



# SAFETY ALERT

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**SA-21—2008**

**REAFFIRMED 2014**

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## **HAZARDS OF COMPRESSED GAS CYLINDERS IN THE MAGNETIC RESONANCE IMAGING (MRI) ENVIRONMENT**

Compressed gas cylinders, cylinder valves, cylinder regulators, other assemblies included with cylinders, or any other equipment used to supply compressed gases shall not be present in the same room as an MRI device unless proven nonmagnetic and/or tested and deemed suitable for this environment.

Serious personal injury and property damage has resulted from the use of steel gas cylinders in close proximity to MRI devices. One incident resulted in the death of a six-year-old boy when a steel cylinder was brought into a room containing an operating MRI unit. The magnetic forces generated by the MRI drew the cylinder across the room, striking the boy in the head.

This is an area of serious concern to the Compressed Gas Association, Inc. and the focus of this safety alert is to notify personnel who handle, use, transport, or store compressed gas cylinders and equipment to this hazard.

If there are any questions as to whether a piece of equipment is suitable for use in the MRI environment, the equipment manufacturer or supplier should be contacted.

For additional information, see ASTM F2503, *Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment* [1].

### **Reference**

Unless otherwise specified, the latest edition shall apply.

[1] ASTM F2503, *Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment*, ASTM International, 100 Bar Harbor Dr., West Conshohocken, PA 19428. [www.astm.org](http://www.astm.org)

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Medical Equipment Committee

NOTE—No technical information has been changed from the 2008 edition. This reaffirmed edition may include minor editorial changes.

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