Standards Overview

Reducing Risk, Protecting People
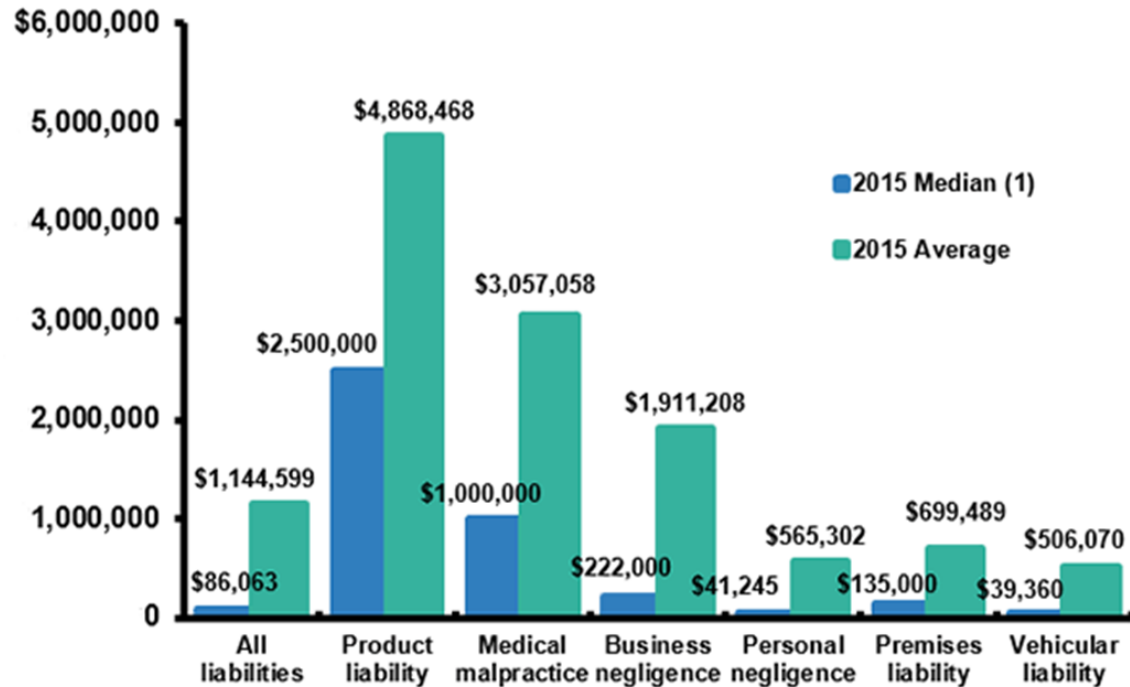
Product Liability Costs

Average product liability injury award: $4,868,468

Average defense costs: $1,037,580

The ANSI Z535 Standards

U.S. <u>voluntary</u> consensus standards that define the "state-of-the-art" in this country for their subjects

- **ANSI Z535.1-2017** Safety colors

- ANSI Z535.2-2011 (2017*) Safety signs for environments & facilities
- **ANSI Z535.3-2011 (2017*)** Safety symbol design and testing
- ANSI Z535.4-2011 **(2017*)** Product safety signs & labels
- **ANSI Z535.5-2011 (2017*)** Temporary safety tags and barricade tapes
- **ANSI Z535.6-2011 (2017*)** Product safety information in manuals

The ISO/TC 145 Standards

International voluntary consensus standards that define the "state-of-the-art" on a global basis

- **ISO 9186, Parts 1-3** Symbol testing (perception, comprehension, recognition)
- **ISO 3864-1** Safety signs (for the environment & facilities)
- **ISO 3864-2** Product safety labels
- **ISO 3864-3** Safety symbol design
- **ISO 3864-4** Safety colors
- **20+ other standards** related to graphical symbols and their use

Leading Product Liability Allegations

- "Failure to Warn"

- "Failure to Instruct"

- "Inadequate Warnings"

Rising Cases

"The increase in the number of warnings cases is a warning itself - a warning to manufacturers. Makers of products must respond to the increasing creativity of claimants' lawyers and the frequent sensitivity of courts to products claims based on the lack of an adequate warning."

