

Fact Sheet

Biopharmaceutical Industry Contributions to State and U.S. Economies

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Key Findings

General Findings

Employment

- The U.S. biopharmaceutical industry employed 406,700 people in 2003.
- When the full multiplier impact is added (the economic ripple effect that captures jobs generated by this industry across all sectors), biopharmaceuticals was responsible for 2.7 million jobs and 2.1 percent of total employment in the U.S.
- Each job in biopharmaceuticals creates another 5.7 jobs elsewhere in the economy.

Output

- Biopharmaceuticals were directly responsible for \$63.9 billion in real output (based on inflation-adjusted 1996 dollars) in 2003.
- When the multipliers are added, the industry was responsible for a total of \$172.7 billion, which includes \$67.8 billion and \$40.9 billion of indirect and induced impacts, respectively.
- For each dollar of output produced in the biopharmaceutical sector in the United States, an additional \$1.70 of output is generated in other sectors.

Workers' Earnings

- The biopharmaceutical industry in the U.S. generated \$115.1 billion in total workers' earnings in 2003 – \$29.5 billion directly, \$54.3 billion indirectly and \$31.3 billion from induced impacts.
- In terms of productivity, each worker produced an average of \$157,300 of real output in 2003, and average annual wages in the industry reached \$72,600.
- For each dollar of labor earnings produced in the biopharmaceutical sector in the U.S., an additional \$2.90 of workers' earnings is generated outside it.

Industry forecast

- Employment within the biopharmaceutical industry is projected to grow from 413,800 in 2004 to 536,300 over the next decade in the U.S. When the full extent of the multiplier dynamics is accounted for, the industry will be responsible for 3,616,580 jobs (total impact) by 2014.
- Real industry output (inflation adjusted, 1996 dollars) is expected to increase from \$69.2 billion in 2004 to \$128.3 billion in 2014. When applying the output multiplier, the industry will produce an additional \$221.8 billion in real output among other sectors, making it accountable for \$350.1 billion worth of real output overall by 2014.

- Total labor earnings generated by the biopharmaceutical industry are anticipated to increase from \$31.4 billion to \$56.6 billion between 2004 and 2014. The earnings multiplier suggests that the industry will be responsible for \$218.0 billion worth of workers' earnings in all industries in 2014.

Taxes

- Federal, state and local personal income taxes generated by the biopharmaceutical industry amounted to \$24.5 billion in 2003. Total sales tax revenues generated from the sales of biopharmaceutical products and related consumer purchases were \$985.6 million. Corporate income taxes totaled \$6.4 billion.

State Findings

- Most biopharmaceutical jobs in 2003: California – 70,000.
- Largest concentration of biopharmaceutical industry in local economy: New Jersey – 3.72 times greater than the U.S. average.
- Greatest industry real output (inflation adjusted) in 2003: New Jersey – \$10.1 billion.
- Greatest industry workers' earnings in 2003: New Jersey – \$5.3 billion
- Highest industry wage per employee: Connecticut - \$120,100.
- Highest industry real output per employee: Indiana – \$292,000.
- Most jobs generated by the industry across all sectors (total impact): California – 317,000
- Most workers' earnings generated by the industry (total impact): New Jersey – \$17.6 billion
- Most real output generated by the industry (total impact): New Jersey - \$22.2 billion
- Highest employment multiplier (number of jobs created by each biopharmaceutical job): Indiana – 6 (each biopharmaceutical job creates an additional 5 jobs elsewhere)
- Greatest percentage of employment growth forecast in this industry over the next 10 years: Nevada – 240 percent.
- Greatest percentage of real output growth forecast in this industry over the next 10 years: Rhode Island – 400 percent.
- Greatest percentage of workers' earnings growth forecast in this industry over the next 10 years: Rhode Island – 180 percent.
- Out of the top 10 states in the Institute's Biopharmaceutical Innovation Pipeline Index – which measures states' ability to capitalize on their strengths in biopharmaceutical knowledge and creativity – seven are from the East. Six are either in or bordering the highly clustered New England and Mid-Atlantic regions.
- Among states with existing clusters of biopharmaceutical activity, Massachusetts and Maryland stand out as the projected top growth performers over the next decade.
- Many state economies, and the District of Columbia, are highly dependent on the biopharmaceutical industry, including New Jersey, Massachusetts, Indiana, North Carolina, Connecticut, Pennsylvania, California, Utah, Maryland, New York, Rhode Island, Illinois and Washington.
- Given the proper innovation environment, states such as Nevada, Vermont, Alabama, New Hampshire, Florida and West Virginia could see biopharmaceuticals account for a growing share of their economies.