

SAFETY ORIENTATION

COURSE OUTLINE

- **HAZWOPER's ultimate goal is keeping you safe, which is more than simply a matter of knowing how to do the right thing.**
 - Staying safe also depends on maintaining a "safety-first" attitude.
- **Every time that you enter a highly contaminated site, you need to think about the hazards you'll face.**
 - Objects you encounter could burn your skin on contact.
 - Breathing the air might permanently damage your lungs.
- **But you're a professional... and you've taken precautions.**
 - You're familiar with the substances onsite.
 - You've consulted the SDSs and the HAZMAT reference books.
 - You know what these chemicals react with, how to handle them... and what their medical effects are.
- **You're wearing the proper level of personal protective equipment (PPE).**
 - Your self-contained breathing apparatus (SCBA) is in perfect working condition, and has a full tank of oxygen.
 - You've thoroughly tested your radio, and you know the signals that you'll use to communicate with coworkers in the "hot zone."
 - You have the monitoring equipment you need to detect contaminants in the area.
- **You've been extremely thorough in your preparations, but there's one other thing that you should never overlook... what's going on between your ears.**
 - Developing the correct way of thinking is more important to staying safe than your PPE.
 - With right orientation, you'll be sure to get your job done properly... without exposing yourself to undue risk in the process.
- **Let's begin by looking at how bad mental habits form, and what their consequences can be.**
 - In every way, the one-hundredth time that you enter a hazardous area should be the same as the first.

- **Whenever you're in a contaminated area, you must be highly aware of your surroundings... and conscious of the many things that can spell danger.**
 - Above all, you must never become nonchalant.
 - Even a moment's inattention could have serious consequences.
- **No one should know this better than you, because you perform tasks that most people would be too frightened to do.**
 - Nevertheless, as you work around hazardous materials more and more, you may find them less and less intimidating.
 - This is inevitable.
 - Whenever you repeat a dangerous activity over and over again, it becomes less threatening.
- **While this can be a good thing, it also can lead to the formation of some unfortunate habits.**
 - For everyday examples of this, you don't have to look any farther than the nearest major highway.
- **Here, you'll find people so used to driving that they don't concentrate on the road anymore. Instead they:**
 - Talk on cell phones.
 - Fiddle with the radio.
 - Turn to talk to people in the back seat.
 - Discipline their children.
- **In short, they do any number of things that someone piloting a two-thousand pound vehicle shouldn't do.**
 - As a result, the inevitable occurs... they have accidents.
 - Their inattention results in crippling injuries or even deaths.
 - And in many cases, other drivers are the ones who suffer.
- **Something similar can happen to you, too.**
 - As you gain more experience in hazardous waste operations, some of the dangerous things that you do can begin to seem routine, even risk-free.
- **Keep in mind, though, that these hazards are just as perilous as they were the first time you encountered them.**
 - Your thinking may have changed, but the danger hasn't.

- **Becoming complacent about safety is one of the down sides to the learning process.**
 - It often results from being highly familiar with the task at hand.
- **Ironically, it is this familiarity that allows you to do a job well.**
 - When you practice anything for a long period of time... driving, playing a musical instrument, or working around hazardous materials... basic procedures become second nature.
 - You're no longer as aware of them when you do them.
 - If this didn't happen, any complex task would be a lot harder.
- **To put this in a HAZWOPER context, think of the hazardous materials that you frequently work with.**
 - These substances have strange names like "hydrogen sulfide" and "methyl mercaptan."
 - Often, they sound like something from a science-fiction movie.
 - When you first deal with these chemicals, they seem dangerous and exotic.
 - You may not be entirely comfortable around them, because you're unsure of how they'll react.
- **But, in time, you'll begin to work with these materials confidently.**
 - You learn how to handle them, and how they should be stored.
- **The secret to staying safe is to keep your familiarity with hazardous materials from making you complacent.**
 - The most direct way to attack a complacent attitude is through concentration... disciplining your thoughts, and willing yourself to focus on the job at hand.
 - There are many ways to do this, and the method that is most effective can be different for each person.
- **Some workers remind themselves of the health effects that hazardous chemicals can cause.**
 - This makes them determined not become victims of contamination.
- **Others concentrate on the fine points of proper work practices and PPE use.**
 - Being detail oriented makes them less likely to overlook safety procedures.