\- Professor Marshall Shapo,

The Law of Products Liability (CCH, 4th edition, 2001 + supplements 2002-2006)
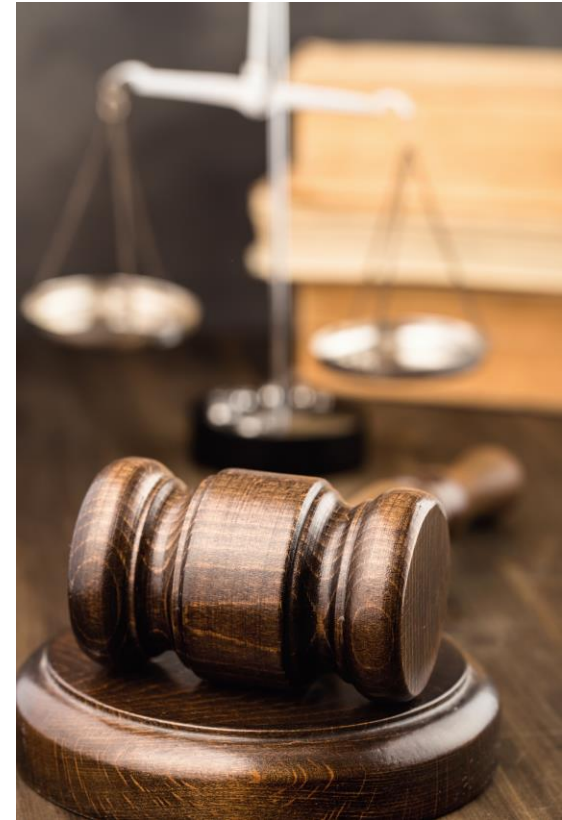
Key Liability Prevention Documents

- Product risk assessments

- Product safety signs & labels

- Product manuals & instructions
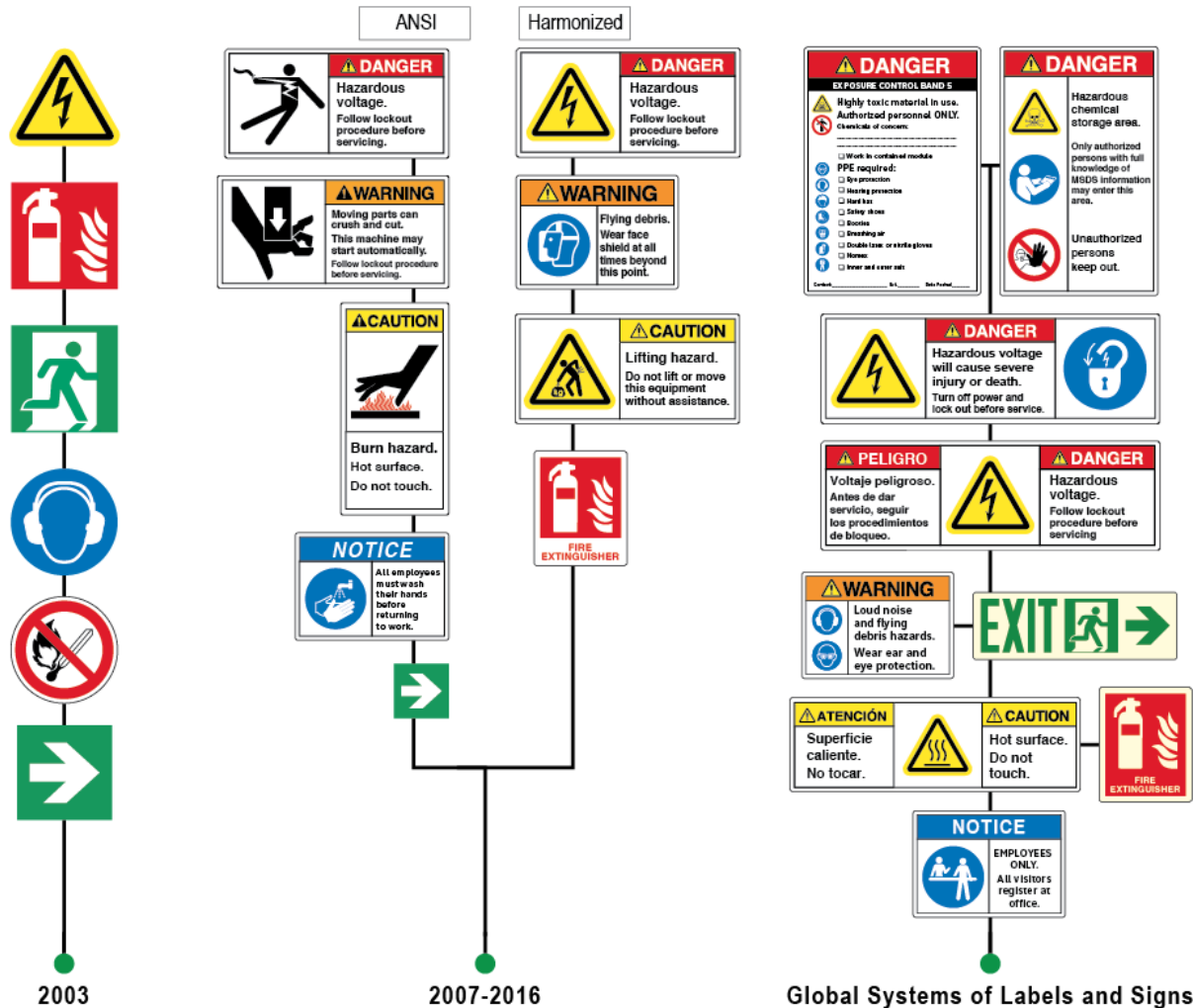
A Legal Perspective on Standards

