

Severe Combined Immunodeficiency (SCID)

General Overview

Q. What is SCID?

A. Severe Combined Immunodeficiency (SCID – or “bubble boy disease”) is a group of treatable, congenital disorders that occur when the immune system does not function properly. The result is that the body cannot fight infections. If left untreated, SCID *will* cause life-threatening illness.

Q. What happens to the immune system of a child with SCID?

A. The immune system is the body’s defense against infection and disease. A working immune system normally produces T-cells that enable the body to fight common infections. A baby with SCID can’t fight these infections because they are missing T-cells and other related cells (hence the term “combined” immunodeficiency).

* Note: although SCID is a disorder of the immune system, it is not related to HIV/AIDS in any way.

Q. What are the effects of having SCID if it is not treated?

A. If untreated, children with SCID are highly susceptible to recurrent life-threatening infections. Despite some initial protection that comes from the mom, an infant may develop diarrhea in the first weeks of life, which could lead to death. Thrush, a fungal infection of the mouth, is often the first sign of SCID.

Q. What is the treatment for SCID?

A. SCID can be cured by bone marrow or stem cell transplant, or it can be treated with life-extending therapies. The transplant procedure should be performed within the first three months of life for best results. The effects of SCID are reversed when the transplanted stem cells, or bone marrow, produce working T-cells and create a functioning immune system.

Q. Is there only one form of SCID?

A. No, there are several different forms of SCID that all result in the lack of a working immune system and require treatment.

Q. Why would a child have SCID?

A. SCID is an inherited disorder that results when babies receive non-working genes from their parents that prevent normal T-cell development and causes a non-working immune system. For more information about how SCID is inherited, contact your health care provider or a genetic counselor.

Q. How common is SCID?

A. It is estimated that about one in every 50,000 babies in Washington State is born with SCID.

For more information about SCID, please see the NBS Treatable Disorders section of our website: www.doh.wa.gov/nbs.



Washington State Department of Health • Newborn Screening Program
1610 NE 150th Street, K17-9 • Shoreline, WA 98155-0729 • www.doh.wa.gov/nbs
Phone: (206) 418-5410 • FAX: (206) 418-5415 • E-mail: NBS.Prog@doh.wa.gov

