## YOU CAN PREVENT MAC

(DISSEMINATED MYCOBACTERIUM AVIUM COMPLEX DISEASE)

A GUIDE FOR PEOPLE WITH HIV INFECTION





U.S. Department of Health and Human Services
Public Health Service



- About 20 to 30 percent of people with AIDS get MAC disease.
- Adults usually don't get MAC disease until their T-cell count drops below 50, but children can get it earlier.
- You can get MAC disease more than once.
- There are several drugs you can take to prevent MAC disease.

# What is *Mycobacterium avium* complex disease?

Mycobacterium avium [MY-co-bak-TEER-ee-um A-vee-um] complex, also known as "MAC," is the name of a group of germs. These germs can infect people who are living with HIV. Adults with HIV usually don't get MAC disease until their T-cell count drops below 50. Because MAC disease occurs later in the course of HIV infection, it usually is not the first sickness a person with HIV gets. Most people with HIV have already been diagnosed with AIDS before they get MAC. About 20 to 30 percent of people with AIDS get MAC disease.



## Can children get MAC disease?

Yes. The risk of MAC for children with HIV goes up as their T-cell count goes down, just as it does for adults. However, children who get MAC disease usually get it before their T-cell count falls to 50. Children with HIV usually have higher T-cell counts than adults with HIV.



## What are the symptoms of MAC disease?

Although MAC usually infects persons through their lungs or intestines, it spreads quickly through the bloodstream, causing widespread or "disseminated" disease. People with disseminated MAC disease can have fever, night sweats, weight loss, abdominal pain, tiredness, and diarrhea.

# How is MAC disease diagnosed?

MAC disease is diagnosed by laboratory tests that can identify the MAC germ in samples of blood, bone marrow, or tissue.

## How do people get MAC disease?

People with AIDS probably get MAC disease through normal contact with air, food, and water. MAC disease has been found in many types of animals, including birds, chickens, pigs, cows, rabbits, and dogs. MAC germs can be found in most sources of drinking water, including treated water systems, and in dirt and household dust. MAC disease does not seem to be spread from one person to another.

### How can I avoid MAC disease?

Because MAC germs are found in food, water, and soil, there is no easy way to avoid them. However, there are drugs that can prevent MAC germs from causing disease.



## When should I get treatment to prevent MAC disease?

Because MAC disease occurs in people with very low T-cell counts, you should not get treatment to prevent MAC disease until your T-cell count is below 50. Your doctor will tell you when you or your child need to begin treatment for preventing MAC disease.

## What drugs are used to prevent MAC?

Drugs which can reduce your chances of getting MAC disease are

- clarithromycin [kla-REE-thro-MY-sin]
- azithromycin [a-ZEE-thro-MY-sin]
- rifabutin [rif-a-BU-tin]

Ask your doctor whether you should take one of these drugs.

# Can the drugs used to prevent MAC disease cause side effects?

Yes. Rifabutin can cause eye irritation. If you are taking rifabutin or other drugs to prevent MAC, see your doctor regularly and report any side effects.

# If I have already had MAC disease, can I get it again?

Yes. If you have had MAC disease, continue to take drugs to treat and prevent further MAC disease. MAC disease is most commonly treated with a combination of clarithromycin and ethambutol [eth-AM-bu-tol], with or without rifabutin.

## For more information, call:

### Free referrals and information:

CDC National AIDS Hotline

English (800) 342-AIDS (2437)

[24 hours/day]

Spanish (800) 344-SIDA (7432)

(HIV and STDs)
[8 am-2 am EST]

TTY (800) 243-7889

(Deaf and Hard of Hearing)

[Monday-Friday 10 am-10 pm EST]

### Free materials:

CDC National Prevention Information Network

(800) 458-5231

1-301-562-1098 (International)

P.O. Box 6003

Rockville, MD 20849-6003

### Free HIV/AIDS treatment information:

AIDS Treatment Information Service (ATIS) (800) 448-0440

Project Inform

(800) 822-7422

### **Drugs undergoing clinical trials:**

AIDS Clinical Trials Information Service (ACTIS) (800) 874-2572

### Social security benefits:

Social Security Administration (800) 772-1213

(You also may request a personal earnings and benefit estimate statement to help you estimate the retirement, disability, and survivor benefits payable on your Social Security record.)

To obtain information on the Child Health Insurance Program, please call: 1-877-KIDS NOW (1-877-543-7669)

CDC Division of HIV/AIDS Internet address: http://www.cdc.gov/hiv

### Other brochures in this series include:

Living with HIV/AIDS

Preventing Infections from Pets

Preventing Infections When you Travel

Safe Food and Water

You can Prevent Cryptosporidiosis

You can Prevent CMV

You can Prevent PCP in Adults and Adolescents

You can Prevent PCP in Children

You can Prevent Toxoplasmosis

You can Prevent Tuberculosis

<sup>\*</sup>Use of trade names does not imply endorsement by the United States Department of Health and Human Services.