



Explosion in gas bakery oven

An industrial bakery was baking cakes in a gas-fired rack oven. The oven door, weighing about 200 pounds, was blown off the oven. There was significant damage around the oven. Several workers had minor injuries such as ringing in their ears, but workers could have been seriously injured or even killed.

An investigation by the BC Safety Authority found the draft control had not been set up properly. In addition, the oven had not been adequately maintained and serviced. The oven's components (such as the burner mountings and heat exchanger) had overheated, cracked, and deteriorated. As a result, unburned gases were sucked into the baking chamber and caused an explosion.

Safe work practices for bakery employers:

- Contact the manufacturer of your equipment to obtain relevant inspection, service, and safety information.
- Establish a preventive maintenance program to have gas-fired ovens inspected and serviced at least every six months. Incorporate information from the manufacturer into your preventive maintenance program.
- If you have rack ovens, check that the oven draft has been set up in accordance with the manufacturer's specifications.
- Have inspections and servicing done by a qualified person, such as a certified gas fitter working for a licensed gas contractor.

Safe work practices for licensed gas contractors:

- Ensure that rack ovens are set up according to the manufacturer's draft requirements. Take into account ambient air pressures that may affect draft.
- Follow the manufacturer's inspection and maintenance checklist when doing inspections and preventive maintenance.

