were necessary.

All data is from IPUMS-USA.[25]

The STEM occupations used in this fact sheet are listed below. The occupations indicated with a * are those added when using the STEM plus Health and Social Sciences definition.

Computer and math occupations

- Computer scientists and systems analysts
- Computer programmers
- Computer software engineers
- Computer support specialists

- Database administrators
- Network and computer systems administrators
- Network systems and data communications analysts
- Mathematicians
- Operations research analysts
- Statisticians
- Miscellaneous mathematical science occupations
- Information security analysts*
- Web developers*
- Actuaries*

Engineering and surveying occupations

- Surveyors, cartographers, and photogrammetrists
- Aerospace engineers
- Agricultural engineers
- Biomedical engineers
- Chemical engineers
- Civil engineers
- Computer hardware engineers
- Electrical and electronic engineers
- Environmental engineers
- Industrial engineers, including health and safety
- Marine engineers and naval architects
- Materials engineers
- Mechanical engineers
- Mining and geological engineers, including mining safety engineers
- Nuclear engineers

- Petroleum engineers
- Engineers, all other
- Drafters
- Engineering technicians, except drafters
- Surveying and mapping technicians
- Sales engineers
- Architects*

Physical and life sciences occupations

- Agricultural and food scientists
- Biological scientists
- Conservation scientists and foresters
- Medical scientists
- Astronomers and physicists
- Atmospheric and space scientists
- Chemists and materials scientists
- Environmental scientists and geoscientists
- Physical scientists, all other
- Agricultural and food science technicians
- Biological technicians
- Chemical technicians
- Geological and petroleum technicians
- Nuclear technicians
- Other life, physical, and social science technicians
- Economists*
- Psychologists*
- Urban and regional planners*

- Miscellaneous social scientists*

STEM managerial occupations

- Computer and information systems managers
- Engineering managers
- Natural sciences managers
- Medical and health service managers*

Health occupations

- Chiropractors*
- Dentists*
- Dieticians and nutritionists*
- Optometrists*
- Pharmacists*
- Physicians and surgeons*
- Physician assistants*
- Podiatrists*
- Audiologists*
- Occupational therapists*
- Physical therapists*
- Radiation therapists*
- Recreational therapists*
- Respiratory therapists*
- Speech language pathologists*
- Other therapists*
- Veterinarians*
- Registered nurses*
- Nurse anesthetists*

- Nurse practitioners*
- Health diagnosing and treating practitioners*
- Clinical lab technologists*
- Dental hygienists*
- Diagnostic related technologists*
- Emergency medical technicians and paramedics*
- Health practitioner technicians*
- Licensed practical and licensed vocational nurses*
- Medical records and health information technologists*
- Opticians*
- Miscellaneous health technologists*
- Other healthcare practitioners*
- Sales representatives wholesale and manufacturing technical and scientific products*

Endnotes

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