

Health and Bioscience

Definition

This sector comprises establishments primarily composed of businesses in agriculture, manufacturing, professional services, health care and social assistance (City of Oshawa, 2013). This sector also encompasses establishments primarily engaged in oilseed and grain farming, pharmaceutical and medicine manufacturing, general medicinal and surgical hospitals, chemical product manufacturing, providing health care by diagnosis and treatment, providing residential care for medical and social reasons, and providing social assistance, such as counselling, welfare, child protection, community housing and food services, vocational rehabilitation and child care, to those requiring such assistance.

(Statistics Canada, 2012)



Overview of the Industry

Health and bioscience is a growth sector and remains a major employer across the Region. Through new and developing programs through local universities and institutions such as Lakeridge Health, Durham Region has established itself as an emerging hub for the health and bioscience sector. This emerging sector has developed the need for new research and technologies within the health

sciences. Research facilities such as Lakeridge Health Education and Research Network (LHEARN) train the next generation of health care providers through state-of-the-art facilities, while education and research efforts are focused on improving care for patients, families and the community. The creation of these facilities allow health care practitioners the opportunity to establish themselves at the forefront of industry leading research. Geographically, this industry thrives due to the partnerships with local post-secondary institutions, as they provide a well-educated workforce to support research, training and development (The Martin Prosperity Institute et al., 2009). Local universities such as the University of Ontario Institute of Technology, Durham College and Queen's University

have established specialized programs which support the success and growth of this sector (City of Oshawa, 2013). Employers in Durham Region also benefit as having a pool of qualified candidates, which allows them the opportunity to establish a solid long-term foundation within the Region (City of Oshawa, 2013). The health care and social assistance industry continues to be a multi billion-dollar industry. In 2009, this industry accounted for 6.9 percent of Canada's GDP and continues to post employment gains (Town of Ajax, 2010). Although this sector continues to grow, it faces challenges in order to meet the demands of a growing population and changing demographic (Town of Ajax, 2010). Many health care workers currently within the industry

have an aging profile, which suggests that there will be the need for additional workers in order to replace the aging workforce (Zizys, 2012). The provincial government has established programs to accelerate technologies in the health and bioscience sector. Programs such as the Health Technologies and Commercialization Program (HTCP) offer financial support to SMEs which advance the development of innovative medical technologies, in order to compete with foreign competitors. It promotes the advancement of medical technologies by addressing significant unmet clinical need, while improving the cost effectiveness of health care delivery. These funding programs encourage innovation within the health and bioscience sector, as they incentivise manufacturing and research initiatives to support the developing industry. The government of Canada also offers substantial Research and

Development (R&D) tax credits in order to continuously motivate and incentivise R&D within health and bioscience (City of Oshawa, 2013). Research and development continues to grow in Durham Region through places such as Clarington’s Technology Business Park which will attract like-minded firms and create an R&D cluster (Municipality of Clarington Planning Services Department, 2010). Sectors that support health and bioscience also have opportunity for growth and transformation. The health and bioscience sector depends on several sectors in order to support continuous growth such as the agriculture sector, advanced manufacturing and multimodal transportation and logistics sector. This cross-sectoral approach efficiently supports emerging sectors by utilizing community resources and existing partnerships (City of Oshawa, 2013). The health and bioscience sector is a Subject Matter Working Group for the Local Employment

Planning Council because it demonstrates the ability to continue to be a high priority growth sector through main initiatives within Durham Region. As Durham Region moves towards a knowledge-intensive economy, health and bioscience will continue to develop and become an integral part of the local and provincial economy (City of Oshawa, 2013).

Canadian Business Counts – Durham Region

Data within the Canadian Business Counts table represents counts of active businesses by industry classification and employment-size categories for Canada and the provinces and territories. The counts are compiled from the Business Register, Statistics Canada’s central listing of Canadian businesses. The table below represents a sampling of active businesses, as of December 2015 within Durham Region in the health and bioscience sector.

Description	Without employees	Total with employees	1-4	5-9	10-19	20-49	50-99	100-199	200-499	500 +
Total	34,517	14,731	8,308	2,865	1,763	1,176	372	148	71	28
Unclassified	4,509	1,054	914	95	27	12	4	2	0	0
Total – Health and Bioscience	6,610	3,512	2,306	578	338	204	55	13	14	4

Industry Overview (NAICS)

The North American Industry Classification System (NAICS) is an industry classification system developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, it is designed to provide common definitions of the industrial structure

of the three countries and a common statistical framework to facilitate the analysis of the three economies. NAICS is based on supply-side or production-oriented principles, to ensure that industrial data, classified to NAICS, are suitable for the analysis of production-related issues such as industrial performance.

NAICS is a comprehensive system encompassing all economic activities. It has a hierarchical structure and is

composed of sectors (two-digit codes), subsectors (three-digit codes), industry groups (four-digit codes), and industries (five-digit codes). At the highest level, it divides the economy into 20 sectors. At lower levels, it further distinguishes the different economic activities in which businesses are engaged. The table below represents the top three industries in the health and bioscience sector.

NAICS Code	Description	Jobs in Durham Region (POW)	Durham Region Residents Employed (POR)	Total - Class of Worker	Employee	Self-Employed #2	Self-Employed	Median Wages and Salaries (POR)	Average Wages and Salaries (POR)	Median Wages and Salaries (POW)	Average Wages and Salaries (POW)
541	Professional, scientific and technical services	10,445	19,015	20,745	16,085	4,660	4,625	\$48,484	\$57,933	\$43,298	\$54,246
621	Ambulatory health care services	7,280	8,940	9,990	8,625	1,370	1,360	\$34,838	\$41,518	\$35,135	\$47,764
622	Hospitals	5,405	9,785	9,955	9,895	65	65	\$57,660	\$60,966	\$57,414	\$61,241

Definition of Terms

Within this document data related to the industry is classified within two categories:

Place of Work (POW) and Place of Residence (POR).

Place of Work – is defined as individuals employed within Durham Region.

Place of Residence – is defined as Individuals who reside within Durham Region.