



## How to support children with gross motor delay “Age 1 to 3”

### **Children’s gross motor development at stages of 1 to 3 years old**

Gross motor development involves whole body physical activities.

It allows children to move freely in their daily environment and engage in various activities and sports such as walking, running, throwing and jumping. These skills are also related to body awareness, agility, balance and strength.

Generally, children stand and walk holding on around one-year-old, and can walk without support before one and a half years old. As their mobility becomes better, they begin to explore new things everywhere. Although they have occasional trips or bumps, they are willing to trot around, climb, or holding adult's hand to walk stairs.

When children are two, they have better muscle strength and endurance, they are more stable during walking and running. They begin to jump and do single-legged movements such as kicking a ball. By the age of three, they can walk up stairs with alternate feet and down stairs with 2 feet per step.



## What is gross motor delay?

Children with gross motor delay fail to do activities at their age. The development of each child varies. Most children can roll at 5 months, sit without support at 8 months, walk before one and a half years old and able to jump before two and a half years old.

## What is the gross motor development in children?

**List of gross motor development of children age 1 to 1.5 years old:**

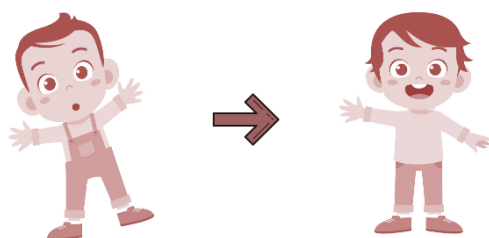
Walk on level ground	<input type="checkbox"/>
Stand and pick up a toy from floor	<input type="checkbox"/>
Climb up and down furniture	<input type="checkbox"/>
Stand up from floor independently	<input type="checkbox"/>
Overhand throw a ball	<input type="checkbox"/>

**Red flag : Unable to crawl / Unable to stand alone / Unable to walk**

### List of gross motor development of children age 1.5 to 2 years old:

Walk backward	<input type="checkbox"/>
Walk up stairs with or without rail support, 2 feet per step	<input type="checkbox"/>
Jump up with or without holding adult's hands	<input type="checkbox"/>
Fast walk	<input type="checkbox"/>
Kick a ball	<input type="checkbox"/>

