



ANTIRETROVIRAL DRUG RESISTANCE

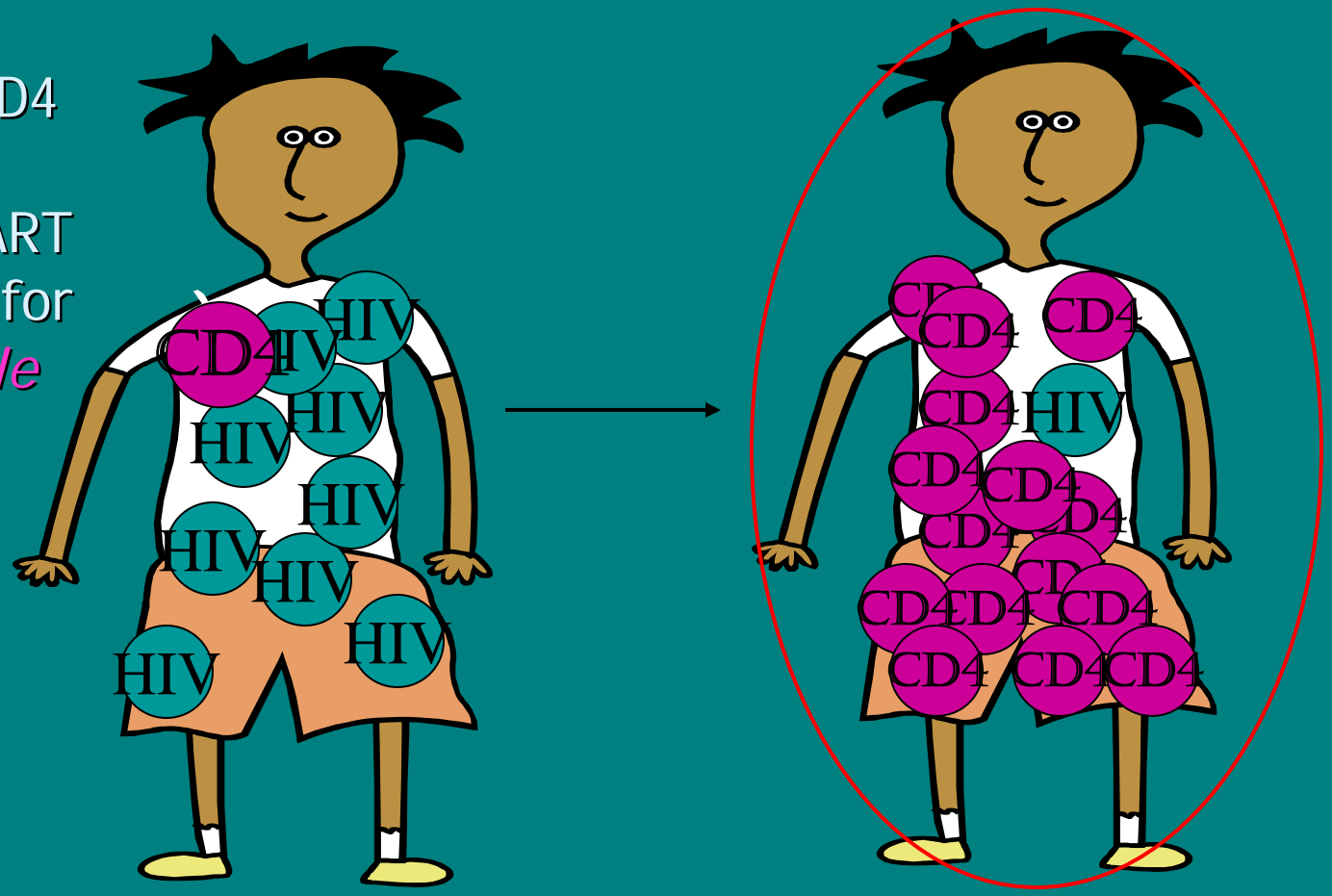
ACTION Project
IHV - Nigeria

OBJECTIVES

1. What is drug resistance?
2. What are the implications of drug resistance?
3. How does resistance happen?
4. What can help me be adherent?

