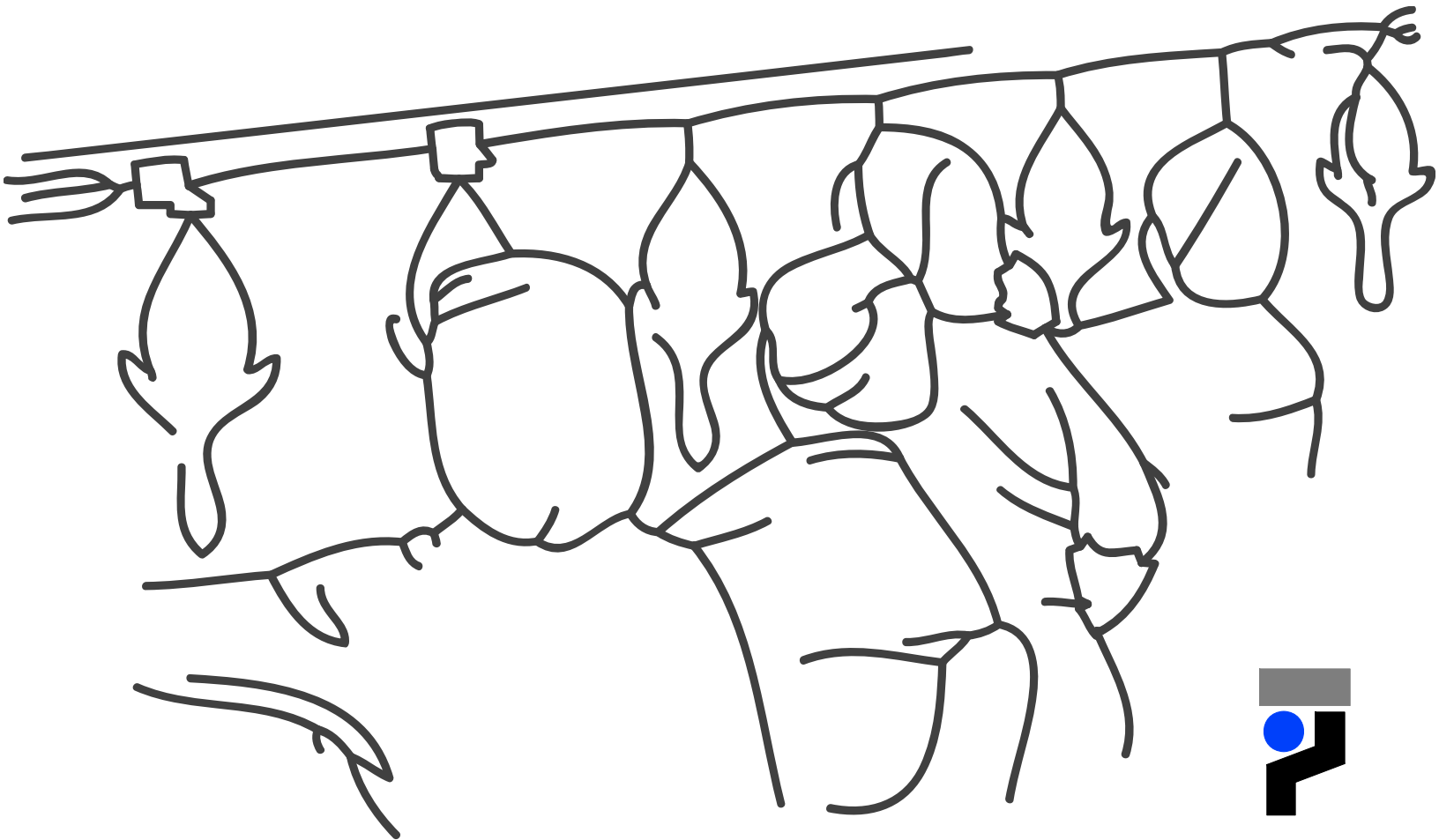


Safe and Secure

Training Series



**This material was produced under grant number SH-20835-10-60-F-37 from the
Occupational Safety and Health Administration, U.S. Department of Labor.**

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SAFE AND SECURE TRAINING SERIES

INTRODUCTION

The **SAFE AND SECURE Training Series** was created for English as well as non-English-speaking (Spanish/Creole), and limited English proficiency workers as well as workers with low-literacy skills. The target audience was workers employed in the poultry processing industry, a high-hazard industry. Although industry-specific terminology is used, it is presented in a context that should be understandable by the participant.

The series is about providing safety and security not only for one's self, but for their family and their community. It is about creating a 24/7 safety awareness model that reaches beyond the workplace into the community and home. Employers and employees have a mutual responsibility to see safety happen. Workers in the poultry industry have one of the most difficult and physically demanding jobs in food processing, therefore, the likelihood of injuries increases.

For this reason, it is critical that everyone give his or her time and attention to ensuring health and safety at all times. SAFE and SECURE is about shared ownership of responsibility. Everybody knows that reduction in injuries; accidents and occupational illnesses lead to increased productivity, reduction in costs and an increase in profits. It not only benefits the employer and industry, but the employee and community.

Because your company is committed to creating a culture of safety, any training you do will become a part of a larger plan for behavioral transformation. This will lead to organizational success, both for the employer and employee.

Currently in the SAFE and SECURE training series are the following modules:

- **Creating a Place Where Safety Happens**
- **Identifying Job Hazards**
- **Your Job Doesn't Have to Be a Pain: Avoiding Injuries Using Ergonomics**

TEACHING STRATEGIES USED

Goal Setting – Goal setting is one of the proven mechanisms for facilitating optimal learning. Goal setting directs attention. Begin each session by reminding participants of the overarching goal of creating a culture of safety by promoting an injury-free workplace. Then review the goals of each session.

Worked Examples minimize unproductive mental work. A worked example is a step-by-step demonstration of how to solve a problem or complete a task.

Problem-Based Learning is a type of collaborative learning in which a group of learners begin their learning with a problem discussion.

Elaboration on a problem is an effective means for facilitating the understanding of problem-relevant information and involves giving examples and making application. Elaborating on the topic by giving examples and discussing applications can help the learner retain the information and sustain learning, both of which will have an impact on a safe environment.

Job Aids help support external memory by directing, guiding work related activities and performance. Any time you can leave your participants with job aids, it is a plus.

Mnemonic is any learning technique that aids memory. Commonly encountered mnemonics are often verbal, such as a very short poem or a special word used to help a person remember something, particularly lists, but a mnemonic may instead be visual, kinesthetic or auditory. Mnemonics rely on associations between easy-to-remember constructs which can be related back to the data that is to be remembered.

