

# **Keeping Polio Bodies Warm**

**Reprinted from Post Polio Solutions – PPN WA Inc.**

## **COLD INTOLERANCE**

It is well known that cold intolerance is a common feature of surviving polio. It is also well documented that this can become an increasing problem as we get older. This appears to happen in at least 41% of polio people. Why does this occur and what can we do about it?

First, if we go to some basic physiology, looking at the action of muscles, we can see that muscular action is necessary to return venous blood up the leg to the heart. This is called the skeletal muscle pump. When the muscle contracts blood is squeezed up the vein and one-way valves stop it flowing backwards. Where there is muscle wastage from polio this caution is less effective. If we stand or sit still without moving, blood collects in our feet and lower legs causing swelling and a drop in blood pressure (even fainting).

Climatic temperature also influences size of blood vessels. Heat opens them up allowing more blood to reach the skin surface areas giving a redder hot look, also sweating and evaporation that helps to cool the body. Cold closes the vessels restricting the flow to capillaries to conserve heat giving a paler appearance to the skin. This function is controlled by the sympathetic nervous system. In polios the nerves that control this sympathetic function may have been damaged by polio thus not allowing them to shut off the blood supply when it is cold. So precious heat is lost, the cold decreases what muscle activity there is and the “purple cold foot/leg syndrome” appears. In fact cold constricts all nerves and muscles. 75% of your muscle strength is lost when the temperature drops to below 20 degrees C.

## **WHAT CAN WE DO ABOUT IT**

Obviously the first requirement is to get some warmth back. Creating a warm environment achieves this. Warm yourself up by external heat, i.e. warm bath/shower/foot bath; electric blanket or just getting into bed. Most polios limbs are warm once they have been in bed long enough. The secret is to keep them warm when you get up. Polypropylene is a silk-like plastic material that holds heat in but allows sweating out. Wrap up well to keep heat in. Socks, leggings, long johns, track pants made of this and similar materials help. Be warned – you must be warm first, when you put them on.

Cold sensitivity can also be increased if your thyroid gland is not working well. Poor thyroid function will make you sluggish, tired and result in a tendency to put on weight. If our magnesium is low we get cold extremities too.

