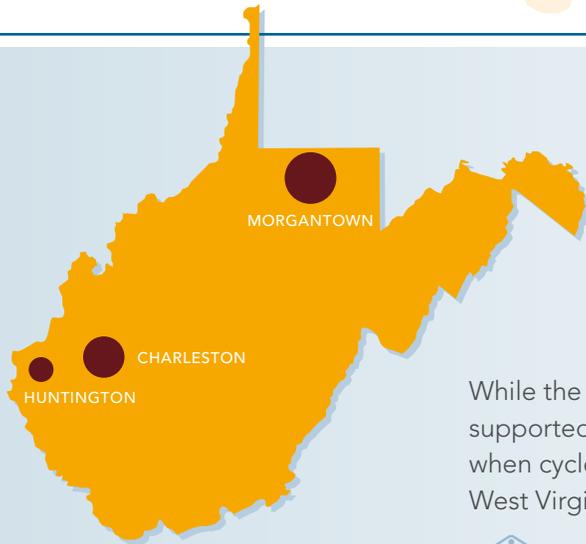


WEST VIRGINIA

Medical researchers funded by the National Institutes of Health (NIH) are working every day to improve health, discover cures and provide hope to people the world-over affected by disease. This work, however, has a secondary benefit: it supports employment and economic activity across the United States, including in West Virginia.



ADDING TO WEST VIRGINIA'S ECONOMY

In FY2017, five institutions in West Virginia received

58 research awards
totaling more than \$28 million

While the bulk of the research awards went to West Virginia University, others supported institutions and businesses across the state. This research funding, when cycled through the economy, generated **\$58 million in total sales** for West Virginia businesses:



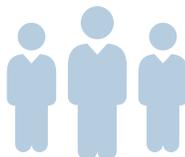
Supporting nearly **400 jobs** in West Virginia; and



Generating approximately **\$6 million in tax and fee revenues** for state, county and municipal governments statewide.

BOOSTING THE LABOR FORCE IN WEST VIRGINIA

Jobs in the scientific R&D sector in West Virginia pay on average 1.3 times more than those in other sectors. In 2017, this was \$45,700 vs. \$36,100. And for young workers (under 25), the difference was also significant — 5 percent higher than the average pay in other fields, \$14,200 vs. \$13,600 — a factor important to the state's future growth.



REDUCING PUBLIC HEALTH COSTS

In West Virginia, **49% of the population** is enrolled in Medicare and Medicaidⁱ, far exceeding the national average of 35%, and spending on these programs amounts to **10% of West Virginia's total GDP**, also well above the national average of 6%. Contributing to this burden is the prevalence of chronic disease in West Virginia, which is much higher than in other states.ⁱⁱ

COMPARED TO OTHER STATES, WEST VIRGINIA RANKS:

- 1st** for rate of **diabetes**
- 1st** for rate of **cardiovascular disease**
- 1st** for rate of **obesity**
- 1st** for rate of deaths from **opioid overdose**
- 2nd** for rate of deaths from **cancer**
- 16th** for rate of deaths from **Alzheimer's disease**



This state snapshot accompanies the UMR report, "The Economic & Fiscal Impact on Select States of NIH-funded Medical Research."

NIH-funded research that leads to improved treatments and cures for disease can help West Virginia address the state and local fiscal challenges of rising health care costs.



MEDICAL RESEARCH AT WORK IN WEST VIRGINIA

In January 2018, West Virginia resident George Blough received a designation she once thought unimaginable: She is the longest living survivor of ovarian cancer that her doctor has ever treated. It had been 28 years since her cancer was first diagnosed, and 21 years since it metastasized to her right lung.

Fortunately for George, in the seven years between her original diagnosis in 1990 and the cancer's recurrence in 1997, a new drug was approved for the treatment of ovarian cancer. George underwent six rounds of chemotherapy with this drug and explains quite matter-of-factly, "Medical research saved my life. If it wasn't for Taxol, I wouldn't be here today."

According to the National Cancer Institute (NCI), Taxol is the best-selling cancer drug ever manufactured. A tremendous success story, its 30-year journey from basic medical research to an approved cancer treatment is testament to the diligence and hard work by numerous academic researchers, the pharmaceutical industry and the NCI working together toward a common cause. In 2017, at an event in Washington, D.C., George and one of these researchers realized their very personal connection. Peggy Rutherford had worked at The Ohio State University in the 1980s conducting tests of "hopeful" chemotherapeutic agents, one of which was Taxol. "Wow! We were in DC to ask for more funding for research and I was standing next to someone who had benefitted from my research. What an empowering moment for both of us," Peggy said.

Today, at 72, George has a wonderful husband, four grown children and six grandchildren. Reflecting on her situation, she says there were times she didn't think she'd live to be 45. "Twenty-eight years ago, hysterectomy was all there was." Now, she tries to give hope to others who have been diagnosed with cancer by reminding them that there are researchers out there working on their behalf. "We have hope because we have research," she says.

¹ According to the most recent statistics available from the Centers for Medicare and Medicaid Services

² [Diabetes and Obesity: "The State of Obesity: Better Policies for a Healthier America 2018"](#)

[Cardiovascular Disease: Kaiser J Family Foundation State Health Facts](#)

[Cancer Deaths: National Cancer Institute State Cancer Profiles](#)

[Alzheimer's Disease Deaths: Alzheimer's Association "2018 Alzheimer's Disease Facts and Figures"](#)

[Opioid Overdose Deaths: Kaiser J Family Foundation State Health Facts](#)

“

Medical research saved my life. If it wasn't for Taxol, I wouldn't be here today...We have hope because we have research.”



United for Medical Research is a coalition of leading scientific research institutions and industries, and patient and health advocates that have joined together to seek steady increases in funding for the National Institutes of Health. Learn more at www.unitedformedicalresearch.com. For examples of the amazing things that NIH research is making possible, visit www.amazingthingspodcast.com.