Prior knowledge is an instructional strategy that allows for the establishment of new mental models and allows for the transference of new information.

RECOMMENDED MATERIALS

LCD Projector

Screen

Computer

Powerpoint Files

Flip Chart

Flip Chart paper

Handouts/Resource Sheets

- 12 Elements of Employee Engagement

- The GROW Model Resource Sheet

- Problems in Poultry

- Where to Look

- Body Mapping Activity

- Recommended Exercises

- Optional: ErgoAid

Markers

Module 1 – Creating a Place Where Safety Happens

Session 1: Defining SMART Conversations, and

Session 2: Creating SMART Conversations

Module 1 – Creating a Place Where Safety Happens

Creating a Place Where Safety Happens, consists of three sessions:

1. Defining SMART Conversations, and
2. Creating SMART Conversations

These sessions are for anyone in a place of leadership in the poultry industry. If you have anyone under your sphere of influence, you are a leader. This cornerstone module will create the framework for future training and help ensure effectiveness.

MODULE 1 OBJECTIVES

Participants will learn how to empower relationships and environments where both employer and employee can work together to help improve conditions in their workplace. They will learn how to decrease fear and anxiety on the job, and their confidence in their ability to do the job will increase resulting in reduced injuries and incidents.

Session 1: Defining SMART Conversations

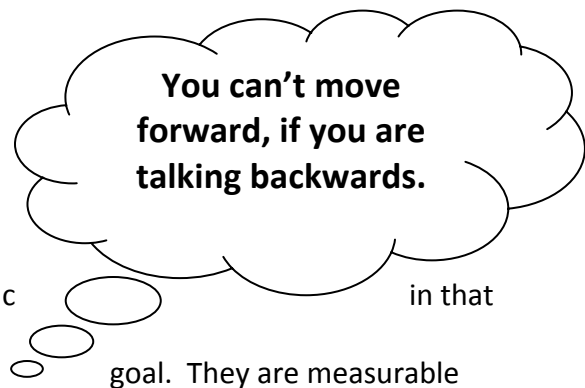
GOAL SETTING – As an opener, review the introduction with the participants.

Then take an informal poll to see if the group agrees that a decrease in fear and anxiety on the job would improve safety in the work area.

What is safety culture? Safety culture is the environment where the attitudes, behaviors and perceptions of all workers are reflected in the health and safety of the workplace. One way to measure or gauge those attitudes, behaviors and perceptions is by listening to the conversations that take place around you. Though certain behaviors, such as posting required safety information is definitely a part of safety culture, by itself, it does not indicate a high level of safety culture. The types of conversations that occur in a workplace where safety culture exists are SMART conversations. We hear a lot

about SMART goals – ones that are specific, measurable, achievable, realistic and time-bound. SMART conversations are similar.

Similarly, how you might ask? They are specific they focus on the desired outcome or safety



goal. They are measurable because they are quantifiable. Participants of SMART conversations leave the conversation feeling like the task is achievable. *"I can do this!"* Closely related to achievable is realistic. Is the request being made within the realm of possibility? Leaders have to be careful not to put demands on workers where the variables or processes that lead to a successful outcome are outside of their control. Lastly, when asking workers to partner in safety and health goals, it should always be accompanied

by a reasonable timeframe. **In summary, SMART conversations are defined as goal-oriented dialogue that motivates and guides the participants of that dialogue into a place of health and safety.**

The key to creating SMART conversations lies in a leader's ability to develop the skill set of (1) asking the right questions, (2) depositing the right feedback, as well as (3) listening and looking for the right cues. As skills are developed, SMART conversations begin to take place and powerful things happen. Soon, it becomes part of the culture.



Powerful questions open up an employee's ability to think. When communications are declarative and one-way it has the ability to shut down thinking. **When a person's thinking is not being activated and stimulated it limits or prohibits their ability**

to attend to the task at hand. A lack of attentiveness results in increased incidents and loss of profit.

CHECK FOR UNDERSTANDING

1. Which of the following is not an indicator of safety culture in the workplace?
 - a. Attitude
 - b. OSHA Posters**
 - c. Behaviors
 - d. Perceptions

2. What is a skill that is most important to have when measuring the effectiveness of the safety culture in your workplace?

ANSWER: Listening

3. SMART conversations that move employers and employees alike in a forward direction toward health and safety have what type of orientation?

ANSWER: Goal

4. Can you think of a situation where a worker was not motivated and misunderstood direction based on your conversation or dialogue? How could you change it to be more goal-oriented? Discussion.

You may be asking yourself does it really matter or is this just a bunch of hype. Wagner and Harter in *12: The Elements of Great Managing* wanted to answer that question for you so they conducted a Gallup poll of over ten million employees and managers about employee engagement to find out. **The answer:** Employees and workers need to know they are valued.

The results of their survey produced 12 elements needed for employee engagement.

1. I know what is expected of me at work.
2. I have the materials and equipment I need to do my work right.
3. At work, I have the opportunity to do what I do best every day.
4. In the last 7 days, I have received recognition or praise for doing good work.
5. My supervisor or someone at work seems to care about me as a person.
6. There is someone at work that encourages my development.
7. At work, my opinion seems to count.
8. The mission or purpose of my company makes me feel my job is important.
9. My associates or fellow employees are committed to doing quality work.
10. I have a best friend at work.
11. In the last 6 months, someone at work has talked to me about my progress.
12. This last year, I have had opportunities at work to learn and grow.

CHECK FOR UNDERSTANDING

A Likert scale is a tool used to survey a group’s level of agreement or disagreement. Using the Likert scale in Figure 1, rank your level of agreement with how well you engage in or model the findings in the Gallup Poll study. For example, 1-*Chicken is dead* would equate to STRONGLY DISAGREE, 2-DISAGREE, 3-NEUTRAL, 4-AGREE and finally 5-STRONGLY AGREE. Create some group discussion by reviewing each element and having participants rank themselves on a scale from 1 to 5. Refer to 12: The Elements of Great Managing Reference Sheet.