To keep you healthy and feeling well by

- Keeping your viral load **LOW**
- Keeping your CD4 cell count **HIGH**
- Allowing your ART regimen to work for *as long as possible*





1. WHAT IS RESISTANCE?

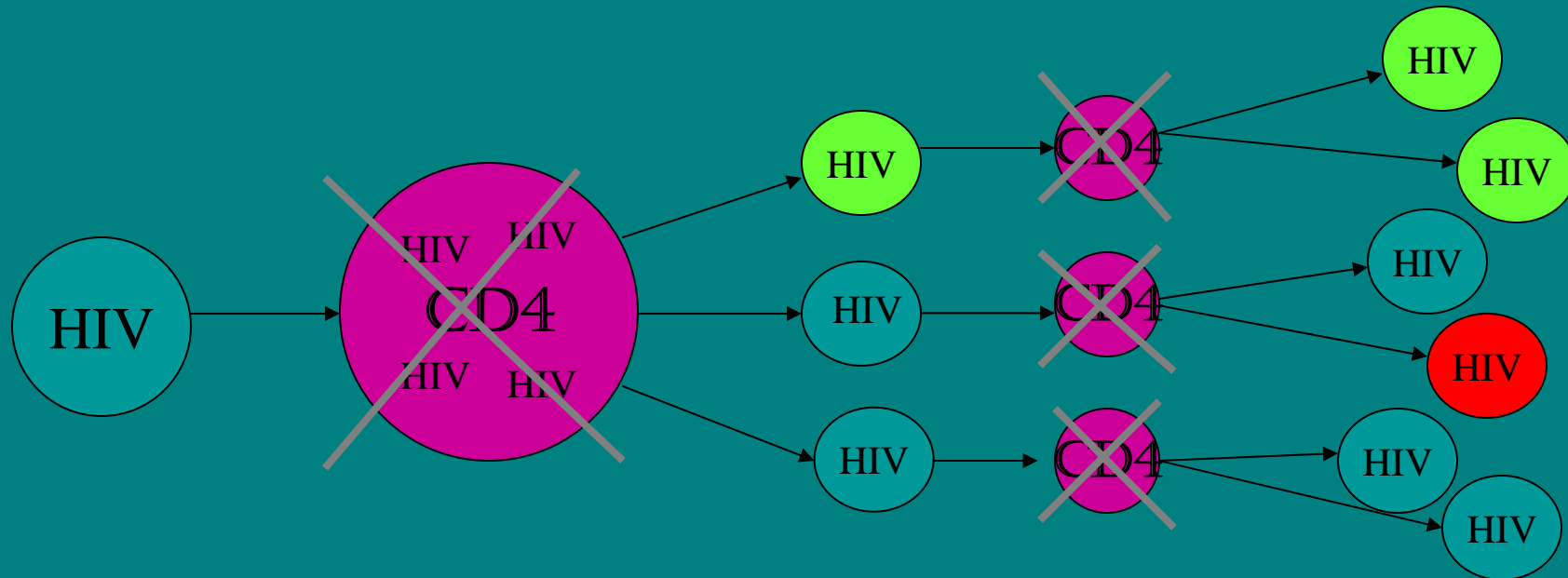


- HIV is like a colony of cockroaches. Resistance is when they keep getting sprayed but don't die.
- Resistance is similar to our past treatment of malaria. We used to treat malaria with chloroquine, but now it's not as effective.

1. WHAT IS HIV DRUG RESISTANCE?

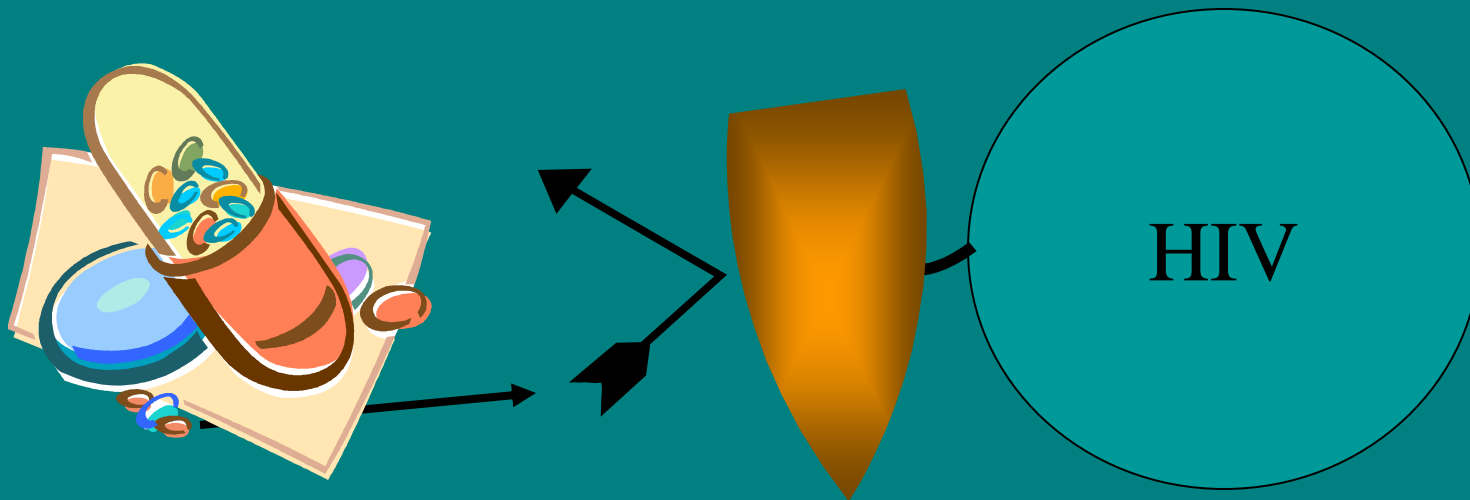
HIV reproduces and mutates every day, continuously and consistently

