

Introduction

Working as a safety officer can be an overwhelming job. (Who doesn't enjoy imagining worst-case scenarios as part of their job description?) Besides the dozens of things that you have to imagine possibly going wrong every day, there is the constant shifting of technology, standards, and best practices. By the time you get the requirements down in your procedural handbook, the Occupational Safety and Health Administration (OSHA) has a new clarifying letter out, and you're left starting the process over again.

Or, what if you're new to the position and still learning about where to find all this critical information? This is an even more daunting task. That's why we've assembled this handbook of resources, so that you'll know exactly where you can go for the latest in safety information.

WHO CAN USE THIS BOOK?

Technically speaking, anyone who wants to work safely and employ the highest quality personal protection equipment (PPE) at work will find this handbook useful. However, we've designed this handbook with some key people in mind:

<u>Occupational Health and Safety Technicians.</u> These are your safety professionals and safety consultants. This occupation collects data on work environments for analysis and implements safety programs designed to limit chemical, physical, biological, and ergonomic risks to workers.

Common Work Activities: Maintaining operational records, investigating safety of work environment, and advising others on health and safety issues.

<u>Occupational Health and Safety Specialists.</u> These are your EHS Managers, Safety Specialists, Industrial Hygienists, and Corporate Safety Officers. This occupation conducts safety inspections and enforces adherence to the regulations governing the health and safety of individuals in the workplace.

Common Work Activities: Conducting health or safety training programs, and inspecting work environments to ensure safety.

<u>Industrial Safety and Health Engineers.</u> These are your safety managers and safety health engineers. This occupation plans, implements, and coordinates safety programs, requiring application of engineering principles and technology.

Common Work Activities: Inspecting facilities or sites to determine if they meet specifications or standards and to update technical knowledge.



What's in This Handbook

Just click on a link and go directly to that page.

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Resources from OSHA

The Occupational Safety and Health Administration is the go-to source for health and safety guidelines in the United States. This is true not just in the metalworking field, but across all industries.



OSHA Page: Are you looking for safety guidelines and materials, but not sure exactly where to find them? Start here. The "Search" function can help direct you to the particular site you need.



OSHA Training: Free safety and health training. Enough said.



OSHA Library: This page includes not only an explanation of training requirements, it also has a broad library of training resources available, including videos and interactive presentations.







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The desire for safety stands against every great and noble enterprise.

- Tacitus





Resources from OSHA

OSHA PPE Guide:

Without being industry-specific, this guide covers the basics of PPE and how to select the right equipment for the hazards you face.



Hazard Assessment Forms:

If you're doing a hazard assessment for the first time and your business doesn't have a good form or template, don't panic! Here are some excellent examples, which you can modify to suit your needs.

- PPE Hazard Assessment and Certification
- OSHA Job Hazard Analysis PDF
- PPE Hazard Assessment Certificate Instructions

Job Hazard Analysis:

Hazard analysis is a major component of any safety officer's work. A job hazard analysis (JHA) is a technique that centers on job tasks as a way to recognize hazards before they occur. It focuses on the relationship between the worker, the task, the tools, and the work environment.

Supervisors can use the findings of a JHA to reduce and prevent hazards in the workplaces. This is likely to result in fewer worker injuries and illnesses, more effective work methods, reduced workers' compensation claims, and increased worker efficiency.

Essentially, this document provides an excellent overview of how to go about tackling this kind of analysis.





Resources from OSHA

OSHA Small Business Resources:

Only have a handful of employees? Your safety program implementation will probably look different from the same process at a larger corporation. OSHA has assembled resources related to safety in small businesses in one convenient location.



Click the image to access OSHA's Small Business Handbook.

OSHA by Industry or Topic: Filter OSHA's content by industry or topic.