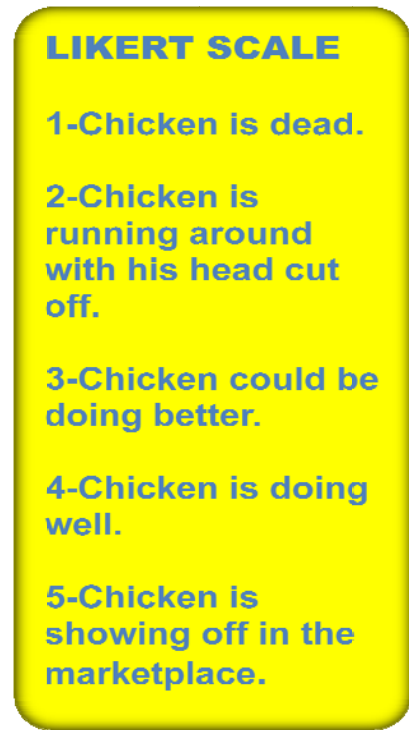


Figure 1. Likert Scale

Element	Rating	Element	Rating
1		7	
2		8	
3		9	
4		10	
5		11	
6		12	

Do you need more evidence? In a recent integrative review of safety research, safety culture was found to be an indicator of reduced injuries and illnesses in the workplace. It's clear. The human factors field dominates research on occupational safety. To help organizations identify job applicants who are likely to engage in safe and productive behaviors, Hogan Assessment System developed personality-based scales to predict safety-related behaviors. After many years working with companies, Hogan discovered a correlation between an employee's personality traits and their propensity to safety.

They found that conscientiousness and safety-related job outcomes indicated that individuals who are inattentive to detail, unreliable and have difficulty following rules are – as you would suspect - more likely to have accidents or injuries.

You may not be able to change another person's personality, but if you can identify traits that influence safety and work toward developing the SMART conversations and strategies that help to encourage and foster those traits, it serves to reason that it would have an impact. In their research, Hogan found that employees who possess a compliant and teachable spirit, exhibit confidence and stability and are aware of their surroundings are the same employees who exhibit safer behaviors.

Let's take a closer look at some of the traits.

Encouraging Compliance

Leadership is responsible for making employees feel comfortable sharing their thoughts about potentially serious matters with the assurance that they will be heard and a resolution found. Tolerating environments where workers are afraid to share can lead to increased injuries.

Building Confidence

One way to encourage compliance and reduce anxiety is by making a conscious effort to build confidence in others. Creating an environment where strength of character and human value is placed as a high priority builds confidence in workers. In turn, this confidence acts as a preventive measure against the pressures that arise from an anxiety-filled workplace that leads to careless mistakes.

Model Stability

Do employees and workers know what to expect from you when you come out on the floor? The ability to maintain emotional control while working is an indicator of a safe working environment. A person who easily loses their temper and flies off the handle is more likely to have an accident and cause an injury not only for themselves but by others as well. Leadership's role is to model emotional stability at all times.



Create Awareness

Finding innovative ways to create awareness in an environment where a worker is tasked with the responsibility of performing repetitive tasks for extended period of time is a challenging one. The ability to create awareness will aid employees in completing work more carefully, avoiding unnecessary risks.

Stay Teachable

People who know everything are hard to teach. Maintaining an open spirit that allows you to learn new things is critical for creating a safe environment. In addition, it allows you to hear and capture valuable information that may be shared by employees. If leaders are not careful they can slip into a closed mindset that prevents them from hearing and valuing what workers have to contribute. Remember, the worker is the one performing the job. Who better to have insight and give input?

CHECK FOR UNDERSTANDING

Which trait do you feel you most exemplify or model?

_____ Encourage Compliance

_____ Build Confidence

_____ Model Stability

_____ Create Awareness

_____ Stay Teachable

In which trait or area do you feel you have the most potential for growth?

_____ Encourage Compliance

_____ Build Confidence

_____ Model Stability

_____ Create Awareness

_____ Stay Teachable

Which trait, if successfully modeled and implemented, would bring the greatest benefit to your specific work area or situation?

_____ Encourage Compliance

_____ Build Confidence

_____ Model Stability

_____ Create Awareness

_____ Stay Teachable

Session 2: Creating SMART Conversations

By having SMART conversations, employers can begin to engage employees. Asking meaningful questions and engaging in powerful dialogue, will begin to build the skills and behaviors that lead to the safety culture. In Session 1 of this module, you learned about some of the traits that are indicators for safer behavior and how leadership and management need to learn ways and strategies for cultivating and encouraging the development of those traits in their workers. You also learned that SMART conversations are goal-directed – they lead participants in the direction of the goal of an injury-free workplace. SMART conversations begin with you, the leader. One proverb reads, “if you want a friend, you must first be a friend.” Similarly, if you want employees to respond positively and constructively, then you must first offer them something positively and constructively to which to respond.

In this session, we will look at some of the characteristics that identify a conversation as SMART. They include, but are not limited to, the following characteristics.

Position Yourself as a Coach

Positioning yourself as a coach requires that you transition from supervisor to advisor. Coaching helps others put together missing puzzle pieces. It helps move them forward, facilitating those “aha” moments. When we don’t take the time to lead and guide in this way and instead rattle off directives and quotas only, we miss the opportunity to help employees develop their character and competency. We rob them of the ability to come up with their own solution, connect their own dots. Coaching is

about giving people the privilege of their own insights; allowing them to go through their own processes.

Frame Safety Standards as Personal Learning Goals

By taking the safety standards and framing them as personal learning goals that are results-oriented and action-based, you not only enter into a relationship, but you begin to help build a sense of ownership in the other person. This shared sense of ownership fosters a spirit of collaboration resulting in all parties working together toward the common goal of an injury-free workplace.

Ensure the Conversation is Two-Way

A great leader knows not only how to lead, but how to follow. Being open and willing to listen to the ideas of others not only builds confidence in that person, but also allows the leader to possibly view a situation from a different perspective and see how their decisions affect others. Remember, before you can ask powerful questions, you first have to be able to listen. Feedback needs to be timely and specific. Start with positive comments such as, “Thank you for your contribution to the team.” It is important to note that regular feedback can pre-empt conflict.

Position the Other Person for Growth

By ensuring the conversation is two-way, you are now able to gather valuable information and in return provide instructional feedback that will position that other person for growth. Learning that is not interactive and that is only one-way means it stays on the surface. It is not absorbed and is easily lost. Facilitating learning through SMART conversations makes it personal and when it becomes personal, it becomes

connected.

CHECK FOR UNDERSTANDING

If you are in a group setting, you can provide participants with some scripted examples.

Listed below are some examples, you may think of others. After you have shared the examples, ask volunteers to share some of their own.

WORKED EXAMPLES –

“Winston, I like how you take it upon yourself to make sure that all the paperwork is in order; that tells me that you really care about the quality of work that you do. I am going to make sure others know about your excellent work ethic.”

“Billy, you seem to be a very conscientious worker. When you have time, I would like you to write down ways you would improve safety in your work area and get them to me.”

“Jose, others can’t help but notice your positive attitude toward your work. I want you to know that you are a great role model for your co-workers and I really do appreciate it.”