**Red flag : Unable to walk stably**

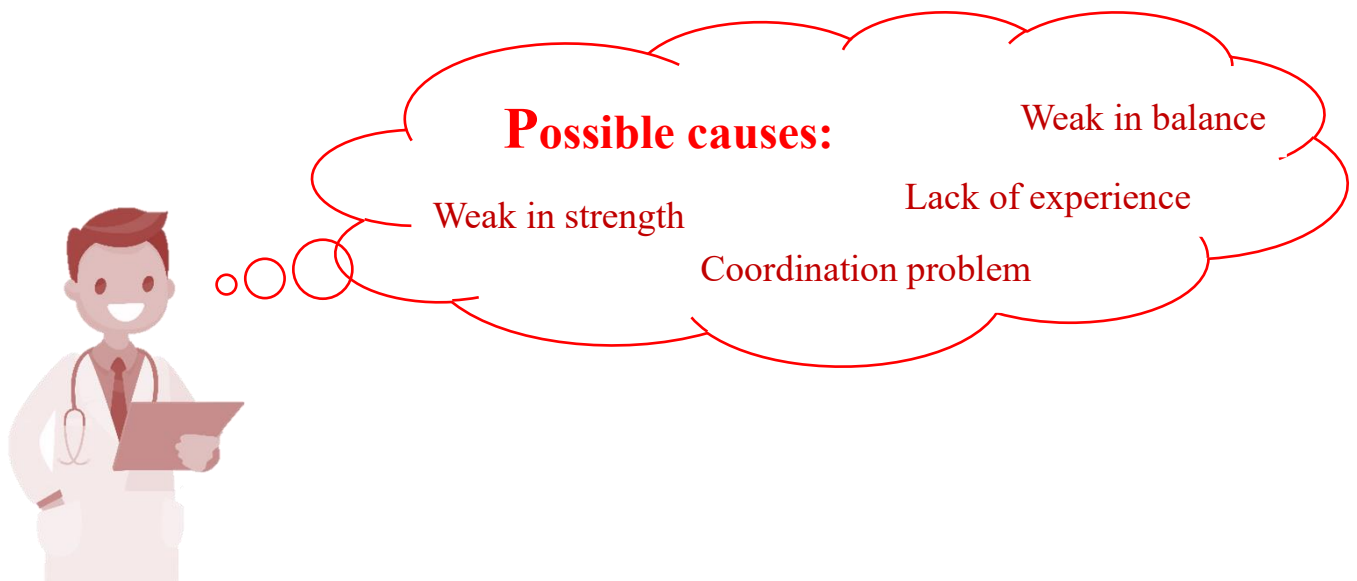


### List of gross motor development of children age 2 to 3 years old:

Walk up stairs with or without rail support, 1 foot per step	<input type="checkbox"/>
Walk down stairs independently, 2 feet per step	<input type="checkbox"/>
Jump forward while maintaining balance	<input type="checkbox"/>
Jump down from a low step without assistance	<input type="checkbox"/>
Attempt to catch a thrown-to ball	<input type="checkbox"/>

**Red flag : Unable to jump with 2 feet**

\*The above developmental lists are for reference only, not a formal developmental evaluation chart



**Children aged 1 to 1.5 years old unable to do what they should do? What exercises and activities can help?**

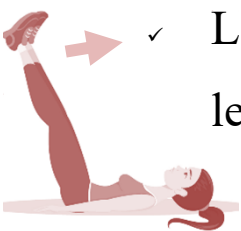
**Recommendations:** \_

● Strengthening the postural / core muscle: \_

- ✓ Sit face to face, hold hands together, rock back and forth.

When the children lean back, ask them to sit up slowly

- ✓ Lie down, parents use toys to attract children to lift their legs up, sweep or kick the toy



- Strengthening the leg muscle:

- ✓ Stand up from stool-sitting with support



- ✓ Stand and pick up toys on floor with support



- ✓ Remove stickers on wall on tip-toes standing, with 1 hand support on wall



- ✓ Bounce on bed or trampoline with music on, 2 hands support by parents

- Improving balance in standing / walking:

- ✓ Stand against the wall or on their own, play with bubbles or toys



- ✓ Stand against the wall or on their own, throw paper balls into basket at different directions



- ✓ Stand and stack tissue paper roll or tissue box



- ✓ Hold one end of the towel with parent, make a small train together and move forward

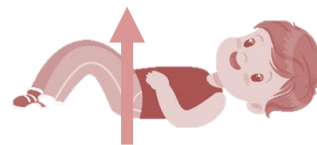


## Children aged 1.5 to 2 years old unable to do what they should do? What exercises and activities can help?

### Recommendations:

- Strengthening the postural / core muscle:

- ✓ Lie on tummy, lift up head and swing arms like swimming
- ✓ Parent hold children at the chest with face down, legs astride around parent's waist, ask the children to lift up head and back like an airplane



- Strengthening the leg muscle:

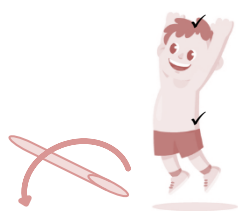
- ✓ Lie on back and knees bent, lift buttock up like a bridge
- ✓ Stand on tip-toes, remove socks from clothespin
- ✓ Jump down from step with 2 hands held
- ✓ Squat down and pick up paper balls from the floor. Can compete with parent, more number wins



- Improving balance in standing / walking:



- ✓ Walk on soft surfaces like mattress

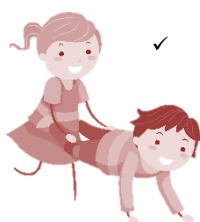


- ✓ Put umbrella flat on ground as hurdle, ask the children to step over



- ✓ Stand and lift up leg to kick water bottle
  - ✓ Stand and put one leg on milk powder can, maintain balance, can play games simultaneously

- Strengthening the arm muscle:



- ✓ Children support their upper body with straight arms while parent holding their waist. To increase difficulty, ask the children to lift up one arm alternatively

