

## Physical Impairment

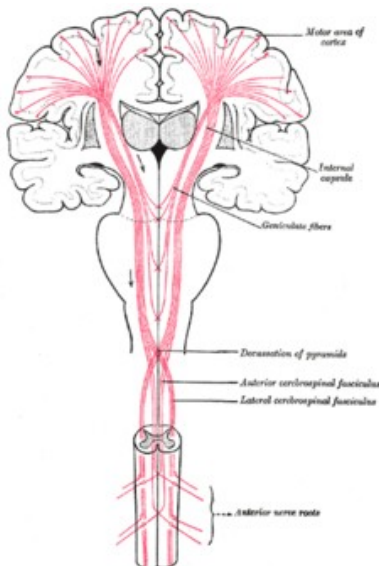
### In-class material

1. Read the article about cerebral palsy and fill in the missing words:

abnormality	affect	affected	brain	decreased	diplegia
hemiplegia	increased	intellectual disabilities		legs	quadriplegia
mild cerebral palsy	severe cerebral palsy		slow	symptoms	tongue
types	writing	5 -10 percent	10-20 percent		70 - 80 percent

### Cerebral Palsy

Cerebral palsy is a group of disorders that \_\_\_\_\_ a person's ability to move and to maintain balance. It is **due to** a non-progressive brain \_\_\_\_\_. People with cerebral palsy have damage to the part of the \_\_\_\_\_ that controls muscle tone. It is what lets you keep your body in a certain posture or position. For example, it lets you sit up straight and keep your head up. Changes in muscle tone let you move. For example, to bring your hand to your face, the tone in your biceps muscle at the front of your arm must **increase** while the tone in the triceps muscle at the back of your arm must **decrease**. The \_\_\_\_\_ in different muscle groups must be balanced for you to move smoothly.



There are four main \_\_\_\_\_ of cerebral palsy - spastic, athetoid, ataxic, and mixed.

- **Spastic:** People with spastic cerebral palsy have \_\_\_\_\_ muscle tone. Their muscles are stiff. Their movements can be **awkward**. About \_\_\_\_\_ of people with cerebral palsy have spasticity. Spastic cerebral palsy is usually described further by what parts of the body are \_\_\_\_\_. In spastic \_\_\_\_\_, the main

effect is found in both legs. In spastic \_\_\_\_\_, one side of the person's body is affected. Spastic \_\_\_\_\_ affects a person's whole body (face, trunk, legs, and arms).

- **Athetoid or dyskinetic:** People with athetoid cerebral palsy have \_\_\_\_\_ movements that they cannot control. The movements usually affect person's hands, arms, feet, and \_\_\_\_\_. Sometimes the face and \_\_\_\_\_ are affected and the person has a hard time talking. Muscle tone can change from day to day and can vary even during a single day. About \_\_\_\_\_ of people with cerebral palsy have the athetoid form.
- **Ataxic:** People with ataxic cerebral palsy have problems mainly with balance. They might be **unsteady** when they walk. They might have a hard time with quick movements or movements that need a lot of control, like \_\_\_\_\_. They might have a hard time controlling their hands or arms when they **reach for** something. People with ataxic cerebral palsy can have increased or \_\_\_\_\_ muscle tone. Only about \_\_\_\_\_ of people with cerebral palsy have ataxia.
- **Mixed:** Some people have more than one type of cerebral palsy. The most common pattern is spasticity plus athetoid movements.

The \_\_\_\_\_ of cerebral palsy vary from person to person. They can also change over time. A person with \_\_\_\_\_ might not be able to walk and might need lifelong care. A person with \_\_\_\_\_, on the other hand, might walk a little awkwardly, but might not need any special help.

People with cerebral palsy can have other disabilities as well. Examples of these conditions include seizure disorders, vision impairment, hearing loss, and \_\_\_\_\_.

(adapted from <http://www.cdc.gov/ncbddd/dd/cp2.htm>)

## 2. Now read a short article about poliomyelitis and get ready to answer the questions below the article.

### Poliomyelitis

Poliomyelitis (polio) is a highly infectious disease caused by a virus that invades the nervous system.

Up to 95% of persons infected with polio will have no symptoms. About 4 - 8 percent of infected persons have minor symptoms such as fever, **fatigue**, **nausea**, headache, flu-like symptoms, stiffness in the neck and back, and pain in the **limbs** which often **resolves** completely. Fewer than one percent of polio cases result in permanent paralysis of the limbs (usually the legs). Of those



paralyzed, 5-10% die when the paralysis strikes the respiratory muscles. The virus is transmitted by the contact with an infected person.

There are two types of vaccine that can prevent polio: inactivated polio vaccine (IPV) and oral polio vaccine (OPV). IPV has been used in the United States since 2000; however OPV is still used throughout much of the world.

(adapted from <http://www.cdc.gov/vaccines/vpd-vac/polio/in-short-both.htm>)

### **Questions:**

- 1. What is the difference between cerebral palsy and polio? Why are they often confused?**
- 2. What are the main types of cerebral palsy? What are the major differences between them?**
- 3. What are the typical symptoms of polio?**
- 4. How can a severe cerebral palsy or polio affect your life?**