Creating and facilitating SMART conversations requires the use of some strategies. The strategies take the form of messages.

Message #1 – Be Prepared.

As leaders, it is your responsibility to work with others to produce desired results. You do this by asking questions and creating dialogue that bring clarity, confront and encourage thinking. The first and most important message or strategy is to be prepared! It is not suggested, unless you have a lot of experience and practice, to attempt to do this off the cuff. It is recommended that you reflect on experiences with employees and co-workers and work on developing your own pool of questions. Questions invite people to reflect. Asking a powerful, sincere question has the effect of disengaging the automatic pilot response the worker typically offers. By taking the time to develop these powerful questions and then look for opportunities to use them, others will begin to feel valued as a person. You should keep in mind the possible settings that SMART conversations could take place. The time available may dictate the intensity of the question. One model for developing powerful questions is the GROW model. The GROW acronym stands for **GOAL, REALITY, OPTIONS, and WILL.**

GOAL questions talk about the agenda or what we desire to accomplish

WORKED EXAMPLE

Scenario – You over hear a worker complaining about production goals.

“Sal, I understand you feel the benchmarks are too high. What would make them more realistic for you?”

REALITY questions deal with the starting point.

WORKED EXAMPLE

Scenario - A worker has had repeated trips to first aid.

“Lois, I see you have been to first aid three times in the last month. Tell me about the common factors that occur before each incident.”

OPTIONS questions talk about possibilities.

WORKED EXAMPLE

Scenario – Someone repeatedly leaves a pallet jack in the walk way.

“Betty, I noticed that someone keeps leaving the pallet jack in the middle of the walk way. What would be three possible ways you would suggest addressing this so it doesn’t happen again?”

WILL questions are about action steps.

WORKED EXAMPLE

Scenario – Safety audit is scheduled in three weeks.

“Sam, you know we have that safety audit in three weeks and the goal is no findings. Can you think of any obstacles that might get in the way of us reaching or obtaining our goal?”

Message #2 – Practice Makes Pretty Good (You Will Never Be Perfect).

In order to practice SMART conversations and be a catalyst for change either with workers or other leaders you have to recognize what is going on around you. You have to be willing to share your observations in ways that stimulate input and interest. It is always a good idea to be sensitive to the worker. The object is not to embarrass someone or make them feel uncomfortable. Therefore, at times, less personal exposure may be preferred. As you work at creating SMART conversations, you may find that some of your questions and techniques need to be tweaked – that is why we call it practice.

Message #3 – Don't Be a Stranger.

Anyone in a place of leadership and responsibility can often feel there is not enough time to get everything done. For someone working in a job where you have to stay in one position for an extended period of time with limited interaction, a lack of

presence from your supervisor or management can be interpreted as a lack of interest. Workers question management's ability to make decisions regarding their work area or job when they have never or have seldom been there.

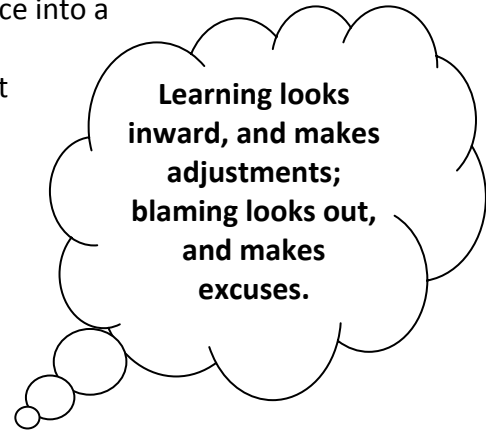
Workers interpret the presence of management as a symbol of how they rate safety, which supports the goal of an injury-free workplace. Some responsibilities of management carry more weight and have the potential for greater impact than others, being visibly present in the work area is one of those responsibilities. It has been said, "the one most present wins".

Message #4 – Let Them Know They Matter.

If cost cutting as well as cost savings is a product of safety, then – supportive of the research discussed earlier - employee welfare should be at the top of the list. The need for leadership to express care and concerns for their workers cannot be understated. Taking the time to show employees that they are valued, asking them for their opinions and validating their concerns and ideas can transform a resistant workplace into a collaborative one. If workers get the idea from management that production takes precedence over safety, the risk of accidents and injuries increase. Making comments about rush orders or pending deadlines only serve to put pressure on the worker. Rather than pressure, encourage, empower and motivate the workers with SMART conversations that will have the effect of accomplishing the desired goal of getting the work done. Many times line leaders and supervisors underestimate the potential for positive influence their position possesses.

Message #5 – Take Ownership.

By doing your part to transform your workplace into a collaborative one, you communicate to the worker that safety is everyone's responsibility. It is important for management to lead by example, by following through with their commitments and to ensure that worker training needs are met.



Message #6 – Accountability is Integrity.

Accountability is a welcomed occasion of any employer or employee committed to safety and health. This is another area where modeled behavior by management speaks volumes. For example, a supervisor or line leader would never walk through a work area without the proper personal protective equipment (PPE). Challenging and empowering workers, through word or deed, toward compliance at the level of PPE is not only good leadership, but is a preventive measure in avoiding potential accidents or injuries. It wouldn't make much sense to watch a worker walk by with improper shoes and not question or help them obtain appropriate equipment and then write them up when they go around the corner and slip. The application of safety and health standards should be consistent across the board. It is reasonable for workers to expect that standards will be applied without waver. This commitment from

management lets workers know that their employer is reliable and dependable.

Message #7 – If You Mean It, Say It.

The level of importance you place on the information you wish workers to know, should dictate the way you communicate that information. Simply posting a memo on a plant-wide bulletin board does not cut it. Make sure to follow up any important written reminder or directive with a verbal contact.

One inexpensive idea for getting the word out is through LCD panels. They can be posted in work areas that are frequented like locker rooms, bathrooms and break rooms. Some cafeterias have televisions where you can repeat video safety reminders or offer encouragement and gratitude for a job well done.

Module 2 – Identifying Job Hazards

Session 1: Hazards – What are They?

Session 2: Hazards – How Can I Prevent Them?

Module 2 - Identifying Job Hazards

Identifying Job Hazards consists of two sessions:

Session 1 - Hazards – What are They?

Session 2 - Hazards – How Can I Prevent Them?

