

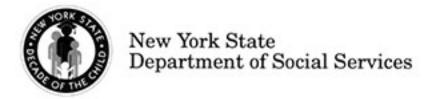
# HIV/AIDS and CHILDREN

Answers for Caregivers





## HIV/AIDS and CHILDREN Answers for Caregivers



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## **Table of Contents**

Acknowledgements v
Preface viii
Introduction to HIV
(Human Immunodeficiency Virus)3
The Immune System and HIV
Who Can Get HIV?
How a Deficient Immune System Works 11
Progress of HIV Infection
Stage One
Stage Two
Stage Three
Stage Four
What Is AIDS?
Group A: Constitutional Disease 16
Group B: Neurologic Disease 16
Group C: Opportunistic Infections
Common Opportunistic Infections in Children 18
Group D: Malignancies
Group E: Other Conditions
HIV Transmission and Prevention 23
How Is HIV Spread?
Sharing Needles
Sexual Activity
Blood Transfusion
Breast Feeding
Other Body Fluids
Perinatal Transmission
How Can HIV Be Prevented?
Blood
Needles
Semen and Vaginal Secretions
Breast Milk
How HIV Is Not Spread

#### **Preface**

Children with HIV and AIDS need what other children need: love, nurturing, protection, and support. They need a loving, stable family in which they can live a full life.

Although a cure for HIV has not been found, children with HIV and AIDS are living longer. Recent medical advances have made this possible. Loving care within a family improves the quality of children's lives. Providing that care can be demanding, stressful, and even overwhelming at times. It is also rewarding, because you, the child's caregiver, can really make a difference.

Caregivers tell us they want information about HIV, AIDS and children so they can better meet the demands of caregiving. Whether you are a natural parent, relative or the foster or adoptive parent of a child infected by HIV or diagnosed with AIDS, this booklet will give you that information.

Look at the Table of Contents and leaf through the booklet in order to learn the topics it covers. Make notes in the margins. Jot down questions you may have. Underline words or phrases you want to refer to again. (The Glossary has a pronunciation key and definitions for some hard words you may find.)

This booklet may raise questions or issues for you. Be sure to get answers from a trusted professional who knows about HIV and AIDS in children. To find the phone number of your local or state AIDS hotline, use the section "Where to Go for Help" beginning on page 113. Hotlines are excellent for answering your questions or for referring you to an expert who can help.

If you are thinking about caring for a child infected with HIV, or diagnosed with AIDS, this booklet may help you make a decision. It will give you a better idea of what to expect. Your role as caregiver is a very important one, and this booklet can make it easier for you to do this challenging work. All who have worked together to make this handbook want you to love and enjoy the child with HIV or AIDS in your family.

## Introduction to HIV (Human Immunodeficiency Virus)

Disease is caused when tiny organisms, too small to be seen by the naked eye, enter our bodies. The world is full of these invaders. Some get into our bodies through the air we breathe, and some through our food. Still others get in through our blood.

These invading organisms, called antigens, fall broadly into four groups: bacterium, fungus, virus and parasite. Bacteria, fungi, viruses and parasites are all around us. When they invade our bodies, our bodies fight back.

Our bodies consist of several carefully designed systems. These systems, when working properly, allow us to live our lives without a lot of conscious thought about them. The muscular, skeletal, respiratory, digestive, nervous and immune systems are examples of these body systems.

All of our body's systems work together but each has a different function. The function of the immune system is to protect us from the invaders which cause disease. When the immune system is not functioning properly, the body is left open to disease.

When an invading agent called antigen enters the body, we say that we have become infected by that antigen. Infection can result in a condition as simple as a cold or as complicated as AIDS.

The immune system is complex. Knowing the few cells described here and how they function is not all there is to know, but knowing them we can begin to understand how the immune system works.

#### FIGURE 1

#### HOW THE IMMUNE SYSTEM WORKS

Step One: An organism invades the body and

gets into the blood.

Step Two: A macrophage detects the organism

and triggers the T4 cells.

Step Three: T4 cells call out B cells.