- **No matter what reminds you to stay safe... keep doing it!**
 - One unsafe moment can be fatal in the hazardous materials business.
- **We've talked a little bit about the perils of underestimating the power of hazardous materials, but overestimating your own capabilities is no less dangerous.**
 - This is why it's important to recognize your physical limitations.
- **Whenever you're in a hazardous area, keep in mind that you don't have "super powers," even when you're wearing personal protective equipment (PPE).**
 - On the contrary, since the PPE and other gear that you are carrying weighs about 50 pounds, you are clumsier and slower than you would normally be.
 - Because of this, you won't be as agile as you're used to.
 - It will take you longer to get away from danger spots than you might think.
- **In addition, when you wear a totally-encapsulating chemical-protective suit, you won't be able to hear or see what's around you as well as you normally would.**
 - The suit muffles sounds from "outside".
 - The headpiece blocks much of your peripheral vision.
- **To work safely, you need to mentally adjust to these constraints before going on-site.**
 - This will make you less likely to injure yourself by trying to do something that your PPE makes difficult... or impossible.
- **When working in a hazardous materials environment, it's also important to pace yourself.**
 - Take the time you need to be cautious.
 - Of course, staying safe in your PPE is not the only reason for this.
- **Rushing through jobs can cause two other major problems.**
 - First, the faster you do a job, the more likely you are to make mistakes.
 - To do good work, you must move at a deliberate pace, always checking the quality of what you're doing.
 - Performing tasks at high speed also often results in trying to do too many things at once.
 - Your mind can become overloaded, and you may miss glaring errors that you would otherwise have noticed.

- **The other problem with rushing through HAZMAT work involves your respiratory equipment.**
 - If you are in a site that requires the use of air-supplying respirators such as a self-contained breathing apparatus (SCBA) or supplied-air respirator (SAR), the more that you exert yourself, the more air you will consume... and the faster your air tank will run out.
 - Moving at a deliberate pace will let your air supply last longer than hurrying will.
- **Remember, the speed at which you work is often a function of your state of mind.**
 - If you are calm and focused on what you are doing, you will move accordingly.
 - If you are upset or angry, however, then you will often speed up unknowingly, reflecting this agitation.
- **This brings us to your "emotional" state.**
 - At first glance, nothing could seem more removed from HAZMAT operations.
 - After all, working with hazardous substances is a technical job.
 - What could be less technical than how you feel emotionally?
- **To understand why your emotional state is important, consider another driving analogy.**
 - One of the first things that instructors tell new drivers is that they should never express emotions behind the wheel.
 - No one wants to drive down a road where angry people are zipping by, challenging other motorists at high speed... or where "happy" drivers are drifting from lane to lane, without paying attention to what they are doing.
- **If expressing our emotions through driving is dangerous, so is letting our feelings get the best of us while we're on a HAZMAT site.**
 - All of us feel strong emotions at times, but they have to be kept under control in a contaminated area...because they can prevent you from concentrating on your job.
 - This sort of composure is not always easy to achieve.
 - Keep in mind, however, that the safety of many people could depend on it, including your own.

- **All of the following are crucial to working in HAZMAT operations:**
 - Staying focused on the task at hand.
 - Mentally adjusting to the limitations of your PPE.
 - Working at the right pace.
 - Controlling your emotions.
- **Each of these is an aspect of mental discipline.**
 - Without this, working around hazardous materials would be even harder than it already is.
- **However, discipline isn't everything. You also need knowledge. You must know about the chemicals that you work with.**
 - What their characteristics are.
 - What the chemicals react with.
 - What their health effects can be.
- **The only way to gain this familiarity is through study, and lots of it.**
 - When you go on-site, you must have all the information you need.
 - You should be able to recall it quickly and accurately.
- **Waste sites and emergency locations don't have libraries of HAZMAT information.**
 - So you must learn everything you need to know beforehand, and carry it with you in your head.
- **Places you can go for this information include:**
 - Textbooks.
 - Government regulations.
 - Training courses.
- **You should also review:**
 - Safety Data Sheets (SDSs) for chemicals you know are on-site.
 - Placards on vehicles.
 - Labels on containers.
 - Up-to-date editions of the "Emergency Response Guidebook".
 - Articles in journals and magazines specializing in HAZWOPER issues.
 - Your company's "emergency response" and "site safety and health plans," which detail procedures specific to your facility or worksite.

- **When you were in school, you may have occasionally avoided doing your homework.**
 - But when it comes to HAZWOPER activities you can't afford not to study, and absorb, this material.
 - If this means turning off the telephone and "holing up" in a quiet place, do it.
 - If anyone asks why you're being "antisocial, " explain that what you are doing requires a lot of concentration.
- **We all know that working with hazardous materials requires the use of specialized, accurate tools.**
 - The habits and practices we've been discussing are tools, too.
 - And they are no less important than your PPE or monitoring equipment.
 - In fact, without your mental tools, you won't be able to use your physical tools properly.

*** * *SUMMARY* * ***

- **Never become complacent when working in a HAZMAT area... keep concentrating on the job you're doing.**
- **Adjust your mind-set to the physical limitations you will face with your PPE... and the environment you're working in.**
- **Take your time. Rushing through jobs can lead to mistakes and injuries.**
- **Control your emotions, so you can focus on your work.**
- **Always "know your stuff" before you enter a contaminated area.**
 - Learn everything you can about the materials you work with... and make sure you remember it.
- **There is a saying that "chance favors the prepared mind." In your job, you will no doubt encounter problems that are the result of pure chance.**
- **But with mental discipline, and study, you can have that "prepared mind"... a mind that can handle anything that "chance," and hazardous materials, dish out!**