INDUSTRIES				
CONSTRUCTION	METAL FABRICATION	MINING	PRIMARY METALS	
Construction Info	Metal Fabrication Info	Mining Info	Primary Metals Info	
Concrete	Fabricated Structural Metal	Coal Mining	Aluminum Production	
	Forcing and Stamping	Metal & Iron Ore Mining	Foundries	
	Machine Shops	Quarrying	Iron & Steel Mills	
	Sheet Metal		Steel Product	
		••	Manufacturing	



Resources from MCR Safety

As a leading manufacturer and provider of personal protective equipment for more than 45 years, we have taken it upon ourselves to provide excellent educational resources that are accessible to everyone. This is part of our vision of ensuring that everybody has both the knowledge and gear needed in order to be safe on the job.

Dedicated Industry Pages / Hazard Focused

MCR Safety's dedicated industry pages highlight useful injury information and point you in the right direction of which PPE is needed for specific industry hazards.



For over 40 years, MCR Safety has protected workers across many industries.





INDUSTRY / < GO BACK

Industry

MCR Safety is an industry leader in PPE ranging from gloves, glasses, and garments. We protect people from numerous workplace hazards. You can find MCR Safety gear in almost all major U.S. industries. Let us help you find the gear you need.

Construction

Metal Fabrication

Mining

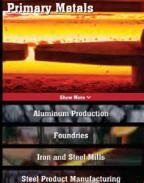
Primary Metals







Quarrying



We plan to equip safety managers and users with over 90 dedicated pages over the next two to three years.

Machine Shops

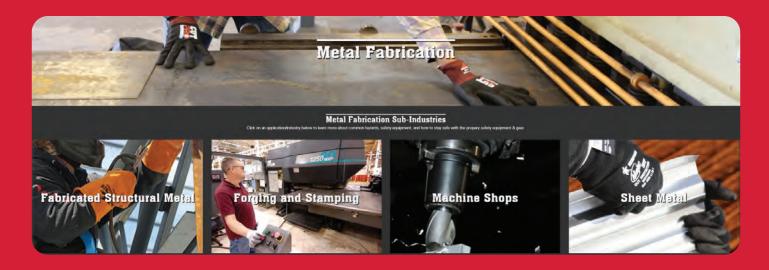
Sheet Metal



Resources from MCR Safety

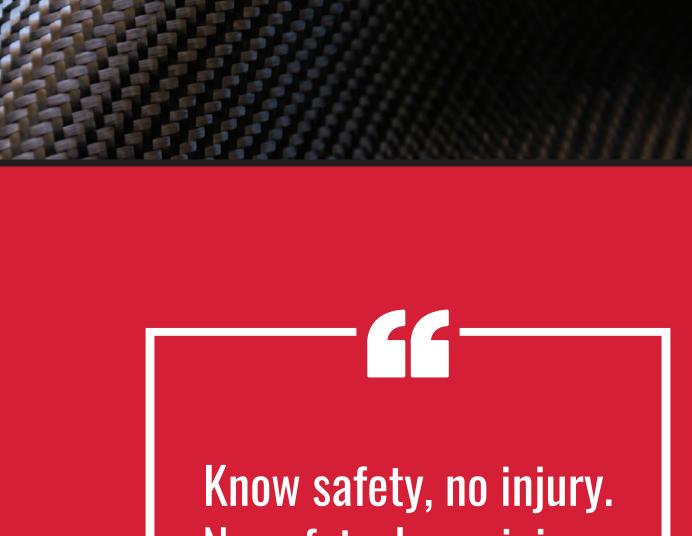
Metal Fabrication Example

Metal Fabrication. This is a solid overview of safety concerns across the industry, including hazards such as hand and arm injuries, chemical and thermal burns, cuts, and pinch points.



- Forging and Stamping. With so much equipment that can easily crush or amputate, those who are bending, punching, and shearing metal have special safety needs.
- Machine Shops. Machine shops are as varied as the work they do, but they all come with significant hazards. Whether using the equipment directly, transporting materials, or maintaining the environment, everyone who works in a machine shop needs to understand the correct procedures and wear appropriate PPE.
- <u>Sheet Metal.</u> Working with sheet metal often means sharp or ragged edges on materials that are awkward in shape and large in size. Good cut and abrasion protection is essential.
- <u>Fabricated Structural Metal.</u> This industry includes some of the most hazardous jobs, including welders, cutters, and brazers. Welding in particular is a common cause of injuries and should be treated with particular care.





