

Canadian Technological Disasters' Atlas

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Major accidents that are caused by social, organizational, technical, and operational errors and frequently occur at major hazard installation are known as technological disasters. They bring major crisis, threaten the viability of a technological system, cause massive losses of life and property, and endanger the health and safety of employees. Businesses and industries are usually the prim locations in which these events occur and will receive the most sever impacts. According to the EM-DAT (Disaster and Emergency Database) number of technological disasters is rising worldwide and Canada is among the top 20 countries in this database. Canadian Disasters Database (CDD- developed by Public Safety and Emergency Preparedness Canada) has reported more than 179 technological disasters in Canada since 1900.

Technological disasters are classified into different types and sizes. In terms of types classifies technological disasters into industrial accidents, transportation accidents, fire, hazardous chemicals, and others. In terms of size, CDD includes technological events in which 10 or more people killed, 100 or more people affected/injured/evacuated or homeless, an appeal for national/international assistance has been made, has had a historical significance, and significant damage/interruption of normal processes has occurs such that the community affected cannot recover on its own.

Using a GIS database developed based on CDD and as part of a research project to study and analyze Canadian technological disasters, an Atlas were generated that includes several maps of technological disasters in Canada by types, location, size, date, time, impacts, and causes. This poster shows some these maps.