

HAZARD



Alert

OYSTER BARGE CRANE BOOM FAILURE

HAZARD SUMMARY

In April 2016, an oyster barge operator was killed when the barge's crane boom fell and struck his head. While the crane was not in operation at the time of the incident, the operator happened to be positioned underneath it when the crane boom failed and spontaneously dropped.

CAUSE

While it was a fairly new crane, it had been built without an engineered design.

As a result:

- the rod of the cylinder was able to extend beyond the available space;
- the high pressure safety valve did not release the pressure once the rod stopped moving; and
- the design of the crane mast caused restricted movement of the cylinder.

These factors caused the piston rod to become overstressed, and it buckled and eventually fractured. In addition, the crane was positioned on the barge so that the operator needed to stand directly under the boom in order to operate the vessel's control panel.



Industry photo courtesy of John Sylvester

LEGISLATED REQUIREMENTS

- Section 12.(1)(b) of the Occupational Health & Safety Act states, "An employer shall ensure that any item, device, material, equipment or machinery provided for the use of workers at a workplace is properly maintained, and is properly equipped with the safety features or devices as recommended by the manufacturer or required by the regulations."

RECOMMENDED PRECAUTIONS

It is recommended that cranes used on oyster barges or similar marine vessels:

- be designed using an engineered design.
- be inspected and maintained on a regular basis to verify they are in safe working order.
- Be positioned and designed so as to minimize overhead hazards for workers.

FOR MORE INFORMATION

Visit the Workers Compensation Board website at www.wcb.pe.ca or contact the WCB Occupational Health & Safety Division at 902-368-5680 or 1-800-237-5049 (Toll free in Atlantic Canada).

**To report a serious workplace incident or hazard,
call the 24hr OHS Emergency Line at 902-628-7513**