PRESENTER'S GUIDE

"EYE SAFETY"

Part of the General Safety Series

Quality Safety and Health Products, for Today... and Tomorrow

OUTLINE OF MAJOR PROGRAM POINTS

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The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- **An estimated 24 million eye injuries occur in the U.S. each year.**
  - About 2,000 of them will occur today, and every day thereafter, while people are at work.
  - All too many of them will cause the victim to lose some or all of their eyesight.

- **Eye hazards can be encountered anywhere you work… whether at a place like a factory, laboratory, warehouse, office or hospital.**
  - You need to be able to recognize these hazards, and know what to do to avoid them.

- **In some ways, your eyes are just like any other part of your body.**
  - When you work them hard, they get tired, sore and more difficult to use.
  - All of these conditions are symptoms of a common type of eye trouble, known as "eyestrain".

- **Tired eyes can feel dry or itchy, and result in occasional blurry or double vision.**
  - Eyestrain can also lead to headaches and dizziness.

- **While there's nothing "new" about tired eyes, the computers, smart phones, and tablets that we use so much today do cause additional strain.**
  - They force our eye muscles to work harder, focusing on images that are smaller and much closer to us.

- **We also blink our eyes less… as little as 10 or 12 times a minute, instead of the normal rate of 15… when we focus on the screens of computers and other devices.**
    - Blinking spreads tears over the surface of our eyes to moisten and lubricate them.
    - When we do less blinking, our eyes tend to dry out and start feeling scratchy.

- **The same thing can happen when we stare at anything for a long time, such as e-mails, manuals or the fine adjustments on machine tools or other equipment.**
    - You can help to prevent this type of eyestrain by blinking your eyes on purpose to moisten them.
    - You can also soothe them by using eyedrops such as artificial tears now and then.

- **You should take regular, short breaks from the tasks that you normally perform to "limber up" your eyes as well.**
    - Give their muscles a "stretch" by focusing them for at least 20 seconds on something that's 20 feet or more away from you.
    - Exercise them by looking up, down, left and right without moving your head.

- **The amount of light you have in your work area can also affect your eyes:**
    - When there's too little light, your eyes must strain to see.
    - Too much light stresses them as well, and may make you do a lot of "squinting" to protect them.
    - Uneven lighting tires them out, by forcing them to frequently adapt to different light levels.

- **If you think the lighting in your work area is causing you eyestrain, speak to your supervisor.**

- **The symptoms of eyestrain are usually temporary, but if they persist there could be a problem with your eyes themselves.**
    - You may need glasses, or an updated prescription.
    - Make a habit of seeing your eye care professional regularly.

- **Safety experts estimate that 90% of the eye injuries that occur on the job could be prevented just by wearing eye protection.**

- **To choose the eye protection that is appropriate for the work you do, you need to:**
  - Understand the eye hazards you may encounter.
  - Know what types of personal protective equipment (PPE) will shield you from those hazards most effectively.

- **To protect your eyes from flying and falling objects, safety glasses are a simple but effective solution.**
  - They can also help protect you from any eye hazards that you might bump into.

- **Safety glasses use shatter-resistant lenses that are made of made of glass, plastic or polycarbonate.**

- **In windy and dusty conditions, or when you're performing tasks such as hammering, grinding, sawing or sanding, small particles of dust, sand, sawdust, bits of metal or other substances can fly toward your eyes from almost any direction.**
  - While safety glasses with side shields can give you some protection, goggles provide the most complete protection from these particles.
  - Their eyecups fit snugly over the eye area.

- **Goggles can be rigid or flexible, with clear or shaded lenses, and can allow for ventilation in different ways.**

- **When flying particles create hazards to the face as well as the eyes, face shields give more complete coverage than glasses or goggles.**
  - But face shields alone cannot provide sufficient eye protection.
  - Safety glasses or goggles should always be worn under them.

- **Splashes of gasoline, solvents, cleaners or other liquids can cause severe burns or other damage if they get into your eyes.**

- **Goggles and face shields should be worn to protect your eyes and face when you're working with these substances.**
    - Liquids can get through the ventilation holes of regular goggles.
    - Be sure to wear ones that use indirect ventilation that will keep liquids out.

- **Remember, you can't work safely if you can't see clearly, so keep the lenses of your protective eyewear clean.**
    - Replace scratched, broken or badly fitting eyewear immediately.

