History of Occupational Health and Safety
Early History of OH&S

- Code of Hammurabi: Ruler of Babylonians - 2000 BC
  - Early attempt at Worker’s Compensation
  - Payment for damages for injured worker
- 1500 BC Pharaoh Ramses created industrial medical service for workers
- Romans created sewage systems, ventilation
Example of Hammurabi Laws (example, do not copy)

- If any one be too lazy to keep his dam in proper condition, and does not so keep it; if then the dam break and all the fields be flooded, then shall he in whose dam the break occurred be sold for money, and the money shall replace the corn which he has caused to be ruined.
Pre-Industrial Revolution

- 1500’s: mining concerns (eg: increased ventilation)
- 1700’s Ramazzini: founder of occupational and industrial medicine
  - He made the connection between jobs and why people were sick or injured
"Yeah, the job's got great benefits, but mainly I like the safe work environment."
Industrial Revolution

- started in the 1800’s in Britain
- changed the way the world produced goods
- children 8 years old worked in factories over 12 hours.
- no laws to support health and safety of workers so factory work was dangerous.
Industrial Revolution

- Steam power invented
- Machines instead of people
- New methods increased injury
- Specialization of work: boring so not paying attention
- Child labour increased (long hours, unhealthy and unsafe conditions).
Hazards during the Industrial Revolution

- Machinery was not always fenced off
- Workers were exposed to moving parts of machines
- Children moved between machines as they were small enough to fit
- Mortality (death) rates were high
- Exhaustion meant more accidents
Lack of Reform

- Reforms would cost owners money and give the workers more rights.
- They wanted to make as much profit as possible (purpose of manufacturing in a capitalist country).
- First Factory Act in 1819 limited working hours for children to 12 hours.
- Organized protest forced owners to correct some of the worst abuses.
Early Growth of Safety Movement

Between 1860’s and early 1900’s:

- Factory Inspection introduced
- Employer’s Liability Law
- Government department created for accident investigation
- Worker’s Compensation Laws passed
- National Safety Council created
Factory Inspection

- 1860’s factory inspections began
- restricted child labor and hours of work, clean conditions, safety devices and standards, minimum wages.
- Factory inspection includes examination of payrolls and employment records; issue fines for unsafe practices.
Role of Organized Labour

- Let public know about bad working conditions
- Fought for safer working conditions and compensation for injured workers
- Overturned anti-labour laws:
  - Fellow Servant Rule
  - Contributory Negligence
  - Assumption of Risk
Anti-labour Laws

- **Fellow Servant Rule**: Employers were not liable for workplace injuries that resulted from the negligence of other employees.

- **Contributory Negligence**: If the action of employees contributed to their own injuries, the employers weren’t responsible.

- **Assumption of risk**: Accept a job; Assume the risks
Role of Specific Health Problems

- Takes tragedies to improve workers’ safety and health
- Coal Mine Health and Safety Act created in 1969 after explosion killed 78 in Virginia
- Mercury poisoning stopped the use of the chemical in hat-making
- Fibers of asbestos causes lung cancer. Removing asbestos now specialized job.
Accident Prevention Program

- World War II: labour shortages, so couldn’t afford to lose workers in accidents.
- Development of 3 E’s of Safety
  - Enforcement workers obey rules and practices
  - Education: what, when, where, why, how of safety
  - Engineering: better products and process
Development of 3 E’s of Safety

- Enforcement: workers obey rules and practices
- Education: what, when, where, why, how of safety
- Engineering: better products and process
Further Growth of OH&S Awareness

- 1950’s, steady growth in safety awareness
- 1960s legislation promoting workplace safety passed.
- However, work injuries and death were still high.
- 1970 Occupational Safety and Health Act (OSHA)
- 1977 Federal Mine Safety Act
- 1978 Occupational Health and Safety Act

NL
Newfoundland

- Significant events changed face of OH&S in Newfoundland and Labrador
- St. Lawrence: industrial disease due to mining.
  - is about a fluorite mining operation. Surveys revealed a high increase of lung cancer in the mining population. After a series of strikes the mine shut down.
Baie Verte: open pit mining of asbestos

- Miners went on strike because of OH&S issues (unusual today to strike over safety issues)
- Concerns about the asbestos mine. There were twice as many deaths in miners and millers than with insulation and textile insulators due to asbestosis. Due to the asbestosis the mine shut down in 1981.
Ocean Ranger: Oil rig disaster

- involves a semi-submersible drilling unit that capsized and sank on the Grand Banks, losing its entire 84 man crew in a severe winter storm.

- This was because no one knew properly how to handle the unit.
Integrated Approach

Today, Health and Safety professionals work together to identify, predict, control, and correct health and safety problems.