No safety, know injury.

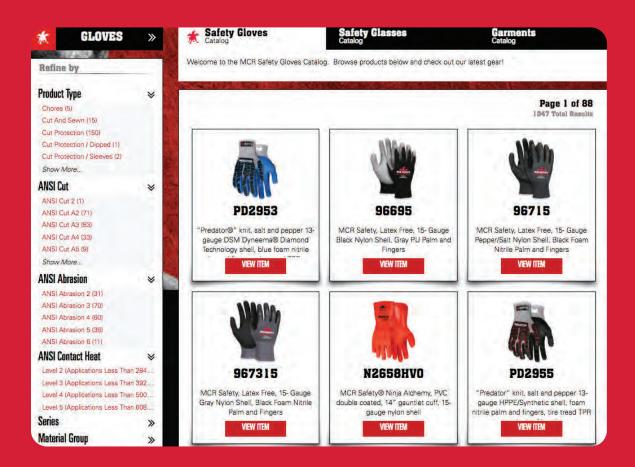


MCR Safety's Online Catalog / Search Engine

MCR Safety's website allows a user to refine multiple PPE categories across 5,000 skus.

Glove Catalog

Want to know what has high cut and which options are made with leather? Make your choice and you'll see all the options available.

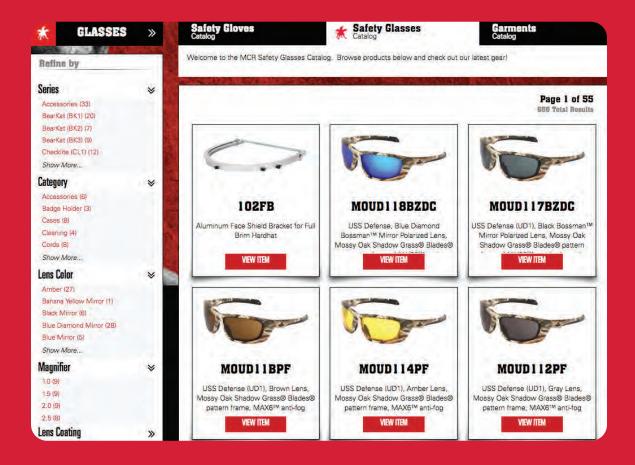




MCR Safety's Online Catalog / Search Engine

Eyewear Catalog

Looking for polarized lenses and extreme anti-fog protection? We've got you covered. Just pick both features on the side filter and we will show you the exact eyewear styles that meet your criteria. Search multiple variations and features with our online filter.