MODULE OBJECTIVES

Employers and employees will learn to work together to help improve conditions in their workplace by:

- Identifying Job Hazards
- Reviewing Sources of Information on Hazards
- Understanding Hazard Control Methods

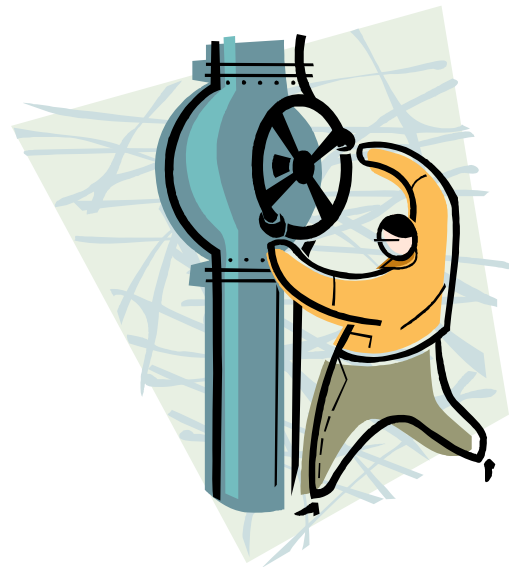
Session 1 - Hazards – What are They?

Identifying Hazards

In this session, facilitators will practice the art of SMART conversations which were discussed in Module 1 - *Creating a Place Where Safety Happens*. It is critical to think about health and safety hazards on the jobs and be able to share concerns and ideas with other. The goal of a company's health and safety program is to create an injury-free workplace. The most effective way to do this is to eliminate or reduce the hazards that cause those injuries and illnesses. Remember, a reduction in injuries, accidents and occupational illnesses lead to increased productivity, reduction in costs, reduction in turnover, better employee morale and an increase in profits. This is not only beneficial to the employer and industry, but as well to the employee and community at large.

When conducting a job or hazard analysis, you typically look for concerns in the following areas:

- facilities,
- processes,
- environment,
- materials, and
- equipment.



Health and safety hazards in the workplace include those things that cause stress or poses potential risks to a worker's physical or emotional well being. In order to prevent injuries, it is important to use the systematic approach to hazard analysis that includes the following steps:

1. Identify,
2. Evaluate, and
3. Control.

Identify

In order to eliminate or reduce hazards, a company first needs to identify the problems and concerns (hazards) that could cause worker injuries. Hazards are not always obvious; so in order to identify the hazard a person must first be familiar with the poultry industry, their work area and the recommended work practices.

Evaluate

Once hazards have been identified, they need to be evaluated for priority. It is not possible to fix everything at once. The biggest concern may often be the hazards that are most serious – those that could cause the most serious injuries or illnesses. There are times when the hazard of most concern will be the one affecting the most people. Still other times, the hazard with the highest priority is the easiest to get corrected because it can render the quickest results.

Control

The third step is to select the most appropriate and effective control measures for those particular hazards. The topic of methods of control will be addressed in Session 2.

CHECK FOR UNDERSTANDING

Before beginning this activity, remind participants of the goal of creating an injury-free workplace and emphasize that fully engaging in this training activity will help improve their ability to identify hazards and make strides toward reaching the goal.

In groups, ask participants to generate a list of health and safety hazards that may occur in their work areas. Divide participants into groups of three to five participants. Once participants have been placed in groups, disseminate “Problems in Poultry” [handout](#) and review instructions. As a facilitator/trainer, it is a good idea to make yourself available during the activity in case participants have questions.

Groups should be given about 10-15 minutes (*depending on time available*) to share some of the health and safety hazards issues that have experienced in their work areas. Each group will select three issues or hazards to share with the group. Participants then reconvene, share their lists and discuss their findings. As individuals share, record the information on a flip chart. Give each group an opportunity to share, making note of any repeats.

There are several different work areas within the poultry process. Recognize that all participants may not be from the same work area. Participants from different work areas will point out different concerns. Make sure you validate and encourage all responses. If there are similarities, ask participants why they think these issues are of

concern across work areas. One reason for creating some discussion after you have surveyed the group is so that participants can experience a more meaningful learning experience.

Sources of Information

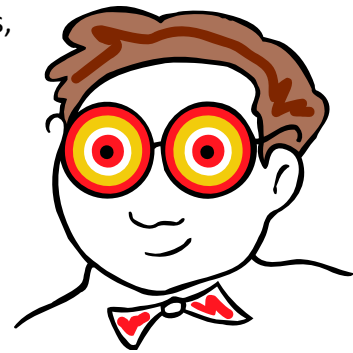
The importance of staying informed about hazards cannot be understated. Employers and employees alike cannot be reminded enough about the direct relationship between an injury-free workplace and their quality of life. Being an informed and self-directed learner means that you seek out information that not only improves your work, but that benefits you, your workplace and your community. Staying informed increases your awareness and helps you to more readily identify hazards.

Employees should never be afraid to ask questions. No one is an island unto themselves. Employers and co-workers can be great sources of information. As leadership begins to use and employ the ideas and strategies of SMART conversations – building a culture of safety and modeling the traits discussed earlier – asking the difficult questions should become a natural course of action.

There are many types of hazards in poultry processing – obvious ones as well as those that are hidden – and many sources for learning about those hazards. Knowing what to ask and where to look is important for any worker striving toward the goal of an injury-free workplace. There are several sources which exist for finding information. Some of them include co-workers, the employer, government resources and other miscellaneous sources.

CHECK FOR UNDERSTANDING

In this activity, participants will pair up with a neighbor to develop a list of the kinds of information that might be found under each category mentioned above by using a worksheet that has already been prepared ([Where to Look Handout](#)). The facilitator/trainer can suggest that participants think about the kinds of information they have received which helped them identify or understand more about a particular hazard or hazards in their workplaces. If they lack experience with this, ask them what information could they receive that would help them to identify or understand more clearly about the hazards in their workplace. Give paired learners 10-15 minutes to complete this activity.



See sample chart on the following page for details. Depending on the training or work setting, the facilitator/trainer could assign the task of retrieving a particular piece of information from one of the sources discussed.

A completed chart could look something like this:

WHERE TO LOOK?

Co-workers	Employer	Government	Other
<ul style="list-style-type: none"> •Surveys •Body and Hazard Mapping •Asking questions •Making Observations 	<ul style="list-style-type: none"> •OSHA 300 Log •MSDS' •First Aid logs •Accident/incident reports 	<ul style="list-style-type: none"> •OSHA inspection data •OSHA web site info •NIOSH Hot Line info •EPA info and data 	<ul style="list-style-type: none"> •Manufacturers information •Health and Safety websites •Trade journals •Health and Safety organizations •Health and Safety training (orientation, other online resources) •University studies (cooperative extensions)

Session 2: Hazards – How Can I Prevent Them?

