Bilateral training involves movement patterns or activities performed with both hands simultaneously, but independently from each other. These activities can be:

1. Symmetrical in-phase (both arms moving in the same direction at the same time e.g. lifting a box, throwing and catching a ball with both hands)

2. Symmetrical anti-phase (arms moving in the opposite direction i.e typing on a computer, climbing a ladder)

3. Asymmetrical (complementary movements i.e. sewing, opening a bottle/jar).

Bilateral training is often combined with other interventions such as electrical stimulation or assistive technology to assist the affected arm to undertake the simultaneous movements.

2017 NATIONAL STROKE FOUNDATION GUIDELINES

**10.1 PHYSICAL ACTIVITY**

**WEAK RECOMMENDATION:** A minimum of three hours a day of scheduled therapy (occupational therapy and physiotherapy) is recommended, ensuring at least two hours of active task practice occurs during this time (Lohse et al. 2014; Schneider et al. 2016).

**CONSENSUS BASED RECOMMENDATION:** Stroke survivors should be encouraged to continue with active task practice outside of scheduled therapy sessions. This could include strategies such as:

- self-directed, independent practice;
- semi-supervised and assisted practice involving family/friends, as appropriate.

**IS THIS SUITABLE FOR THE CLIENT?**

**TARGET IMPAIRMENT**
- motor impairment
- sensory-motor impairment
- neglect (limited evidence)

**STAGE OF RECOVERY**
- appropriate for all stages of recovery.

**SEVERITY OF IMPAIRMENT**
- appropriate for all levels of severity of motor impairment
  * range of bilateral movements may be restricted in patients with severe spasticity or contractures

**WHAT RESOURCES DO I NEED?**

- Everyday items depending on the activities e.g. medium size light ball, jar/bottle, towel, rolling pin etc
- Electrical stimulation machine* (Optional)
- Carer assistance may be needed to set up the tasks and/or to provide assistance to the affected arm to perform some movements.

*If affected arm needs assistance to perform active movement. If using stimulation, please refer to the guidelines offered in The BEST study.

**ADDITIONAL RESOURCES**