

**CHAPTER 1:**

1. Added a section about safety applying to all work sectors: manufacturing, retail, hospitality, healthcare, etc.
2. Added information on the Chemical Safety Board.
3. Added information on ergonomics as a trend in safety in the 1990s.
4. Added information on the West Fertilizer Company tragedy.
5. Added information on whether the accident rate has decreased because America has lost so many manufacturing jobs.

**CHAPTER 2:**

1. Moved “Heat Burns and Chemical Burns” sections to Chapter 15.
2. Moved “Repetitive Strain/Soft Tissue Injuries” section to Chapter 8.
3. Added a reference year to Figures 2–1, 2–2, and 2–3 so students know when the data was compiled.
4. Added a brief section on OSHA reports and logs here (and reference where they appear in detail in Chapter 5).
5. Converted Figure 2–4 into a chart.
6. Added a link to Bureau of Labor Statistics for more detailed information.

**CHAPTER 3:**

1. Bolded the sentence about Heinrich’s Theory being discounted by contemporary research for emphasis.
2. Added information on James Reason’s Swiss Cheese Model of accident causation.
3. Changed the section on “Drugs and Accident Causation” to “Individual Factors and Accident Causation” (includes drugs, depression, obesity, fatigue, personality, etc.).

**CHAPTER 4:**

1. Added information on the importance of the employee on safety teams and the employee’s role in safety.
2. Replaced Figures 4–9 and 4–10 with photographs.

**CHAPTER 5:**

1. Added information on indirect costs of OSHA fines (bad PR, loss of goodwill, corporate image, legal fees, paperwork, etc.).
2. Replaced Figure 5–4 with instructions for finding consultation services in your state.
3. Revised Figure 5–5 to include website addresses for each agency instead of street addresses.
4. Updated the OSHA standard subparts listed to ensure they are up to date.
5. Added information on where the fines go when OSHA collects them and discussion plus examples about the size of fines.

**CHAPTER 6:**

1. Replaced Figure 6–1 with a figure showing how students can access workers' compensation information for their states.
2. Added information on workers' compensation abuse (employees trying to take advantage of the system).
3. Replaced Figure 6–2 with a photograph.

**CHAPTER 7:**

1. Added information about why safety professionals who do accident reports need to be familiar with common causes of accidents (added to the "Common Causes of Accidents" section).
2. Added a section on "Who is responsible for reporting."
3. Added an accident investigation exercise to the end of the chapter.

**CHAPTER 8:**

1. Added information on ergonomic assessment tools such as NIOSH guidelines, RULA, and REBA.
2. Moved section on "lifting" from Chapter 11 to this chapter and expanded the content of the section.
3. Expanded the section on "Human Factors and Safety."
4. Added information on choosing which workstations/operations to evaluate for ergonomics to the section on "Worksite Analysis Program."
5. In the section titled "Training and Education," referred students to using recommended training materials from OSHA.
6. In the section on "Identifying Specific Ergonomic Problems" added material on "anthropometry" (body size).
7. In the section on "Helpful Assessment Tools: NIOSH, RULA, REBA, and HAL" (added information on analysis tools including RULA, REBA, HAL, and Strain Index).

**CHAPTER 9:**

1. Explained how the list of "common causes" can be used and how it relates to the rest of the chapter.
2. Added explanations for the strategies for dealing with stress.
3. Added physiological measures of stress (heart rate, pupil dilation, perspiration, etc.).
4. Added information about 24/7 use of technology and multitasking as causes of stress.
5. Added information about Employee Assistance Programs (EAPs) and company wellness programs for dealing with stress.

**CHAPTER 10:**

1. Added information about how a given type of machine guard is chosen.
2. Added information on advanced sensors and Bluetooth technology.

**CHAPTER 11:**

1. Dropped “Lifting” from the title to this chapter, and moved the section on lifting to Chapter 8.
2. Changed title to “Falling, Impact, Acceleration, and Vision Hazards with Appropriate PPE.”

**CHAPTER 12:**

1. Added information on Clo as a unit for measure for PPE temperature protection.
2. Added a section on OSHA recommendations and guidelines for temperature hazards.
3. Added a note to “Chemical Burns” explaining why it is in this chapter and not in the chapter on fire safety.

**CHAPTER 13:**

1. Added a note that refers students to Chapter 16 for coverage of “Confined Spaces.”
2. Added information on 29 CFR 1910 Subpart H (OSHA’s standards on pressure hazards).

**CHAPTER 14:**

1. Added information about power strips and daisy chains.
2. Made minor updates corrections to the text.

**CHAPTER 15:**

1. Added information about the number of fire extinguishers needed, how to choose the type, and where they should be located in a facility.
2. Moved sections on “Chemical Burns” from Chapter 2 to this chapter.
3. Added information to the “egress” section about lighting and signage.
4. Strengthened the material on “egress.”

**CHAPTER 16:**

1. Added information to describe TWA in more detail.
2. Removed the underline from the TWA side of the equation.

**CHAPTER 17:**

1. Expanded the explanations of risk reduction strategies.

**CHAPTER 18:**

1. Added a section about “earbuds” from handheld devices and potential hazards.
2. In the section on “Hazard Levels and Risks” added information from Chapter 16 on calculating TWA.
3. In the section on “Vibration Hazards” added information about tools insulation, tool mounting, and job rotation.

4. In the section on “Noise Control Strategies” added information on specific engineering controls (e.g., mufflers, insulation, wall panels, and sound absorption).
5. Added information about calculating Noise Reduction Rating (NRR) and how to evaluate PPE based on the NRR.
6. Moved the section on “Fit Testing” to earlier in the chapter.

#### **CHAPTER 19:**

1. Added a section on “active shooter” response.
2. Added a section on “reporting suspicious activities.”

## **ABOUT THE AUTHOR**

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David L. Goetsch is vice president Emeritus of Northwest Florida State College and professor of safety, quality, and management. In addition, Dr. Goetsch is president and CEO of the Institute for Organizational Excellence (IOE), a private consulting firm dedicated to the continual improvement of organizational competitiveness, safety, and quality. Dr. Goetsch is cofounder of The Quality Institute, a partnership of the University of West Florida, Northwest Florida State College, and the Okaloosa Economic Development Council and founder of the Leadership Institute of Northwest Florida State College and founder of the Leadership Institute of Northwest Florida State College.

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