- ✓ Hold a tray with both hands, pretend be a waitress and deliver toy foods to parents

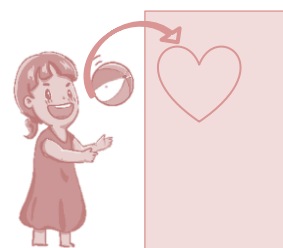


- ✓ Arrange 3 water bottles in a straight line, ask the children to roll a ball to knock down the bottles



- ✓ Parent hold a hanged balloon up above the head of children, ask the children to raise their hands and touch the balloon

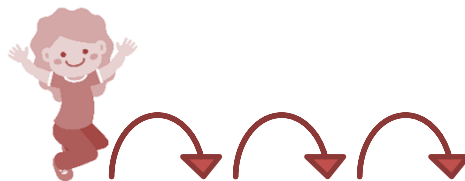
- ✓ Paste a cartoon picture on the wall, ask the children to throw paper balls to the picture



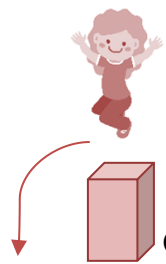
## Children aged 2 to 3 years old unable to do what they should do? What exercises and activities can help?

### Recommendations:

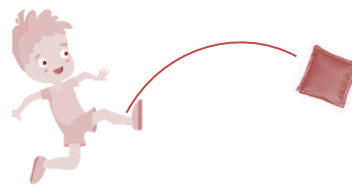
- Improving jumping skills:



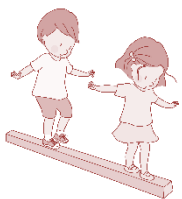
- ✓ Put hands next to ears, jump with both feet like a bunny
- ✓ Jump down from a step independently



- Improving single-leg balance:



- ✓ Put a bean bag or doll on one foot of children, ask them to kick it forward as far as possible
- ✓ Line up books of different thickness on ground to make a balance beam, ask children to walk on it
- ✓ Stand with 1 foot on stool, maintain balance, turn around and transfer small toys from front to back





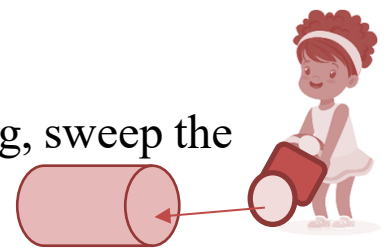
● Strengthening the arm muscle:



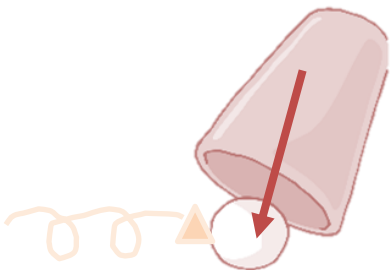
- ✓ Prepare a basket of table tennis balls, use a spoon to transfer them from one place to another

- ✓ Drop a small silk scarf down from height, ask children to catch it with both hands

- ✓ Hold a square mat with both hands in standing, sweep the paper ball on ground into the target



- ✓ Sit face to face with parent, parent rolls table tennis ball to children one by one, ask children to cover it with the cup



## **Precautions and safety issues for exercises:**

- Do some warm-up exercises before training, such as jogging, stepping in place. For children before 2-years old, you can utilize music to do simple rhythmic activities with them;
- The time between meals and exercises should not be too short (not less than 1 hour is recommended)
- Appropriate sports clothes and footwear should be worn, and accessories should not be worn;
- Ensure that the venue is not slippery, has enough space for activities, and no obstacles around to avoid accident;
- Do the exercises with your children;
- 5-10 repetitions for each set of exercises, repeat 2-3 cycles
- If the child has any discomfort, you should stop and let them rest

## Any other suggestions?

- It is difficult for young children to have enough attention to join activities in the community. Practising the physical activities that suggested by therapist at home are recommended.
- Praise children's effort and own improvement, never compare with other children.
- In addition to physical training at home, you can also take children to the playground for physical activities, such as playing on slides, swinging, cycling, jumping and throwing balls etc., helping them to develop regular physical activity habit.



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