

Manual Material Handling

Manual Material Handling (MMH) means moving or handling things by lifting, lowering, pushing, pulling, carrying, holding or restraining.

When getting ready to lift, carry or handle a load, assess the following:

1. What you are handling? Is the load:

- Too heavy.
- Too big.
- Too high or too low.
- Wet or slippery.
- Unstable and shifty.
- Does it have handles or a proper grip.

2. What is the task?

- Combination of MMH such as lifting, carrying and lowering.
- Move the load over long distances.
- Frequency and duration of the task.
- Insufficient recovery time of not enough rest breaks.

3. Condition of the workplace.

- Indoor or outdoor.
- Flooring: uneven, wet, cluttered, snow-covered.
- Stairs and elevators.
- Lighting.
- Cold, hot, humidity.
- Small or cramped spaces.
- Furniture and equipment, For ex. tables, shelving, storage space, trolleys.
- Personal protection equipment and clothing : Gloves, appropriate footwear.

4. How the task is done

- Poor techniques: bending and twisting, far reaches, lifting too fast, jerky movements.
- Poor planning.
- Not enough breaks or rest between tasks.

And how much control you have on those hazards, the task and the environment: *what can you change to make the task safer?*

Before you lift and carry

1. Plan

Before the lift ask yourself: "Do you need to lift?"

Can you use a cart, dolly, hoist, etc.? Easier to push or pull

Check the pathway and the final destination: Where is the load going? How far are you going? Is the path clear of obstacles? Are the doorways large enough for the load to fit through? Any stairs, steps or elevators?

2. Assess the weight and shape of the load.

Do you have a good grip? Does it have handles?

Is the load going to shift? Is it liquid? Is it oddly shaped or bulky?

3. Help

Get help as needed – 2 persons lift.

Communicate clearly.

Handling Basics

Two principles to keep in mind:

1. "Keep your back straight" i.e. neutral posture of the spine.

2. Keep load close to the body – the further you are from the body, the more muscle work you have, the more pressure and strains you are putting on your body.

Basic Lift

The basic lift is best for **small compact loads** that you can straddle and get close to your body.

- Stand close to the load.
- One foot in front of the other.
- Use a wide stance for good balance.



- Squat and get the load close and in front of your body.



- Have a good grip on the load.
- Arms should be inside the knees.
- If there are no handles = use a diagonal grip and place the hands on opposite corners of the load. Forward foot = forward hand.



- Keep your back straight.
- Lift smoothly, without jerking.
- Lift and carry with the load close to your body and in front of you.



- Lift with your legs NOT with your back.



- Avoid twisting and side bending.
- Don't twist but turn your feet in the direction you are going with the load.



Tripod Lift

Use with **uneven or shifty load**, like bags.

- One foot next to the load (one forward and one back).
- Squat down and place the back knee on the ground.



- Grasp the load with both hands.
- Slide the load onto the kneeling leg.



- Slide/transfer the load onto the other thigh.
- Place both forearms under the load (hug it into your chest).



- Keep the back straight and lift with your legs.



Pushing and Pulling

It is much easier to push and pull than to carry, so use dollies, trunks, carts, etc. whenever possible, even if it is just for part of the way.

When using carts and trucks, make sure the path is clear and there is enough room to manoeuvre.

Secure the load.

Use brakes on the wheels.

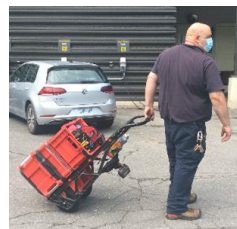
Carts should be well maintained.

Respect the weight limits.

- It is easier to push than to pull. You can generate more force when pushing and you can also see where you are going.



- Pulling is often more arm work.



- Keep your back straight.



- Use your legs, not your back.