Research shows that in order to have new information encoded into memory and transferred for long term storage it is beneficial to activate prior knowledge. Engaging participants in pre-questions or pre-discussion before giving instruction can assist them to absorb and retain the new information more effectively. Begin this session with problem-based scenarios that show unsafe work practices. Create discussions with participants on recommended work practices or solutions for preventing hazards. Below are examples you can use or you work with participants to create your own. Discuss how you might control for hazards in each of the situations or how you may have done things differently.

Example 1 - There are times when a person may take an adjustable stand and stack it on top of another adjustable stand to reach an area where they can't reach, such as a drip pan or other overhead area. Adjustable stands or ergonomic stands are used so that people of varying heights can work at the same workstation. Someone might do this because they find it easier to use materials (stands) that are right there or readily available in the work area rather than retrieving a ladder. A discussion regarding this scenario would be that this is an unsafe practice because of the two stands stacked on top of each other are not stable and a slip/trip/fall, struck by, or sprain/strain can result.

Instead of stacking stands, one solution would be to get a safe-ready ladder to reach spaces not readily accessible.

Example 2 - Whenever working with knives or scissors people may have a tendency to stab the meat (product) with the blade and either drags it towards them or lifts it and

brings it towards them to trim. This is a very unsafe practice because the blade could cut through the meat and depending on the force being used could result in a puncture or cut to the person's face or abdomen. Many people get in this poor/unsafe habit of "stabbing" the product because it tends to stick to the conveyor belts. The desired practice is to use the protected non-knife/scissor hand to reach for and retrieve the product for trimming/cutting.

Example 3 - Not properly steeling (maintaining) knives prior to each use can cause many issues. First, additional force can be required to both make the desired cut and to hold onto the knife itself; this added force can cause cumulative trauma disorders (injuries that get worse the more times it happens). Second, using a dull knife and applying more force to the blade can cause a person to lose control of it causing a cut or puncture wound to either the person or the worker next to them (buddy cut). Third, the use of dull knives may cause a person to become "backed up" in their production count or reasonable expectancy (number of pieces a person is reasonably expected to produce/cut/trim in a specific amount of time). This happens because as the knife becomes dulls, it doesn't cut as well. The person may become frustrated and unable to perform at the same speed. When they fall behind this presents another issue in that they are now crowding their co-workers by invading their working space making the likelihood of a "buddy cut" all the more likely or probable. These situations can be avoided to some degree by practicing good knife skills, knife steeling and sharpening techniques, and by educating workers on when and how to properly use knife steels (either ergonomic or hand).

A “health and safety process model” for identifying, evaluating and controlling (eliminating or reducing) workplace safety and health hazards is one way to help identify, evaluate and control hazards. It may be an obvious statement, but elimination is the most effective way to reduce the hazards that cause those injuries and illnesses. Learning ways to eliminate or reduce hazards is called “controlling” hazards. Not only is it important to be and stay informed so that you can identify hazards, it is equally important to control the hazards after they are identified.

Following the 3-step approach discussed earlier, hazards are identified, and then there is a need for them to be prioritized for correction. As mentioned, not everything will be able to be corrected immediately. There needs to be a list of priorities – those hazards that need attention immediately, those hazards that should be looked at next, and so forth. The company will need to discuss what makes the most sense depending on the particular hazards and conditions in that workplace.

After you have identified and evaluated the hazard, the third step in the systematic approach to hazard analysis is control. Methods of hazard control provide the most effective way to protect workers from particular hazards. Industry has established a list of control methods to help workers and employers, effectively control hazards.

HIERARCHY OF HAZARD CONTROLS

1. Elimination

The best way to control a hazard is to eliminate it and remove the danger. This can be done by changing a work process in a way that will get rid of a hazard; it could be as simple as substituting a dull knife for a sharp knife; or removing the pallet jack from a blocked walk way.

2. Substitution

The second most effective method is to substitute something else in its place that would be non-hazardous or less hazardous to workers. For example, a non-toxic (or less toxic) chemical could be substituted for a hazardous one.

3. Engineering Controls

If a hazard cannot be eliminated or a safer substitute cannot be found, the next best approach is to use engineering controls to keep the hazard from reaching the worker. This could include using adjustable stands; adding a machine guard; a technology to reduce noise levels; using mechanical lifting devices; or using ventilation that helps remove or reduce contaminants before they can get in the breathing zone of workers.

4. Administrative Controls (Training and Work Practices)

If engineering controls are not available, administrative controls should be the next consideration. Administrative controls involve changes in workplace policies and procedures. They can include such things as:

- Warning alarms,

- Labeling systems,
- Job Rotation, and
- Training.

5. **Personal Protective Equipment**

The use of personal protective equipment (PPE) is a way of controlling hazards by placing protective equipment directly on workers' bodies. Examples of personal protective equipment include: respirators, gloves, protective clothing, hard hats, goggles, and ear plugs.

Personal protective equipment is the *least* effective method for protecting workers from hazards. PPE should be used in combination with more effective ways of hazard control. It should never be used in place of other more effective hazard control methods.

CHECK FOR UNDERSTANDING

In a group, provide participants with a list of possible hazards that someone might encounter when working in poultry. They may be compiled on a handout or written on a flipchart in from to the room.

Below is one example, you can add to this list or create your own. Discuss in what situations these hazards might occur and the types of control and possible solution that could be used to prevent injury within each scenario. Have participants share other examples.

- ◆ Bending at waist to reach into tubs or lift tubs of product.
- ◆ Forceful gripping
- ◆ Ergonomic hazards from use of scissors and knives
- ◆ Standing for long periods of time
- ◆ Reaching to access product, saws, or machine load areas
- ◆ Cuts and lacerations
- ◆ Reaching up, forward or to the side to access shackle
- ◆ Slips, trips and falls
- ◆ Forceful hand exertions

Module 3 – Your Job Doesn't Have to Be a Pain: Avoiding Injuries Using Ergonomics

Session 1: Using Ergonomics

Module 3 – Your Job Doesn't Have to Be a Pain: Avoiding Injuries Using Ergonomics

Your Job Doesn't Have to Be a Pain consists of one session:

Session 1 – Using Ergonomics

MODULE OBJECTIVES:

In this session, participants will learn what ergonomics is and the influence it can have in the workplace. They will be able to recognize the factors involved as well as learn methods of prevention.

- Define ergonomics
- Create awareness of impact
- Recognize factors involved
- Learn methods of prevention

Session 1 – Using Ergonomics

In support of an awareness of a culture of safety and in pursuit of the goal of an injury-free workplace, protecting the worker from injury is a shared responsibility between both employer and employee. A workplace that makes safety as a top priority and who has created a culture of safety is one that has an ongoing effort to implement engineering and administrative controls regarding identified hazards. In addition to engineering and administrative controls, PPE is a type of ergonomic control.

