



## **CT Scans and Radiation Risk – Frequently Asked Questions**

### **Is there an increased risk of cancer from medical radiation, especially CT scans?**

While no one can point to a single individual and say that their cancer was caused by medical radiation, there is increasingly strong evidence that exposures to radiation levels found during CT scans may slightly increase the risk of future cancer. The estimated risk for developing cancer is variable, but for every 1000 children undergoing a single CT scan of the abdomen there will be 1 cancer caused by CT (risk of 1 in 1,000). This needs to be interpreted against the risk of developing cancer over one's lifetime. For those same 1,000 children, 200 will eventually develop cancer regardless of exposure to medical radiation (risk of 1 in 5). So the additional risk is very small, but the best available research indicates that there is in fact some risk.

### **If my doctor orders a CT scan, should I let my child have it?**

Like any medical test, the beneficial information gained from the test should outweigh the risk of having the test performed. CT is a very powerful and valuable imaging technique that can provide important and even life-saving information. Sometimes, however, imaging tests like ultrasound and magnetic resonance imaging (MRI) can provide the same information as CT but not expose your child to any radiation. Your referring doctor has determined that a CT is the best choice for your child's current situation.

### **What steps do you take to reduce radiation to my child?**

Many facilities that perform CT scans on adults do not use radiation dose reduction techniques when scanning children. Here at Nationwide Children's Hospital, we specialize in caring for children. All of our CT protocols are designed specifically for the needs and protection of children. Our CT protocols use reduced radiation doses determined by the age and size of the child, and are limited to the area of specific medical concern. Our CT radiation doses are 50% or less of those delivered in typical facilities. All of our CT scans are performed by accredited CT technologists, and are overseen and interpreted by board-certified radiologists with subspecialty training and certification in pediatric radiology.

### **Who should I talk to about my concerns?**

Any discussion should start with your child's physician. They have determined that a CT is needed to better evaluate your child's condition. If they have a question as to whether or not a different study might be suitable, our radiology physicians are available for consultation with your doctor. If you still have questions or concerns, please ask to speak with one of our CT technologists or radiologists.