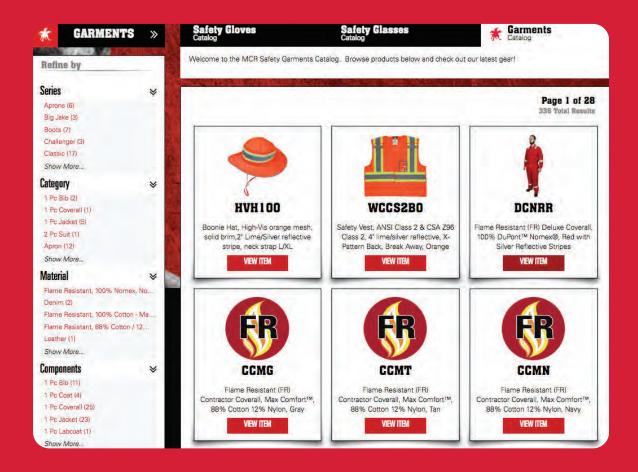




MCR Safety's Online Catalog / Search Engine

Garment Catalog

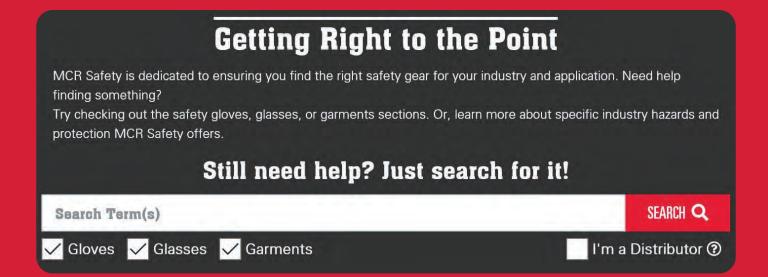
Looking for Class 2 Vests and with fivepockets? We've got those. Just pick both features on the side filter and you will see the styles that match your search criteria. Search many variations and features with our online filter.





MCR Safety's Online Catalog / Search Engine

Do you prefer getting right to the point when you need information? We figured you did. Just enter what you need and we will show you what we've got.



MCR Safety's full online catalog download







More MCR Safety Online Tools

Chemical Permeation Database

MCR Safety's Glove Permeation Guide will help you determine the proper glove to use when handling chemicals.

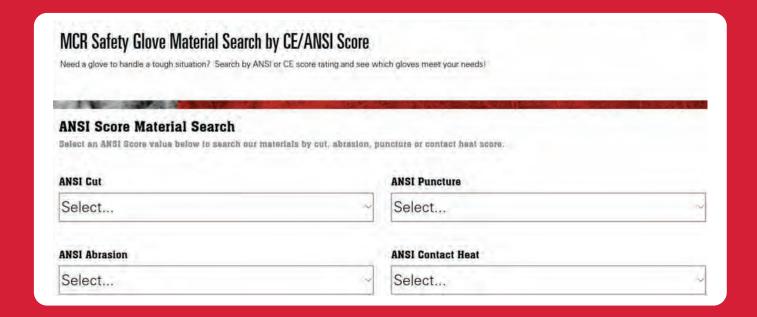
Pocket Guide to Chemical Hazards

Not exactly sure what that chemical is or how it should be treated? This guide has you covered.



Search by CE/ANSI Score

Need a glove to handle a tough situation? Search by ANSI or CE score rating and see which gloves meet your needs!

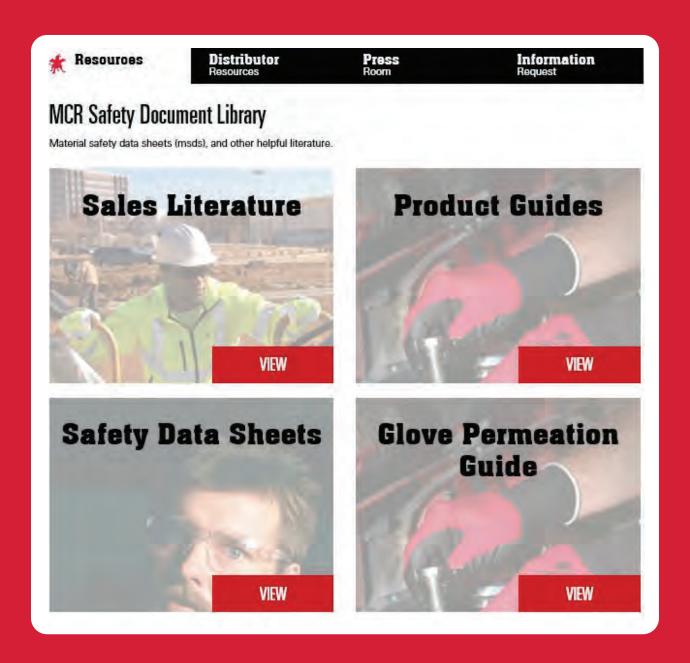




More MCR Safety Online Tools

Document Library:

Provides access to safety data sheets and other helpful literature.





