

## **Backpack Harness Training Outline**

University of Washington, Building Services Department  
Safety & Health Investment (SHIP) Project

### **TRAINING SESSION RUNDOWN – approx. 90 mins**

<b>Time</b>	<b>What</b>	<b>Who</b>
Prior to start	Make Information Statement available during sign-in	
1 min	Welcome, Introductions	
2 mins	Opening Remarks	
2 mins	Overview of SHIP Project	
5 mins	Review of Information Statement/Consent Procedures	
5 mins	Overview of Ergonomics	
Demonstration 20 mins	--Adjusting the Harness Height --Adjusting the Straps --Picking up and Putting on the Vacuum --Plugging in the Cord --Correct adjustment and use of wand --Proper use of cord holder	
Participation & Individual Fitting 45 mins	Break into small groups by gender and height Custodians fitted for two types of backpacks (old and new) Trainers note fit and special needs on Tracking Sheet Note fit on instructional handouts for each custodian	
5 mins	Wrap-up main teaching points	

### **TRAINING OBJECTIVES**

- 1. To provide a basic understanding of the SHIP Project and the role of ergonomics in injury prevention*
- 2. To provide training and demonstrations to all Buildings Services custodians on*
  - a. The proper adjustment of the ProTeam vacuum backpack harness,*
  - b. Safer methods for lifting the backpack onto the back and bending down to plug in,*
  - c. Ergonomically healthy ways to use the wand attachment, and*
  - d. The proper connection of the cord to the vacuum*
  - e. Reporting issues with vacuum to supervisor*
- 3. To provide personalized fitting for each custodian and an opportunity to demonstrate their ability to properly adjust the backpack harness*
- 4. Provide tips, review dos/don'ts*

## KEY TRAINING POINTS

### 1. *To provide a basic understanding of the SHIP Project and the role of ergonomics in injury prevention*

- Review the main points in the Information Statement, including project team members, risks and benefits of participation, and confidentiality
- Ergonomics is a method of getting a good fit between the work and the worker, can help reduce injury by reducing awkward postures and unnecessary forces on the body

### 2. *To provide training and demonstrations to all Buildings Services custodians on*

- *The proper adjustment of the ProTeam vacuum backpack harness*
  - Adjust the height of the harness on the vacuum itself by using a screwdriver to remove the bolt holding the upper part of the harness to the backpack, and move the harness higher or lower to fit the length of the torso of the individual. Supervisors have the screwdrivers that best fit.
  - The bolt holding the upper part of the harness to the vacuum should be replaced in the HIGH, MIDDLE or LOW position, depending on the individual user.
  - How to tell if the bolt is placed in the correct position: when the individual is wearing the harness correctly so that the weight of the vacuum is resting mainly on the hips, the top padded section of the harness should rest in between the shoulder blades.
  - The correct order to adjust the straps: After slipping the harness on both shoulders, the FIRST step is to connect the waist belt and pull the straps until it is snug. Doing this first will ensure that almost all of the weight is resting on the hips. SECOND, adjust the shoulder pads by pulling the straps down and back. (Make sure custodians see how these straps work as they are not intuitive). THIRD, connect the chest strap (optional). The chest strap can be moved up or down, depending on comfort of the user. (Again, demo).
- *Safer methods for lifting the backpack onto the back and bending down to plug in*
  - Store the vacuum at an elevated level to reduce the number of times it must be lifted from the floor. Give examples. Bending over repeatedly over time can lead to back discomfort.
  - When bending down to pick up any object or putting the plug in the socket, use the Build-A-Bridge technique to support your back. Build-A-Bridge by placing your hand on your leg, sturdy non-movable furniture, or a wall and put weight on your arm (while bending down).
- *Healthier ways to use the wand attachment*
  - Adjust the wand to the right height for your body so that you don't need to bend over when pushing it back and forth. Make sure your elbow is bent when you start from a neutral, upright position. Don't chase the wand. Adjust to your comfort.
  - If the wand is not adjustable, maintain your hand grip on the wand in a high enough position so that you can use it while standing upright.
  - Straight wands are designed to be used with a side-to-side motion. Be sure that you are also moving your feet while you are moving side-to-side to reduce back strain.
- *The proper connection of the cord to the vacuum*
  - Use the cord holder on the vacuum harness to connect the extension cord to the vacuum plug.
  - Do not tie a knot in the cord, which could damage it and cause an electric shock.
- *Reporting issues with vacuum to supervisor*
  - Report missing or broken parts, such as a chest strap or cord holder.

- Do not tie straps into knots. If straps are slipping, ask the supervisor for a strap clip.
- If you cannot get a good fit for your vacuum, let your supervisor know. It may be possible to change the vacuum type or the harness to fit better.

3. *To provide personalized fitting for each custodian and an opportunity to demonstrate their ability to properly adjust the backpack harness*

- Allow the custodian to demonstrate their knowledge of the steps to put on a vacuum. Coach them through the steps if they do not remember correctly. Make sure they know which direction to pull the straps for optimal use.
- Check the fit of the harness straps and whether the upper padding of the harness sits in between the shoulder blades. If not, remove the backpack, unscrew the bolt and replace it in a higher or lower position as appropriate.
- Note the custodian's name, gender, height range, position of the bolt, vacuum type and any special needs on the tracking sheet.
- Note the custodian's name and fit preferences on a card showing the steps to adjust the harness, and give to each custodian as a reminder.

4. *Provide tips, review dos/don'ts*

- Talk about changing the bag and how the sides may get clogged. This affects vacuum performance in terms of power and heat buildup. Demo a bag that has sides clogged but is not filled to the top.
- Recommend against improper wear of backpack either slung on one shoulder or strapped at shoulders but not waist as these cause more discomfort and wear and tear on the body.

## **MATERIALS/RESOURCES NEEDED**

- Information Statement
  - Copies in English, and translated versions as needed
  - Pass out prior to start of training session
- Schedule ASL and language interpreters as needed
  - Will attend Area G session on March 9 to interpret for Robert Chase
- Handouts: Steps to Adjusting the Harness
  - Copies of Page 2 of the PDF "Fitting SCP\_Flyer Feb 16" printed on white card stock
  - Trainers note personal fitting details on card
- Vacuum Backpacks and accessories
  - 6 vacuum backpacks – new style (Pro6)
  - 4 vacuum backpacks – old style (SuperCoach)
  - Two types of Wands – adjustable and straight
  - Screwdriver to adjust harness bolts
- Tracking Sheets
  - Tracking sheets lists Name of participants in each Area
  - Clipboards
  - Pencils