Employers use these controls to prevent musculoskeletal disorders (MSD's) caused by poor work design and practice. The method commonly used for the prevention of MSD's is ergonomics.

What is ergonomics? Ergonomics is:

- The study of how to bring the work to the worker,
- It's about making the workplace better fit the employee,
- It involves the design of tools, equipment, workstations and job tasks,
and
- It is an effective way to reduce the number and severity of workplace injuries.

To refresh, engineering controls are those changes that are made to eliminate a hazard. This would be, for example, using an adjustable work stand, to prevent improper reaching. Administrative controls are situations where employers modify workplace policies and procedures for performing work. Rotating workers in positions that are very physically demanding like deboning chicken would be an example of an

administrative control. Lastly, PPE is that protective equipment placed on the worker's body. Gloves would be an example of a PPE.

According to recent reports, almost 70% of OSHA inspections result in a citation. This can cost a facility \$7,000 for a serious violation. If the violation is "willful" or "repeated", multiply that number by 10. It is easy to see how safety through prevention saves. If ergonomics is neglected in the workplace, it could lead down a path to injuries, but one of absenteeism, high turnover rates, a reduction of quality of product, and ultimately an increase in costs.

Cumulative trauma disorders are injuries that can result from a path of ergonomics-neglected. There are a number of things that can contribute to cumulative trauma disorders. They develop gradually from repeated stress to a particular body part. Such disorders are also called "overuse" or "wear-and-tear" repetitive strain disorders.

When attempt to prevent MSD's and cumulative trauma disorders, it is important to understand the factors associated with ergonomics. Working in the poultry industry, especially in the areas of cutting and deboning, can create added stress on the body.

Factors to consider are:

- Force
- Repetition
- Postures (Awkward & Static)
- Vibration
- Contact Stress

Force

Force is an ergonomic stressor caused by lifting, pushing, pulling, grasping and pinching items in the work environment. Lifting heavy objects high, outside a person's normal range of reach, places force on the back as well as the neck and shoulders. Force is often required to handle and control equipment, tools, raw materials and finished products. Tasks that require forceful exertions that don't result in acute injury place higher loads on the joints and connective tissues. Prolonged or recurrent exertions of this type can cause feelings of fatigue and may lead to musculoskeletal problems when there isn't adequate time for rest or recovery.

For example, force required to make a particular cut either with a knife or scissors, can contribute to cumulative trauma disorders. Increasing the applied force increases muscle effort, decreases circulation to the muscles and causes greater muscle fatigue. Effort required to make a particular cut, either with a knife or scissors, can depend upon the sharpness of the tool. A dull instrument requires more force or exertion and contributes to cumulative trauma disorders.

Forceful gripping may cause pressure on nerves from muscles or tendons, as may repeated movement. Hand and arm motions may include grasping, turning, applying pressure and pinching. These movements frequently result in stressful hand and wrist positions. Compression or pressure to nerves (and blood vessels) can also occur when tool handles are squeezed in the palm.

Repetition

Repetition involves performing the same motion or series of motions repeatedly as well as frequently. Effects of repetitive motions from performing the same work activities increase when awkward postures and forceful exertions are involved. Repeated applications of force that do not cause immediate damage can, over time, induce fatigue in our connective tissues and wear them out resulting in the cumulative trauma mentioned earlier. The longer the period of continuous work, the longer the necessary recovery or rest time required.

The speed of work may be determined by the speed of a conveyor belt. For example, in poultry processing, the faster the conveyor line, the more frequent is the requirement for the cutting of chicken (the repetition of a specific task). Jobs that require frequent repetition of the task cause muscles to contract frequently, requiring more muscle effort and less recovery time.

Posture

There are postures that our joints can absorb more easily than others. The closer to the extreme of a joint's range of movement, the less capable the joint is and the more susceptible to injury. An extreme posture can cause stress in the joints reducing the blood flow.

Body postures that deviate from normal resting or neutral positions place unnecessary stress on muscles, tendons and bones are referred to as awkward. Awkward

postures include reaching above shoulder height, kneeling, bending the head over to look in hard-to-see areas, improper cutting and twisting the body while lifting.

Awkward hand motions are sometimes used to separate meat from chicken bones. One hand may hold meat while the other hand is holding the knife to make a specific cut.

Static postures are those held for a long period of time that can place stress on the body, particularly if the posture is awkward. Static postures can accelerate the development of fatigue and discomfort.

Vibration

The body experiences stress when using vibrating objects such as tools or while standing on a vibrating platform. Vibration can lead to reduced blood flow to the exposed body part causing stiffness and numbness in the affected area. Vibration is the physical exposure to tools or machinery that moves back and forth really fast. Standing on a vibrating platform can lead to digestive and back disorders.

Contact Stress

Contact stress occurs with physical contact between the body and sharp or blunt edges of tools, equipment and products. This is a dynamic force applied to the body, like when you use a hammer. The body responds to impact stress by limiting blood flow to the exposed body part.

In addition to the factors listed above other factors in poultry processing such as gloves and temperature are as important. Working with gloves that fit too tight restricts the blood flow to the fingers and cause numbness in the fingers; in addition, working

with gloves that are too big limit dexterity and makes gripping more difficult. Gloves also increase the amount of force that a worker must exert in order to handle objects.

In order to meet USDA requirements, product must be kept at 40 degrees as it moves through processing. This requires the product to be washed and cooled with cold water causing discomfort to workers who may experience poor circulation or musculoskeletal disorders in the hands. Exposure to temperatures below 66 degrees F for more than two hours can limit blood flow to the extremities, which can cause numbness and in the hands and fingers and reduces grip strength. PPE, such as rubber aprons and gloves, are recommended for these types of work areas.

CHECK FOR UNDERSTANDING

Participants will identify and raise awareness of health and safety risks in the workplace by engaging in a body mapping activity. Body mapping involves workers identifying their own work-related injuries and illnesses by indicating (representing injuries, illnesses, and stresses) on a drawing of a body. Body mapping is a tool that can be used by employers and workers to identify any reoccurring injuries and helps to develop priorities for hazard prevention and correction.

Body mapping involves workers identifying their own work-related injuries and illnesses by placing indicators on a drawing of a body.

Give participants the [Body Mapping Activity Sheet](#) and ask them to remember specific and personal work-related injuries, illnesses and stresses from the past or present. Participants can work individually or in pairs to show on the body map parts of their body that have been affected.