Online MCR Safety Digital Safety Content

Geared at Helping You Choose the Right PPE

How to Choose the Right Gloves

Picking the right gloves for a given job isn't as simple as just looking at a chart. This educational blog walks you through some of the major considerations that factor in when selecting the right glove for any given job. In five easy steps, you will be one step closer to a safer work environment.

1) Assess the Application

Assess the application being performed by workers, which includes material being handled. Within the Manufacturing industry, there are literally endless applications workers perform: Automotive Assembly, Glass Handling, Sheet Metal Handling, Material Handling, Small Part Handling such as handling Nuts/Bolts, Steel/Metal Rolling, Wiring, and Heavy Material Fabrication.



We have only covered a handful of the applications workers perform. The key principle here is to recognize that every job

is different and will most likely require a different glove. There isn't a one-all glove that your entire company can wear.

Glove Materials

Do you know what your gloves are made of?
Do you know what that means? This is an overview
of the most common types of glove materials available
and the types of work and hazards for which
they're typically used.

An Overview of the Main Types of Glove Materials

Posted by Anthony Webb on Nov 7, 2017 8:30:00 AM



We literally have over 1,000 different gloves utilizing a multitude of different materials. Protecting today's modern day employee from all the potential workplace hazards that exist requires a wide assortment of options. So asking us which glove materials makes up the majority of our gloves opens up a lengthy discussion. Put it this way, we list over 40+ materials available under the MCR Safety website—glove section making up these 1,000 plus gloves.

A Guide to Grip

Unless you're a physicist, grip is a surprisingly complex topic. What gives one glove good grip in a particular set of circumstances doesn't necessarily transfer over to different environmental conditions. This chart provides a basic overview of the gripping properties of various glove coating and types.





MCR Safety's Dedicated Protection Pages

Cut Protection

An introduction to cut protection and related ANSI ratings.

Click on the colored bar and see all MCR Safety solutions for each ANSI cut level

Extreme Cut Hazards A9: 6,000+ grams to cut

Very High Cut Hazards A8: 5,000 to 5,999 grams to cut

High Cut Hazards

A7: 4,000 to 4,999 grams to cut

Impact Protection

An overview of the development of crush and impact protection in gloves throughout the years.

WE'VE PARTNERED WITH D30® TO CREATE A NEW PERFORMANCE LEVEL

IMPACT PROTECTION / < GO BACK

Impact Protection

Up until around 2008, options for back-of-hand protection were limited. Yes, knights during the dark ages protected their back-of-hand with steel armor. However, in the modern world, we no longer require protection from slashing swords. Our modern knights though, known as industrial workers, do require back-of-hand protection from everyday work hazards.



MCR Safety's Dedicated Protection Pages

Eye Protection

Even if you're familiar with PPE in general, eyewear has very specific requirements and necessitates additional thought.

Different Lens Options







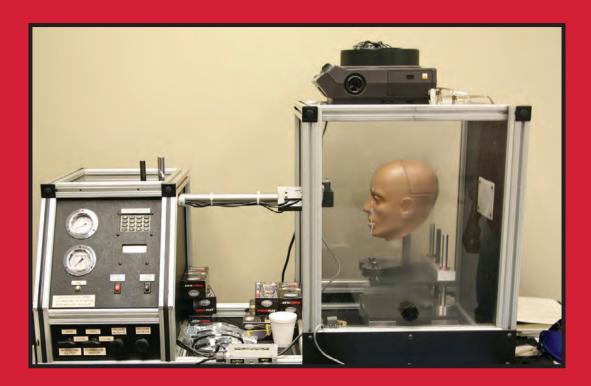


MCR Safety's ITC Lab

MCR Safety's ITC Lab

Would you like to know how the gloves you are currently using actually perform? MCR Safety takes pride in being one of the few testing laboratories in the world. MCR Safety's Innovations Technology Center Laboratory (ITC Lab) is accredited to the ISO/IEC 17025:2005 standard, the single most important standard for testing laboratories around the world. Laboratories that are accredited to this international standard have demonstrated they are technically competent and able to produce precise and accurate test data. Our accredited scope includes: ANSI/ISEA 105-2016 coated/uncoated abrasion testing, puncture testing, and cut testing.