Step Four: B-cells produce antibody. Antibody

weakens or destroys the invading

organism.

Step Five: T8 cells end the defense process.

The process of fending off infection by any invading organism - bacteria, virus, fungus or parasite - is essentially the same. The invader enters the body, the macrophage initiates the immune response, and the T4 cell orchestrates it. The T4 cell signals the B cell, which makes antibody to the invader. The T8 cell shuts down the whole operation when the process is complete. (See Figure 1.)

If the immune system's response is strong enough, the invading organism is eliminated before the person gets sick. If not, the person becomes ill. In either case, the antibody, designed by the B cell to fight the illness, remains in the blood to protect the individual should the invader return at another time.

It is this process that is put in place when a child is immunized against childhood viruses. A dead or weakened virus is placed in the child's body and the child's immune system responds by producing an antibody to kill the virus. The macrophage "sees" the virus, the T4 cell "sees" and "signals" the B cell. The B cell makes antibody to disable the invader and the T8 cell shuts the response down when the job is complete.

Different viruses, fungi, bacteria and parasites attack different systems of the body. Polio, for example, is caused by a virus which attacks the muscle system.

### The Immune System and HIV

Human Immunodeficiency Virus (HIV) is the name of the virus which causes Acquired Immune Deficiency Syndrome, AIDS. The virus is so named because:

- 1. It is a virus.
- 2. It attacks human beings.
- It disables the body's <u>immune</u> system by attacking T4 cells.

AIDS (Acquired Immune Deficiency Syndrome) needs to be explained carefully because the name itself includes a combination of terms that are not easily defined.

Syndrome refers to a collection of symptoms or disorders rather than a specific disease. Acquired refers to the fact that the immune system has become disabled by an invading organism, in this case, HIV.

When HIV enters the body, the immune system starts to work as it would with any invader. The macrophage "sees" the virus, and the T4 cell starts to orchestrate the immune system's assault. It signals the B cells. The B cell

#### FIGURE 2

#### HIV AND THE IMMUNE SYSTEM

Step One:

HIV invades the body and gets into

the blood.

Step Two:

A macrophage detects HIV.

Step Three:

T4 cells call out B cells.

Step Four:

B-cells produce antibodies to HIV. Antibodies to HIV have no effect on

the virus. Antibodies to HIV remain

in the blood.

Step Five:

HIV attacks other cells in the brain, nervous system, and immune system

that contain the CD4 molecule.

sights the virus and makes antibody to destroy it. When the job seems to be done, the T8 cell shuts down the immune response. (See Figure 2.)

## **Counseling and Assistance:**

Bronx AIDS Services 1-800-334-3477
Brooklyn AIDS Task Force 1-718-783-0883
AIDS Center of Queens County 1-718-896-2500
Gay Men's Health Crisis (Manhattan) 1-212-807-7660
Long Island Association for AIDS Care 1-516-385-AIDS(2437)
Mid-Hudson Valley AIDS Task Force 1-800-992-1442
AIDS Council of Northeastern NY (Albany) 1-518-445-AIDS(2437)
AIDS Rochester 1-716-442-2200
Central NY AIDS Task Force (Syracuse) 1-315-475-AIDS(2437)
Southern Tier AIDS Program (Johnson City)1-607-723-6520
AIDS Community Services of Western NY (Buffalo)

### AIDS Hotlines and Other Important Numbers

By calling these telephone numbers you can get general information about HIV/AIDS. They may also have information about HIV counseling sites, referrals, housing, and financial assistance.

National AIDS Hotline 1-800-342-AIDS(2437)
National AIDS Hotline (Spanish) 1-800-344-SIDA(7432)
NYS Department of Health 1-800-541-AIDS(2437)
Gay Men's Health Crisis 1-212-807-6655
HRA/NYC AIDS Service Line 1-212-645-7070
New York University 1-212-998-5566
Albert Einstein Hospital 1-718-904-2000
Leake & Watts AIDS Foster Care Helpline 1-914-423-5273
National Teen AIDS Hotline 1-800-234-TEEN(8336)
Hearing Impaired Hotline TDD 1-800-243-7889



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