



# ALASKA FACE Facts

Department of Health and Social Services  
Division of Public Health-Section of CHEMS  
Occupational Injury Prevention Program

## Welder Dies as a Result of a Fishing Vessel Explosion

On May 26, 1993, a 40-year-old, male welder (victim) was killed as a result of traumatic impact injuries during the explosion of a fishing vessel undergoing repairs. The victim was welding a broken light bar inside the 30-foot fishing skiff in front of the control console prior to the explosion. At the time of the explosion, the victim was standing on an aluminum deck plate near the welding job. Another worker was performing a grinding operation (in preparation for repairing a broken speedometer transducer cable mount) on the vessel's stern. Sparks from the grinder apparently entered an open bilge drain and ignited gasoline vapors in the bilge. The subsequent explosion moved forward, through the bilge to the marine toilet. From this point the blast forces traveled under the false deck and blew off the welded down deck plate where the victim was standing. The aluminum deck plate (4 foot X 4 foot, 10 inch X 1/4 inch) struck the victim, causing massive impact injuries. Co-workers immediately called 911 and provided initial first aid efforts. They applied pressure to the groin area to prevent bleeding and covered the victim with a blanket. One worker noted that the victim had stopped breathing, and another worker immediately applied CPR. The victim started breathing again and EMTs began to arrive at the scene. The victim died at the site shortly after emergency rescue personnel arrived.

Based on the findings of the epidemiologic investigation, to prevent similar occurrences employers should:

- ensure that hazard assessments are conducted by employees prior to beginning any job or work task, especially those operations in which overtly hazardous chemicals or physical energies are present (e.g., gasoline, solvents, high voltages).
- ensure that a safety program is conducted at the work site that includes a general hazard assessment, evaluation of work tasks to establish safe working procedures, regular safety training, and ongoing safety meetings. Even small work sites should have an individual designated for collateral safety duties.
- ensure that employees are knowledgeable about the hazards of gasoline and other chemicals used at the work site. When chemical spills occur procedures should be carried out to minimize the impact of explosive vapors, mists, aerosols, or dusts.
- ensure that a safe process for welding, grinding, or conducting other operations that produce ignition sources near vessel gasoline tanks or other flammable materials should be developed and immediately implemented.



**To view previous FACE reports please visit the Occupational Injury Prevention Program website:**

[http://www.hss.state.ak.us/dph/chems/occupation\\_injury](http://www.hss.state.ak.us/dph/chems/occupation_injury)

or

**Call or fax your request to:**

**907-269-5221 (phone) 907-269-5236 (fax)**

**To receive the latest FACE updates via the Internet please send an email to [djilly@health.state.ak.us](mailto:djilly@health.state.ak.us)**