

# Staff guide: Physical Activity Neurological Cancer



Improves  
cancer-related  
fatigue



Helps  
depression



Helps  
anxiety



Improves sleep  
quality



Improves  
quality of life



Improves  
cardiorespiratory  
fitness



Improves  
cognitive  
function



Improves  
muscle strength



Reduces  
hormone/metabolic  
dysfunction



Helps joint  
pain



Helps body  
composition



Reduces post  
treatment  
complications



Helps  
lymphoedema



Helps  
sexual function

## Minimum Guidelines For Adults



**5 days a week for 30 minutes which increases heart rate and breathing so you can talk but not sing**



**Strength activities 2-3 x a week for large muscle groups at a level where you need a short rest before repeating the activity**



**If over 65 years old, do activities that challenge balance 2 x a week**

- 1. Choose an activity and do it several times a week**
- 2. Increase the amount of time per session**
- 3. Make it more challenging i.e. adding speed, walking up hills, adding a weight**

# Staff guide: Physical Activity

# Neurological Cancer

## Evidence for benefits in neurological cancer

Research has shown people who participate in physical activity have better quality of life and lower brain cancer treatment-associated symptoms.

## People who are already active

Encourage people who have been recently regularly physically active to continue with their physical activity. They may need to adapt to do a little less during 'not so good' phases of treatment.

Refer to physiotherapist for more advice.

## Surgery

**Exercise before and after surgery will help recovery. The amount and type of exercise will depend on symptoms. Seek advice from a physiotherapist if needed.**

### Practical advice:

- **Before surgery:** Walking, running, cycling and strength exercises are great examples of how to build fitness before surgery.
- **Recommendations:** Refer to prehabilitation (if available) or physiotherapist.
- **After surgery:** Take pain control as advised. Start by marching on the spot and then build to regular walks on the ward. Once home, build up daily walks at a pace where you feeling slightly out of breath but are still able to talk.
- **Movement:** Do range of movement exercises as prescribed by the physiotherapy team to support recovery.
- **Strength training:** After 6 weeks, low level strength training can begin. Encourage to start at a lower than normal level and build up slowly.
- **Surgical recommendations:** Follow advice from the surgical team regarding returning to contacting sports or heavy lifting after surgery.

# Staff guide: Physical Activity Neurological Cancer

## Chemotherapy

**Physical activity can help with chemotherapy tolerance and reduce side effects.**

- **Bone health:** Weight-bearing plus impact exercises (stairs, walking, jumping, running) are important for bone health as chemotherapy can cause bone loss.
- **Joint & muscle pain?** Physical activity can help. Warm up and cool down helps the body to prepare and recover from activity.
- **Muscle strength:** Exercises are important as chemotherapy can cause muscle loss.

### Look out for:

- **Cardiotoxicity?** Consider referral to cancer physiotherapist for physical activity support.
- **Chemotherapy-induced peripheral neuropathy (CIPN):** Refer to cancer physiotherapist if CIPN impacts walking, balance, activities of daily living (ADLs) or falls.
  - A stationary bike, arm bike or seated exercises may be safer option.
  - If CIPN is painful, swimming or cycling may be more comfortable.
- **Platelets low:** Physical activity is good, but avoid activities which cause external impact i.e. risk of falls or bruising.
- **Low haemoglobin:** Do multiple short periods of daily physical activities rather than longer and fewer spells. Aim to work to a level where you are able to talk but not sing rather than use a heart rate monitor or smart watches.
- **Neutropenic:** Avoid busy or poorly ventilated gyms or pools during time of neutropenia. Try outdoors or home exercise instead. Avoid high intensity exercise until counts improve.
- **PICC line:**
  - Avoid swimming with PICC line in situ.
  - For strength training refer to physiotherapist for supervised training while PICC line is in situ.



# Staff guide: Physical Activity Neurological Cancer

## Radiotherapy

Regular physical activity can help manage and reduce radiotherapy side effects.

- **Muscle strength:** Exercise is important as radiotherapy can cause loss of muscle strength.

## Practical advice

- **Side effects peak:** Plan lower levels of physical activity for when the side effects peak.
- **Swimming:** is safe during radiotherapy. Do shower & moisturise. If skin is irritated, stop swimming.
- **Clothing:** Wear loose and comfortable clothing to avoid irritation and rubbing.
- **Hydration:** Drink more water than usual - radiotherapy can cause dehydration.
- **Protection:** wear sun protection as required.

## Functional Defecits

There are benefits to being active if functional deficits occur secondary to treatment or the cancer. Refer to physiotherapist to work on an exercise programme.

### For example:

- **Low tone:** Physical activity can help to pump blood and fluids around the body and reduce risk of or actual swelling.
- **Poor balance:** Exercise can help the body to build compensatory strategies to support balance and independence.
- **Reduce function:** Physical activity can help to optimise the body and stay strong.

# Staff guide: Physical Activity

# Neurological Cancer

## Fatigue

**Regular physical activity and exercise is the best treatment for fatigue.**

- As little as 30 minutes a day 3 days a week of moderate physical activity can show benefits.

## Practical advice

- **Short sessions:** Start off with short sessions of physical activity and build up.
- **Avoid 'boom or bust':** On good days do 80% of physical activity, and on 'not so good' days do 40%.
- **Bedrest:** Avoid total sedentary rest.
- **Record:** Keep a diary on how the fatigue responds to different activities.

## Seizures

- **Swimming:** If swimming, seizures need to be well controlled. Go to where there is a life guard and inform them about the risk of seizures.
- **Head position:** Avoid activities in which you are spending long periods with your head lower than your knees i.e. head close to the ground with knees/legs above.
- **Triggers:** Avoid activities/environments which are known to trigger seizures.
- **Safety:** If at high risk of seizures, suggest modifications to increase safety i.e. stationary cycling rather than road cycling or rather than exercising alone, exercise with a friend.

# Staff guide: Physical Activity Neurological Cancer

## Bone Mets/Lesions

Exercise can be safe and is beneficial for improving function, quality of life and reducing risk of falls & fractures.

### Practical advice:

- **Fracture risk:** If at risk of fracture or are concerned, please refer to cancer physiotherapist for guidance.
- **Prevent falls:** Encourage to exercise in a safe environment to prevent falls and support with another person.
- **Stop and seek advice:** If they feel anything uncomfortable or out of the ordinary and speak to their cancer nurse specialist (CNS), cancer doctor or physiotherapist.

\*\*\*if bone mets present in area being exercised please refer to physiotherapist.