- **If you have questions about what type of eye protection is appropriate for the work you do, talk to your supervisor.**

- **If you've ever had a sunburn, you already know what the ultraviolet radiation in sunlight can do to your skin.**

- **Ultraviolet (known as "UV") and infrared radiation (known as "IR") can both be hazardous to your eyes as well.**
    - When radiation heats and burns the surface of your eyes, the result can be a painful temporary condition called "conjunctivitis".
    - When IR and UV get inside the eyeball, they can burn nerve tissue, and that damage can be permanent.

- **When you're working in the sun, remember to shield your eyes with sunglasses or tinted goggles.**
    - Each pair is marked with the amount of UV protection that it gives you.
    - Make sure to wear the eyewear that provides 100% protection.

- **Remember that "polarized" lenses only filter out glare.**
    - They will not protect you from UV radiation.

- **The torch flames and electrical arcs that are used in welding give off significant amounts of glare, UV and IR.**
    - These hazards can affect not only the welders themselves but anyone working nearby as well.

- **Welders can protect themselves by wearing welding goggles or helmets that have special filters to shield their eyes from this dangerous "radiant energy".**
    - Some filters made of shaded glass provide a fixed level of protection.
    - Others are designed to darken automatically as they are exposed to IR or UV radiation.

- **All lenses use standard "filter numbers" to indicate how much protection they can give you.**
    - The higher the number, the greater the protection.

- **Different types of welding emits different levels of glare and radiation.**
    - Goggles that are appropriate for oxy-fuel welding cannot shield you from the higher levels of ultraviolet and infrared radiation that are produced by electrical welding.

- **To protect people who are working nearby from ultraviolet and infrared radiation, welders are required to set up welding screens before they start their work.**
    - In some cases, they may provide bystanders with tinted goggles or other protection as well.

  The tightly-focused beams created by lasers can also be hazardous to your eyes.
    - If you work with or around lasers you should always wear eye protection that uses the appropriate type of radiation filter.
    - Never look directly into a laser's beam.

- **Even when we do our best to protect our eyes, accidents can still happen., and it pays to know the right ways to handle them.**
    - If you get something in your eye, don't rub it!
    - That could scratch the surface or embed the particle in it.
    - Blink instead, so your tears can help flush out whatever's gotten in there.
    - Eye drops or artificial tears can help wash it away as well.

- **If the particle is hard to find and remove, use a mirror to help.**
  - Gently brush the foreign object out with a damp cotton ball.
  - Be careful not to touch to eyeball, so you don't scratch it.

- **Scratches in the surface of the eyes are usually caused by foreign objects that hit or brush against them.**
  - These injuries often feel like there's a particle of something in there that you can't get out.

- **If redness, pain or that "foreign body" sensation continue in the injured eye after flushing and resting it, you should see your doctor.**

- **If anything becomes embedded in your eye, do not attempt to remove it. Instead:**
  - Cover the eye with a paper cup or eye shield.
  - Bandage it loosely.
  - Get medical assistance immediately.

- **If chemicals splash into your eyes:**
  - Go immediately to the nearest water source.
  - Flood the injured eye carefully while holding the eyelid open.
  - Continue rinsing for at least 15 minutes.

- **Workplaces where chemicals are commonly used are normally equipped with eye wash stations.**
  - Be sure you know where these units are in your facility.

- **The effects of radiation burns on your eyes usually do not show up until six to twelve hours after exposure. The symptoms can include:**
  - Blurred vision.
  - A painful feeling of "sand in the eye".
  - Sensitivity to light.

- **If you think your eyes have been exposed to radiation, keep them closed to "rest" them, and call your doctor.**
  - Mild radiation burns usually heal in a few days' time.

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- **To avoid eyestrain, remember to blink your eyes regularly to moisten and lubricate them.**
- **Take breaks now and then to rest your eyes and limber up their muscles.**
- **Most eye injuries can be prevented by wearing the appropriate eye protection.**
- **Safety glasses and goggles can shield your eyes from flying particles and splashing chemicals.**
- **Faceshields provide extra coverage, but should always be worn with glasses or goggles as well.**
- **The filter lenses in sunglasses, goggles and welding helmets can help prevent your eyes from being burned by ultraviolet and infrared radiation.**
- **Take all eye injuries seriously. When in doubt, get medical assistance.**
- **Now that you understand the eye hazards that you can encounter, and know what to do to avoid them, you can go home seeing "clearly"… every day!**