

Key Sector – Health/ Life Science

Edmonton's Expertise

Biotechnology, Health Research, Medical Devices.

Selling Points for Edmonton

Alberta's Cluster for Health & Life Sciences: Edmonton has a strong base of activity in health and life science. Approximately 60 percent of all Alberta life science companies are located in Edmonton. The health biotechnology and pharmaceuticals subsector as well as medical technology and devices subsector are Edmonton's major strengths, which, together, account for 69 percent of the overall life science industry in Alberta.

Specialities in Health Research: The University of Alberta's Faculty of Medicine and Dentistry is world-renowned, with 19 different departments and research specialties in cardiology, virology, oncology, and organ transplantation. Scientists based at the University have made a number of medical breakthroughs, including: a new heart transplant protocol for children, the world's first oral anti-viral treatment for Hepatitis B, and a revolutionary treatment for Type 1 diabetes known internationally as the Edmonton Protocol.

Largest Healthcare System in Canada: Edmonton is the headquarters of Alberta Health Services (AHS), making it a strategic location for health-related companies to locate in Alberta. AHS is Canada's first and largest province-wide, fully-integrated health system, responsible for delivering health services to the over 4 million people living in Alberta with an annual operating budget of \$14.3 billion.

City Priority & Support: In April 2016, the City of Edmonton announced a new initiative to prioritize health innovation and build Edmonton as "Canada's Health City". The strategy aims to: create an ecosystem that attracts, retains, and supports health-related talent; increases access to capital for health-related projects; and accelerates commercialization of health technology and research created in Edmonton.

Neato Facts/Stat

- In 1956, surgeon John Carter Callaghan performed Canada's first successful open-heart surgery at the University of Alberta Hospital.
- The total healthcare expenditure in Alberta was \$26.8 billion in 2013. This equated to \$6,700 per person annually – the highest per capita spending on healthcare in country.

Comparison to Major Centres

Business Cost Comparison Ranking for Biotechnology R&D

Cost	Edmonton	Calgary	Vancouver	Toronto	Montreal
Labour	2	5	1	3	4
Facility Lease	4	2	5	3	4
Taxes	1	2	3	3	4
Utilities	4	3	5	5	2
Overall Rank	1	3	5	4	2

Source: KPMG Competitive Alternatives, 2016

Business Cost Comparison Ranking for Medical Devices

Cost	Edmonton	Calgary	Vancouver	Toronto	Montreal
Labour	2	5	1	4	3
Facility Lease	4	3	5	1	1
Taxes	2	1	4	3	5
Utilities	4	3	1	5	2
Overall Rank	4	5	3	2	1

Source: KPMG Competitive Alternatives, 2016

Industry Players

Ceapro Inc.: Ceapro is involved in the development of proprietary extraction technology and the application of this technology to the production of extracts and “active ingredients” from oats and other renewable plant resources. Ceapro adds further value to its extracts by supporting their use in cosmeceutical, nutraceutical, and therapeutics products for humans and animals.

Gilead Alberta: Gilead Sciences is a research-based biopharmaceutical company that discovers, develops and commercializes innovative medicines in areas of unmet medical need. The company’s Edmonton site develops and manufactures Gilead’s investigational medicines for clinical research programs in areas such as hepatitis C, HIV/AIDS and cancer.

Innovative Trauma Care Inc.: Innovative Trauma Care created the iTClamp™ Hemorrhage Control System, a temporary wound closure device to control severe bleeding within seconds of application to a penetrating injury. Today, the device is helping to save lives around the world. Since its initial approval by Health Canada in 2012, iTClamp has been cleared for use in dozens of countries, including the United States, Australia, and members of the European Union.

Major Organizations & Assets

Alberta Health Services (AHS): AHS is Canada’s first and largest province-wide, fully-integrated health system, responsible for delivering health services to the over four million people living in Alberta. AHS delivers public health care on behalf of the Government of Alberta’s Ministry of Health with a \$14 billion annual operating budget.

TEC Edmonton Health Accelerator: The TEC Edmonton Health Accelerator is encouraging innovative companies to enter into the health sciences field. The incubator plans to assist a minimum of 50 new health-care company clients over five years.

University of Alberta: The University of Alberta is one of Canada's leading research universities, attracting more than \$500 million annually in external research funding. Edmonton also has several specialized hospitals with leading health research institutes, the majority of which are connected to the University of Alberta. They include:

- Cross Cancer Institute
- Glenrose Rehabilitation Hospital
- Li Ka Shing Institute of Virology
- Mazankowski Alberta Heart Institute
- Metabolomics Innovation Centre