UNDERSTANDING THE HAZCOM FINAL RULE

COURSE OUTLINE

- **The Occupational Safety and Health Administration (OSHA) first established the Hazard Communication Standard in 1983.**
  - But even though the Standard helped improve the safety of workers who handle hazardous materials, it wasn't perfect.

- **At first, not all workers who handle HAZMATs were covered by the Standard.**
  - There were confusing rules and unclear definitions as well.

- **As a result, OSHA updated the Standard over several years to…**
  - Include all workers who could encounter hazardous materials in their workplace.
  - Make its requirements as clear as possible.

- **In a major update that occurred in 2012, OSHA revised the Standard to align with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals, ("GHS").**

- **Incorporating the Globally Harmonized System into the HAZCOM Standard helped to…**
  - Make the information and communication about hazardous materials in the Standard more consistent with regulations in other parts of the world.
  - Make it easier for materials to be classified and communicated to all workers, wherever they are located.

- **Then, over forty years after issuing the original Hazard Communication Standard, in 2024 OSHA released another update to the Standard called the "Final Rule".**

- **This update gives workers the "right to understand" more about the hazardous materials in their facility and how to work with them safely, by…**
  - Clarifying some issues in the Standard that had caused confusion.
  - Accounting for changes in the chemical industry such as newly discovered hazards and recently developed technology.
  - Providing workers with better protection.

- **Specifically, the "Final Rule" addresses…**
  - Hazard Classification.
  - Safety Data Sheets.
  - Container labels.

- **When you're handling HAZMATs, you need to be able to quickly get information about the material that you're working with.**
  - So everyone in your facility needs to know about the updates in the "Final Rule" and how they impact the way workers receive this information.

- **Just knowing that a material is hazardous isn't enough to keep yourself safe when you're working with it.**
  - You need to know exactly what the material's hazards are, how to work with it safely, and how you should respond in an emergency involving the material.

- **To make sure this information is as easy to understand as possible, the Hazard Communication Standard divides chemical hazards into three classes…**
  - Health hazards.
  - Physical hazards.
  - Environmental hazards.

- **Each of these classes also has "subdivisions", based on how hazardous the material is and the "hazard statements" that have been assigned to it such as the substance's…**
  - Flammability.
  - Toxicity.
  - Danger to the environment.

- **The hazards are then further broken down based on their severity and assigned a "category number".**
  - This indicates how dangerous they are.

- **There are many things to evaluate during the classification process.**
  - So OSHA tells manufacturers what they should consider when they're studying these materials and their hazards.

- **In the "Final Rule", OSHA states that manufacturers have to consider a material's "normal conditions of use" and "foreseeable emergencies" when they are classifying it.**
  - That way, when you're handling materials, you will be able to understand the full scope of their hazards.

- **"Normal condition of use" is how someone is expected to use, store and dispose of a product, based on the information and instructions they are given.**
  - For example, an "epoxy syringe" has two chemicals in separate, adjoining tubes.
  - When it is used, the two chemicals are mixed.
  - This is considered its "normal condition of use".

- **So any hazards that result from the chemicals mixing together must be considered when manufacturers are classifying the product.**
  - Even though the hazards might not exist when the syringe isn't "in use" and the chemicals are separated.

- **But OSHA didn't just update how to evaluate hazardous materials.**
  - They also updated what various materials can be classified as.

- **In the "Final Rule" they added a new physical hazard class called "Desensitized Explosives", as well as several subcategories.**
  - OSHA defines "Desensitized Explosives" as "Chemicals that are treated so that they are stabilized, or their explosive properties are reduced or suppressed".

- **While these chemicals are stabilized, they can still be dangerous if the stabilizer is removed during its normal use or storage.**

- **So instead of the explosive bomb pictogram that is used to identify explosives, the "Desensitized Explosives" class has a "flame" pictogram.**
  - It also has its own unique "hazard statement", "precautionary statement", and "signal word".

