

Lesson one: What are total contact casts

- Total contact casts are worn by people to offload wounds on the bottom of their foot.
- A total contact cast is a custom made, offloading product. This means each total contact cast is made for each individual person and their situation.
- Total contact casts are part of a long term treatment and wound healing plan. A person will also need other products and treatments to heal their wound.
- Total contact casts must be kept dry. A wet total contact cast will change its shape and cause injury to the person's skin.
- Benefits for a person using a total contact cast include:
 - The foot wound is always offloaded and protected
 - Reduced risk of infection due to exposure to dirty areas and germs
 - It is non removable, so there is no need to remember to put it on.

Lesson two: Step one: Select

- Information from the offloading assessment will help you plan:
 - How the person will use their total contact cast
 - If a walking aid and teaching is needed
 - Follow up
 - Referral/s to other services.
- When deciding if a total contact cast is suitable, check the person's other foot for wounds or risk signs.
- Before making a total contact cast **assess**:
 - Where to place the felt padding to protect the persons skin and bones
 - The best ankle position for the persons mobility and comfort
 - If the total contact cast will have a cast shoe or rocker sole.
- If the person has full range of motion, the total contact cast should be made with the person's ankle in 5 degrees of dorsiflexion.
- If a person has a reduced range of motion, the total contact cast should be made as close to 5 degrees of dorsiflexion as possible.
- If the person's foot is in a plantarflexion position of more than 5 degrees, do not provide a total contact cast. Refer the person to see a health professional at a rehabilitation service. This may be a specialist such as an orthotist.
- A person should consider the different benefits of a rocker sole or cast shoe when selecting which option they prefer.
 - A rocker sole does not need to be taken on and off
 - A cast shoe may provide more protection to the total contact cast.

Lesson three: Step two: Fit

- The appropriate order and method to fit a total contact cast is:

1. Prepare the area, materials and equipment, person, wound area, pads and plaster slabs.
 2. Fit the internal layer.
 3. Fit the outer layer.
 4. Select and fit a cast shoe or rocker sole.
 5. Check fit.
 6. Assess and or fit suitable shoes or therapeutic footwear on the other foot.
- It is important that the bottom of the total contact cast is level.
 - The plaster in the cast can take up to 72 hours to set properly. Walking on the total contact cast before it has set can change its shape and damage the cast.
 - Both feet are at high risk of wound development and complications. A person with a total contact cast must always wear suitable shoes or therapeutic footwear on the other foot.
 - If possible, the person's other shoe should have a thick heel to match the height of the cast.

Lesson four: Step three: Use

- The total contact cast is non removable and must be worn all day and night until removed by a health professional.
- It takes up to 72 hours for the total contact cast to set. During this time:
 - Do not walk on the total contact cast. Walking could change the shape.
 - The total contact cast may not be safe or effective if the shape changes.
- The person must **not** try to take the cast off themselves. This can be dangerous and lead to injury.
- Check if the person can walk safely while wearing the total contact cast.
- Teach the person that it is very important to pay attention to any warning signs, because waiting too long to take action could lead to serious complications. They should contact the health service as soon as possible if they:
 - Have any problems or warning signs
 - Feel any concerns or worries about the cast or their foot
 - Think the cast or cast shoe needs repairs, including if the cast gets very wet.

Lesson five: Step four: Follow up

- Follow up is essential for all people who are using a total contact cast. Follow up:
 - Must be done every 7 days
 - More regular follow up may be needed if the person has warning signs that need close monitoring.
- Check the condition of the person, their foot and leg, the total contact cast and cast shoe.

- After the wound has visibly healed, the wound and surrounding skin is still weak and vulnerable to reopening. Especially in the first 2-3 weeks. A total contact cast should continue to be used for two to three weeks after the wound is healed.
- At the end of the follow up, plan follow up actions for short and long term protection.