Ergonomic factors can affect your body so you want to make sure you are protected. When your body is under too much pressure or strain it will let you know. Effective treatment of pain and strain requires paying attention to early warning signs.

Some of the early warning signs include:

- Swelling
- Numbness
- Tingling
- Discomfort
- Burning sensations
- Irritation
- Insomnia
- Stiffness

You can experience these early warning signs in your back, neck, shoulder, elbows, forearms, wrists and hands. Using the debone work area as an example, these different body parts performing varied work functions can experience or be subjected to various ergonomic stress factors.

Back

There are several examples of back stressors. For instance, a person in the position of loader bends over repeatedly to remove product from a bin and is engaged in repetition causing stress on the back. Workers on the processing line cannot leave their station and after standing for long periods of time can experience static force.

Workers engaged in cutting and pulling meat from the bone have to do so at high rates

of speed. Failure to keep up can result in chasing product down the line taking the worker out of their own space. This twisting puts your body in an awkward position and can cause not only injury to you, but to others.

Preventative measures that can be used to take some of the added pressure off the back are wearing insoles, putting down an ergo mat, changing stance, shifting weight, and wearing proper footwear. In addition, engaging proper work practices (cutting and pulling techniques) pre-shift and periodic upper body/back/neck exercises, and keeping work tools (scissors and knives) sharp help a worker keep pace and avoid unnecessary twisting.

Neck and Shoulder

A person's stature is a consideration when working on the processing line. A person who is too tall often stoops over. The static force caused by bending over not only causes pressure on the back, but neck as well. Persons who are short tend to engage in improper reaching. The improper reaching takes a worker out of the normal body range and causes undue pressure on neck and shoulders. A worker in a position where what they do affects the person beside them, as in a poultry processing line, must be much focused, staying on task. This intense concentration can often result in a worker having their head bent over for extended periods of time.

Elbows

Workers who engage in what sometimes is referred to as the "lazy cut" are workers who attempt to make cuts while propping on their elbows. Not only is this an

improper work practice, it puts pressure on the nerve in the elbow, leading to increase risk of injury, i.e., tennis elbow.

When handling and reaching for product the elbows should be kept close to the torso. Repetitive, elevated reaches when loading or lifting product causes stress to the elbow and should also be avoided.

Forearms, Wrists, and Hands

Different product (leg, thigh, breast, and wing) requires different cuts, some are cut right to left, others right to left. Using in-line knives can force a worker to bend their wrist in order to exert the force needed to control the knife. In addition, improper cutting methods and dull knives can place added pressure from undue force on the forearms, wrists and hands. Also, scissors can rub on the sides of fingers, causing pressure and compression to nerves of the fingers.

As previously noted, sharper knives reduce the force needed to make a cut. Good knife steeling equipment should be readily available for each worker required to use a knife. Bent handle knives to allow cuts to be made with straight wrists is another control.

In addition to the preventative measures mentioned above, warm-up exercises and stretch breaks can also help relieve pressure. Using the [excerpt](#) from *A Guide to Safe Work Practices in the Poultry Processing Industry* from the North Carolina Department of Labor Occupational Safety and Health Division, model some exercises that workers might try. Give participants an opportunity to demonstrate the exercise as well.

CHECK FOR UNDERSTANDING

In this activity, the facilitator/trainer will engage participants in a game of jeopardy.

Categories: Ergonomic Factors, Prevention, Warning Signs, Exercises, Work Practices

Question Bank:

1. A situation where employees work several different jobs to avoid stressing the same parts of the body.

What is job rotation? (Controls-1)

2. Reducing exposure to hazards by modifying the workplace policies and procedures.

What is an administrative control? (Controls-2)

3. Design, modify or replace workstations, equipment or tools.

What is an engineering control? (Controls-3)

4. Engineering, administrative and PPE

What are controls used to prevent MSD's? (Controls-4)

5. I help prevent feet from fatigue after long periods of standing on hard floors and surfaces.

What are insoles? Or What is proper footwear? (Controls-5)

6. This item protects hands from injury or cold.

What are gloves? (Prevention-1)

7. A tool used to identify reoccurring injuries.

What is body mapping? (Prevention-2)

8. Swelling, numbness, tingling, discomfort, burning sensations, irritation, insomnia, stiffness

What are early warning signs? (Prevention-3)

9. Stretching to relieve stress and pressure on body.

What is exercise? (Prevention-4)

10. Things you can do to avoid injuries or illnesses.

What are preventative measures? (Prevention-5)

11. Force, posture, repetition and contact stress.

What are ergonomic stressors or factors? (Stressors-1)

12. Performing the same motion or series of motions repeatedly and frequently.

What is repetition? (Stressors-2)

13. Tasks that require exertions and result in pressure on joints

What is force? (Stressors-3)

14. Positions that place stress on the body, such as reaching above shoulder height, kneeling, squatting, leaning over a worktable, twisting the torso while lifting

What is posture? (Stressors-4)

15. Injuries caused by exposure to repetitive, forceful or awkward tasks over time.

What is cumulative trauma? (Stressors-5)

16. The study of how to bring the work to the worker.

What is ergonomics? (Ergonomics-1)

17. MSD's

What are musculoskeletal disorders? (Ergonomics-2)

18. Poor work design and practice.

What is the cause of MSD's? (Ergonomics-3)

19. Injuries, absenteeism, high turnover, reduction in quality, and increase in costs

What are the results of neglecting ergonomics? (Ergonomics-4)

20. The proper design of tools, equipment, workstations, and job tasks.

What is ergonomics? (Ergonomics-5)

You can develop your own set of questions for a new game or add to this list. To create a more meaningful learning experience, you may engage participants in some discussions following each question.

Controls	Prevention	Stressors	Ergonomics
\$100	\$100	\$100	\$100
\$200	\$200	\$200	\$200
\$300	\$300	\$300	\$300
\$400	\$400	\$400	\$400
\$500	\$500	\$500	\$500

EXAMPLE OF GAME BOARD

Resources

Hogan Assessment Systems, The Meta-Analytic Correlation between the Big Five Personality constructs of Emotional Stability and Conscientiousness

North Carolina Department of Labor Occupational Safety and Health Division, A Guide to Safe Work Practices in the Poultry Processing Industry

Poultry Processing Industry eTool (<http://www.osha.gov/SLTC/etools/poultry/>)

<http://www.oshainfo.gatech.edu/ergo-training/trainer.html>

United Food and Commercial Workers International Union, A Safety Committee Guide for the Workplace, www.ufcw.org.

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*Special thank you to
Elizabeth Eades-Guerrero
and Sam Fulginiti
for all their guidance and input!*