- **The Final Rule also created new numerical subcategories of the "Flammable Gases" class based on how dangerous they are.**

- **To do this, in the "Final Rule" OSHA divided the already-existing Category 1 of the "Flammable Gases" class into two subcategories…**
  - 1A, for the most hazardous gases.
  - 1B, for lesser hazardous gases.

- **It also specified that "pyrophoric gases" as well as "chemically unstable gases" belong in Category 1A.**

- **Lastly, OSHA expanded the "Aerosols" class to include a new "Nonflammable Aerosols" subclass.**
  - This helps differentiate between the degree of hazards different types of aerosols have.

- **Understanding how these categories are organized is key to your understanding of the materials that you're handling.**
  - Which helps to keep everyone in your work environment safe.

- **Safety Data Sheets ("SDSs), provide important information about the hazardous materials that you handle in your workplace.**

- **They will tell you a material's…**
  - Name.
  - Quantities of its ingredients.
  - Manufacturer.
  - Hazards.
  - The precautions you should take when you're working with it.

- **An SDS is especially useful in an emergency.**
  - If you or a coworker spills a material or are otherwise exposed to it, the SDS will also tell you how to mitigate the situation.

- **SDS's are typically very accurate sources of information.**
  - But some manufacturers want to avoid listing the exact quantities of ingredients in the material, so they can protect their "trade secrets".

- **So OSHA now allows manufacturers to provide a "prescriptive range" for the quantities of the ingredients that are trade secrets.**
  - This helps companies protect their product while still making sure workers are getting the information that they need to work with it safely.

- **OSHA helps them with this by providing a list of ranges they can use, such as…**
  - 0.1%-1%
  - 5%-10%
  - 30%-60%
  - 80%-100%
  - As well as narrower ranges that OSHA has developed.

- **Manufacturers can also use their own ranges, as long as they are narrower than those on OSHA's list.**

- **Another thing the "Final Rule" does is to give employers the latitude to store Safety Data Sheets in a way that covers groups of hazardous chemicals that are used in a work area or a "process".**

- **Prior to the Final Rule, OSHA required companies to address hazardous chemicals individually.**
  - So you couldn't "consolidate" groups of chemicals that were used in a work area or together in a process onto a single SDS.

- **Since SDS's had to be stored alphabetically, this could make it cumbersome to determine all of the hazards a work area or process actually contained.**
  - Under the Final Rule OSHA remains firm in its requirement that information be provided about the hazards associated with each individual chemical in a facility.
  - But they now allow SDS's to be stored together, in groups covering work areas or processes, for easy access.

- **Finally, to make sure that everyone has access to the SDS's for the materials that they work with, OSHA is also clear that they should always be stored where they are available to all workers.**
  - So if you don't know where to find them, ask your supervisor or manager.

- **One of the most important sources of information about hazardous materials are their container labels.**
  - They can give you immediate access to information about what you're handling.

- **OSHA uses the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).**
  - This system makes sure that container labels have high-quality and consistent information.

- **Under the GHS system, a container label typically includes…**
  - A product identifier.
  - A signal word.
  - Precautionary statements.
  - Hazard statements.
  - Pictograms.
  - The supplier's name and contact information.

- **This information is important.**
  - But some manufacturers have struggled to fit it all on "small containers" that are 100ml or less.

- **Originally, OSHA allowed manufacturers to use "pull-out", "fold-back" and "tag" labels in these situations.**
  - But in some cases even these don't fit on a very small container.

- **OSHA's "Final Rule" states that if a manufacturer can demonstrate that they cannot use a label that contains all of the required information due to the size of a product that they produce, they may provide less information than is normally required on the container label.**

- **If these manufacturers have any containers that are 3ml or less, they don't have to have a label on the container at all.**
  - But any container without a full label must have all the required information on its box or other outer package.
  - This guarantees that you will still get the information you need about the materials you're working with.

- **Sometimes, manufacturers will discover that a material has new hazards after it has shipped out.**
  - In this case they are not responsible for the labels of chemicals that are already in the stream of commerce.
  - But OSHA does require manufacturers to revise their labels for all future shipments of that product within six months.