- Manufacturers must meet or exceed <u>current</u> standards relevant to their products (ie., ANSI Z535.4-2011/2017)

- By publication date, standards provide courts with a defined "state-of-the-art" for a given timeframe

- Standards provide a "common ground" industry baseline of expected:

  - Function

  - Performance

  - Safety

U.S. Warnings Design Over the Past Century

1914
Universal Safety Standards

1941
ASA Z35.1 Standard

Today
ANSI/ISO Best Practice

U.S. Safety Signs and Labels are Going Global

2003

2007-2016

Global Systems of Labels and Signs

ANSI Z535: Content for Hazard Alerting Labels

- The degree of **seriousness**

- The **nature** of the hazard

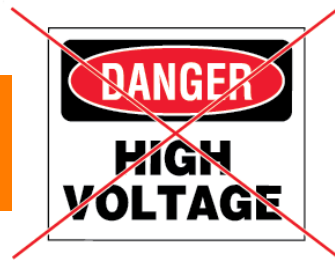- The **consequence** of interaction and

- How to **avoid** the hazard

Derived from:

- **Case law** for what constitutes an adequate warning

- **Human factors research** on how people comply with warnings
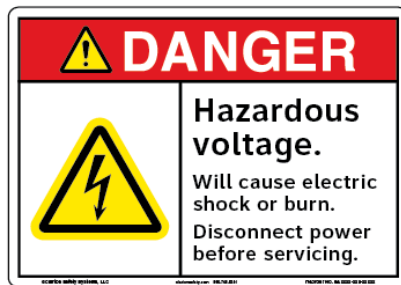
ANSI Z535 Accurately Communicates Risk
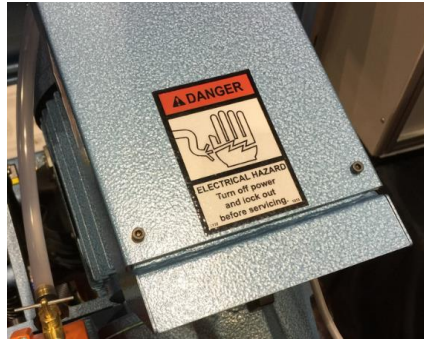
ASA Z535.1-1968
OSHA 1971

DANGER HIGH VOLTAGE

CAUTION EAR & EYE PROTECTION REQUIRED

DANGER HOT

ANSI Z535-2017

DANGER Hazardous voltage. Will cause electric shock or burn. Disconnect power before servicing.

WARNING Loud noise and flying debris hazards. Wear ear and eye protection.

CAUTION Burn hazard. Hot surfaces. Do not touch.