5 6		RESISTANCE
ypel	Cut Level Rating	Weight (grams) needed to cut through material with 20mm of blade travel
MCR	A1	≥ 200
	A2	≥ 500
	A3	≥ 1000
	A4	≥ 1500
	A5	≥ 2200
	A6	≥ 3000
NNSI/ISEA 105 (2016)	A7	≥ 4000
	A8	≥ 5000
	A9	≥ 6000



To check out our ITC lab video, just click the image.



What is ANSI?

What is ANSI?

We talked a lot about ANSI in our last section. While ANSI is a well-known name in safety ratings, its role in the development and publicizing of those standards is frequently misunderstood.













Smart PPE and Professional On-Site Evaluations

Today's technology goes beyond materials and structures. MCR Safety's Smart PPE, powered with Corvex Technology, integrates NFC tags and sensors directly into PPE, providing immediate notification to environmental hazards such as cut, chemical, and cold. We highlight all you need to know in our most recent blog on wearable technologies:



360° Protection Program

The MCR Safety 360° Protection Program is designed to perform a complete assessment and review of your current safety gear performance. This service will provide an emphasis on direct and indirect cost savings, productivity, and risk reduction for now and in the future.



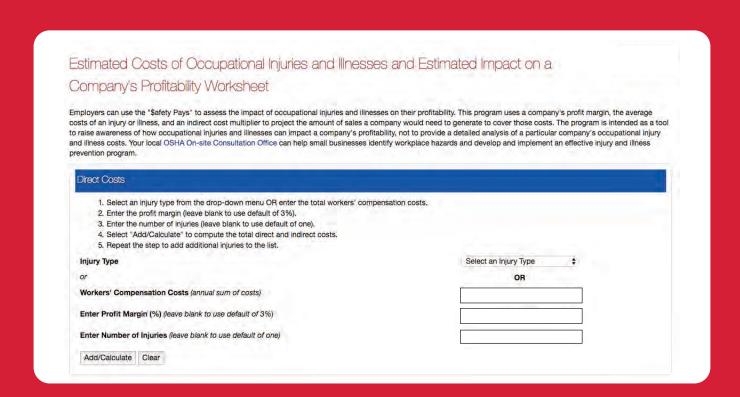
The program uses a comprehensive five-step process of evaluation, measurement, analysis, execution, and protection to ensure that your workplace is protected from every angle.



OSHA'S Safety Pays Tool

OSHA Cost Tracker will help you calculate the price of safety. Safety should always be in reach, not something that is only available to the largest and wealthiest companies. OSHA's cost tracker will help you determine the cost of implementing the right safety practices and equipment, as well as the savings achieved by maintaining a safe environment.

Employers use Safety Pays to assess the impact of occupational injuries, specifically on profitability.





Workers' Compensation

Are you unsure if the investment into quality PPE is worth the additional cost? Check out our blog about what happens if someone gets injured on the job and some related workers' compensation information.



blog.mcrsafety.com/end-users/workers-compensation-ppe-and-the-bottom-line





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Safety doesn't come with luck. It has to be prepared.





Additional Online Safety Resources

The internet contains a wealth of resources regarding health and safety that no health and safety officer should have to go without. Here are some of the best sites to review.

The National Institute for Occupational Safety and Health

Want to know the latest data and research about workplace safety and health? Operating under the Centers for Disease Control, NIOSH is the first place you should look.



Injuries, Illnesses, and Fatalities

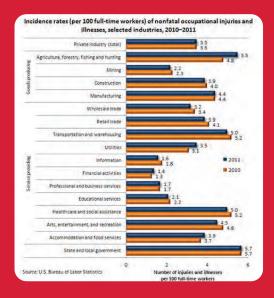
The Bureau of Labor Statistics collects data about occupational injuries and illnesses and makes them searchable by industry, circumstances, and worker characteristics. This is a fantastic resource if you're assembling materials on the importance of workplace safety measures.

