

## Children Diagnosed With Cancer: Late Effects of Cancer Treatment

Today, because of advances in treatment, more than 8 out of 10 children treated for cancer survive at least 5 years, and most of these children are cured. But the treatments that help these children survive their cancer can also cause health problems later on.

Most treatment side effects appear during or just after treatment and go away a short time later. But some problems may never go away or may only show up months or years after treatment. These problems are called late effects.

### Everyone is different

Each child getting cancer treatment is unique. The treatments used vary from child to child and from one type of cancer to another. Late effects will also vary, and depend mostly on the type of treatment used and the doses given.

### Chemotherapy

Chemotherapy (chemo) is the use of drugs to kill cancer cells. But chemo drugs can damage normal cells, too, which can cause short-term and long-term side effects. Short-term effects can be nausea or hair loss.

### Radiation therapy

Radiation treatment uses high-energy rays (such as x-rays) to kill cancer cells and shrink tumours. The radiation may come from outside the body (external radiation) or from radioactive materials placed into or right next to the tumour (internal or implant radiation).

### Surgery

Surgery is an important part of treatment for many cancers. As with other types of treatment, the possible long-term effects of surgery depend on a number of different factors.

In some cases, surgery may be fairly minor and may leave nothing more than a scar. In other cases, it may need to be more extensive and require removing part or all of an organ, or even a limb. Doctors do their best to limit the effects of surgery by striking a balance between removing all of the cancer and taking out as little healthy body tissue as possible.

### Late effects of childhood brain cancer treatment

Just as the treatment of childhood cancer requires a very specialized approach, so does aftercare and watching for late effects. Here are just a few of the more common possible late effects of cancer treatment.

- Learning problems
- Problems with memory and attention
- Poor hand-eye coordination
- Behaviour problems
- Frequent headaches
- Poor appetite
- Cold intolerance
- Delayed growth
- Trouble sleeping