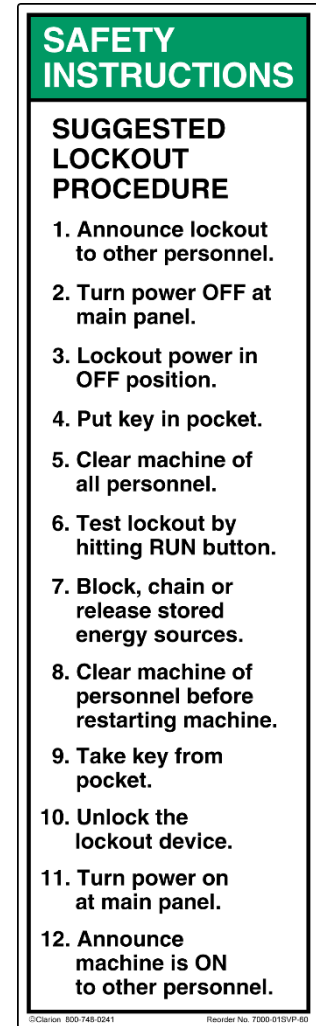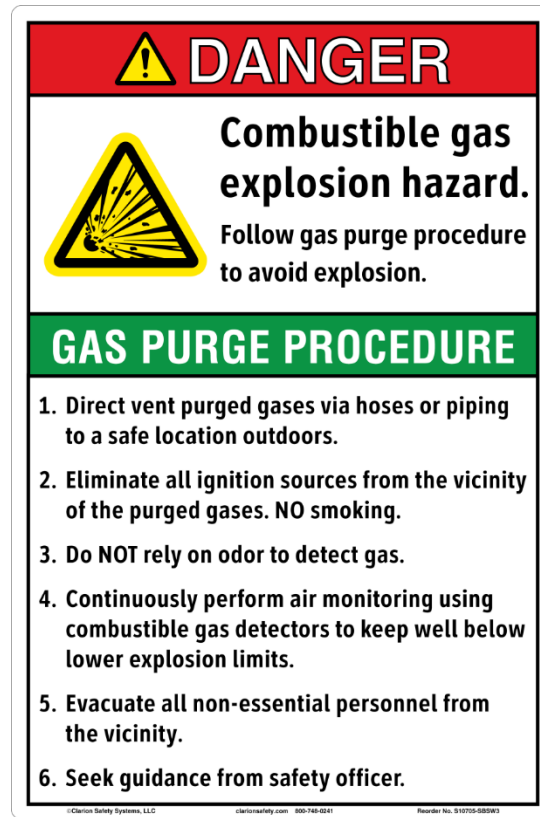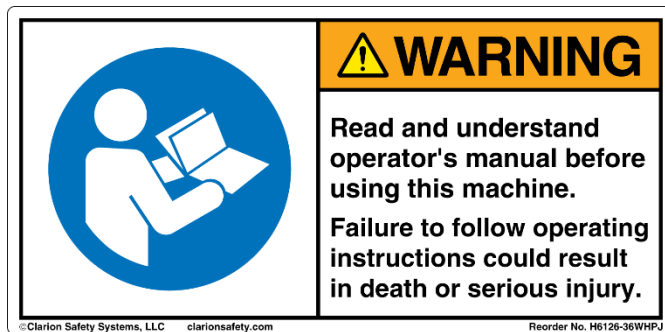# Product Safety Labeling Is Still Done Incorrectly

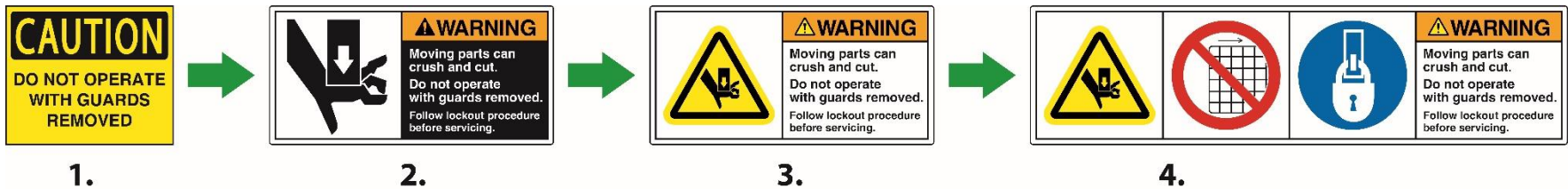# Many Warnings Do NOT Meet Current Standards

Handling Complexity

- "Refer to manual" labels

- Safety instruction portions added to labels

- Safety instruction labels

The Evolution of Safety Label Formats Continues

- Progression towards graphic-based safety label design

- 1941 to present

An Intelligent Decision-Making Process

- **Listen** to your customers and your engineers

- **Perform** routine risk assessments

- **Design** labels & signs to meet identified needs using current standards-based best practice principles

- **Choose** proper materials for expected durability

- **Revaluate** on a continuing basis to evolve with your industry and best practices

A New Level of Safety Communication

We'll help you and your clients stay up to date on meeting the latest regulations, codes and best practice standards for peace of mind and the most effective warnings possible.

We offer:

- Safety label, sign and tag assessments
- Safety and risk assessments