Top Safety Resources Online

Looking for LinkedIn groups, YouTube channels, online forums, or other sources of community and information?

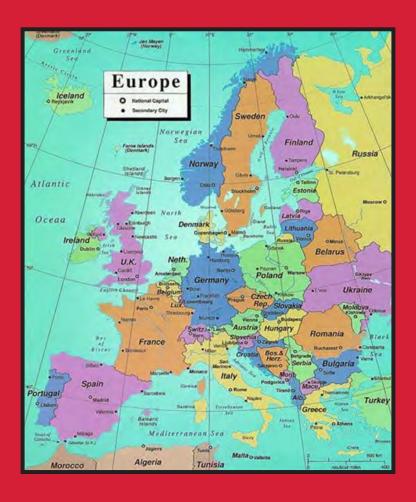
There are limitless resources collected here.







Other Top Online Safety Resources



• www.osha.europa.eu/en

This is the European Union information agency for occupational safety and health.

• www.environmentalleader.com/

This site provides news and best practices for Commercial and Industrial Environmental Professionals.

www.safety.blr.com/timesavers/

Safety regulations, time savers, training (in Spanish), webinars and many other resources are available here.



University Occupational Safety Information



Top 20 Best Occupational Safety Degree Programs



University of Iowa's Occupational Safety Resources



Top Safety Certifications

These certifications provide the qualification every safety professional needs. In addition, there is a wealth of information on each website.



Advanced Health and Safety Certification

Certified Safety and Health Manager (CSHM) Certificate, etc.

Certified Safety Practitioner (CSP) Certificate

COSS® Programs

Etraining

Health and Safety Level 1, 2, and 3 certification

IOSH Managing Safety Certificate

Loss Prevention Certification

NEBOSH Construction Certificate

NEBOSH Diploma

NEBOSH International General Certificate (IGC)

NEBOSH National Certificate

NEBOSH Oil and Gas Certificate

OHSAS 18001/ISO 45001 Occupational Health and Safety Lead Auditors Certification.

OSHA 10-Hour Training Courses

OSHA 30-Hour Training Courses

University of Alabama

www.nsc.org/safety-training/workplace /advanced-safety-certificate

www.ishm.org/about-cshm/

www.bcsp.org/CSP

www.coss.net/

www.etraintoday.com/

www.clariongr.com/hse-level-1-2-3-certification/

www.iosh.co.uk/Training/IOSH-training-courses/Managing-Safely.aspx

www.losspreventionmedia.com/insider/professional-development /the-critical-role-lp-certification-plays-in-the-future-of-retail/

www.astutis.com/nebosh_construction.html

www.astutis.com/nebosh_diploma.html

www.britsafe.org/products /nebosh-international-certificate-in-occupational-health-and-safety/

www.astutis.com/nebosh_certificate.html

www.sheilds.org/nebosh-oil-gas-certificate/

www.bsigroup.com/en-US/OHSAS-18001-Occupational-Health-and-Safety /iso-45001-training-courses/

www.oshaeducationcenter.com/osha-10-hour-training.aspx

www.oshaeducationcenter.com/osha-30-hour-training.aspx

www.alabamasafestate.ua.edu /education-training/health_safety_management_certificate.php



Leading Safety Magazines

The American Society of Safety Professionals

Even if you're not a member, the ASSP has some fantastic resources available.



Industrial Safety & Hygiene News

Another excellent news source for keeping up with what's happening now in the world of industrial safety.



EHS Today

The latest headlines in emergency management, health, and safety news, all at your fingertips.



Safety + Health

This is the official magazine of the National Council Congress and Expo.



Occupational Health & Safety

Occupational Health & Safety has been an industry leader for over 86 years.







Safety starts with me.





Conclusion

Safety is a big job, and a stressful one, but it shouldn't feel impossible. Resources like these put the power of safety entirely in your hands. Looking for more information about how to keep your workplace safe?



Get in touch with the experts at MCR Safety today.