- **If employers are made aware of these new hazards, they must share that information with workers who are handling the chemicals.**
  - Even if the information is not yet included on the label.

- **The original Standard also didn't address what companies should do when they learn about new hazards after chemicals have been packed and labeled, but not yet shipped.**
  - OSHA deals with this situation in the "Final Rule" as well.
  - It states that manufacturers do not have to re-label the packages themselves, but they do have to send updated labels along with them.

- **The "Final Rule" also specifies that the labels for bulk shipments can either be on the immediate container or can be transmitted with…**
  - Shipping papers.
  - Bills of lading.
  - Electronic means.

- **This way, the required information is immediately available in print to workers who are receiving the shipment.**

- **Another update in the "Final Rule" is that manufacturers can, but are not required to, use Department of Transportation (DOT) and GHS pictograms on the same container.**
  - In the past, OSHA worried that the combination of these pictograms would be confusing.
  - But they eventually decided that since all of the labels provide valuable hazard information, this was really not a problem… even if some of the information is redundant.

- **"Precautionary statements" are a particularly important element of a container label.**
  - In the "Final Rule", OSHA reduced redundancies and streamlined these statements so workers can more easily understand them.

- **There are two parts to a "precautionary statement"…**
  - The "if" statement.
  - The "medical response".

- **For example, a statement that starts with "If inhaled or on skin…" would be the "if" statement.**
  - The "medical response" that follows would read "… immediately call a poison control center".

- **But if there are too many precautionary statements on one label, the words can appear "jumbled" and hard to understand.**
  - Especially if you're trying to read them in an emergency.

- **To address this issue, the "Final Rule" uses a system of "combination" and "prioritization" for precautionary statements.**
  - So for hazards that have similar routes of exposure or health advisories, labels only need one precautionary statement.
- **For example, if both inhaling and touching a substance triggered the same "seek medical advice" instruction, OSHA now allows the precautionary statements to be combined to…**
  - "If inhaled or on the skin, seek medical advice."

- **Similarly, if a hazard has two classifications that involve the same route of entry but different medical responses, the manufacturer could combine them and use the more urgent medical statement.**
  - OSHA uses the example of a hazard that is classified as both a "Skin Corrosion Category 1C" and "Acute Toxicity Category 3 for Dermal" material.
  - Because they both have the same route of entry (skin contact) their medical statements can be combined.

- **In this case, "Acute Toxicity Category 3 for Dermal" could prompt a "Call a doctor" medical response.**
  - But a "Skin Corrosion Category 1C" classification would require a more urgent response such as, "Immediately call a Poison Control Center or a doctor".
  - So using the more urgent language, the precautionary statement could read… "In case of skin contact, immediately call a Poison Control Center or doctor".

- **This allows manufacturers to make their precautionary statements more concise and easier to read, which can save a lot of time, sometimes even lives, in an emergency.**

*** * * SUMMARY * * ***

- **The original HAZCOM standard was established in 1983. In 2024, OSHA made the latest update to it, called the "Final Rule".**

- **The "Final Rule" primarily addresses hazard classification, Safety Data Sheets and container labels.**

- **OSHA now requires that a product or substance's "normal conditions of use" be considered when identifying its hazards.**

- **The "Final Rule" introduced new hazard classes and categories, including "desensitized explosives", "flammable gases" subcategories and a "non-flammable aerosols" category.**

- **Manufacturers can now use "prescriptive ranges" of a chemical's ingredients on its SDS to protect their trade secrets.**

- **When containers are 100 ml or less, they can have shortened labels, while containers that are 3ml or less don't require a label at all... but in both cases all of the required information must still be on their outer packages.**

- **The "Final Rule" reduces any redundancies in precautionary statements so workers can read them more easily... and faster.**

- **Understanding the HAZCOM Standard's "Final Rule" will help you to know what information manufacturers must give you about the hazardous materials that they produce... and how you can use it to keep yourself and your coworkers safe... every day!**