1,000,000,000 - 10,000,000,000 viruses produced in a day
Approximately 1,000,000 - 10,000,000 mutations in a day!



1. WHAT IS HIV DRUG RESISTANCE?

- Some “mutations” or changes can make your drugs stop working
- When your drugs stop working, the virus will be able to reproduce more freely—even if you still take your drugs
- Then you need to *switch* to a different ARV



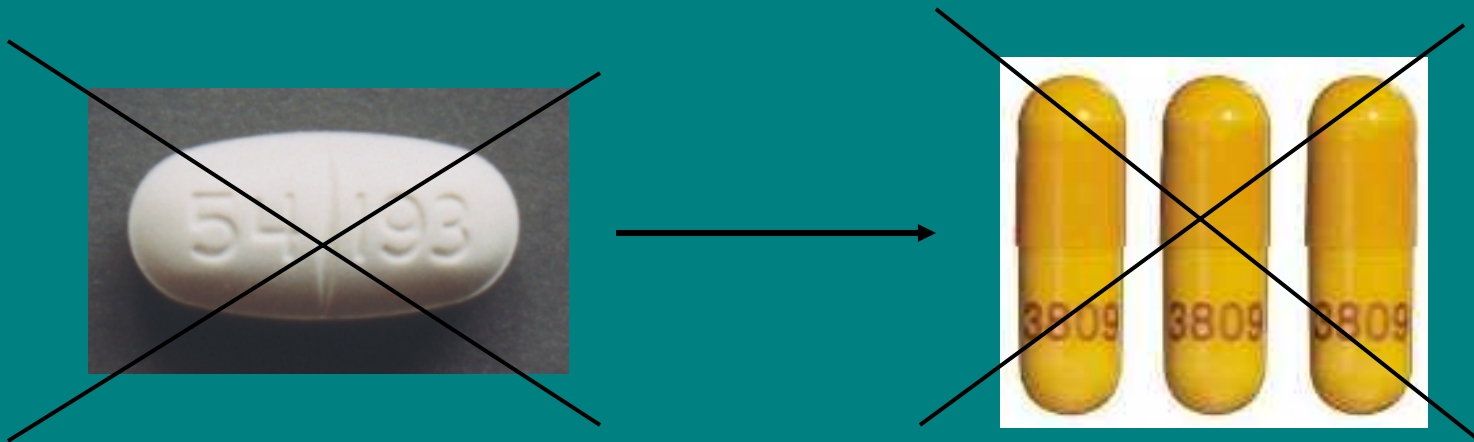
1. WHAT IS HIV DRUG RESISTANCE?

- Resistance usually **develops gradually** over time.
- As resistance develops, your ARVs will not work **as well**.
- Eventually your ARVs won't work at all, and you'll have to switch to new medication.



2. IMPLICATIONS OF CROSS-RESISTANCE?

- Some changes can make other ARVs not work, too—even if you've never taken those drugs
- For example, if you are resistant to nevirapine (NVP), efavirenz (EFV) will also not work
- Once resistance develops, it never goes away





CAN A RESISTANT VIRUS BE TRANSMITTED?



YES!

A person with resistant virus can transmit it to another person.

If that person needs to take ARVs, they may not work.

So, even if both members of a couple already have HIV, they should still use condoms.



3. HOW DOES RESISTANCE HAPPEN?

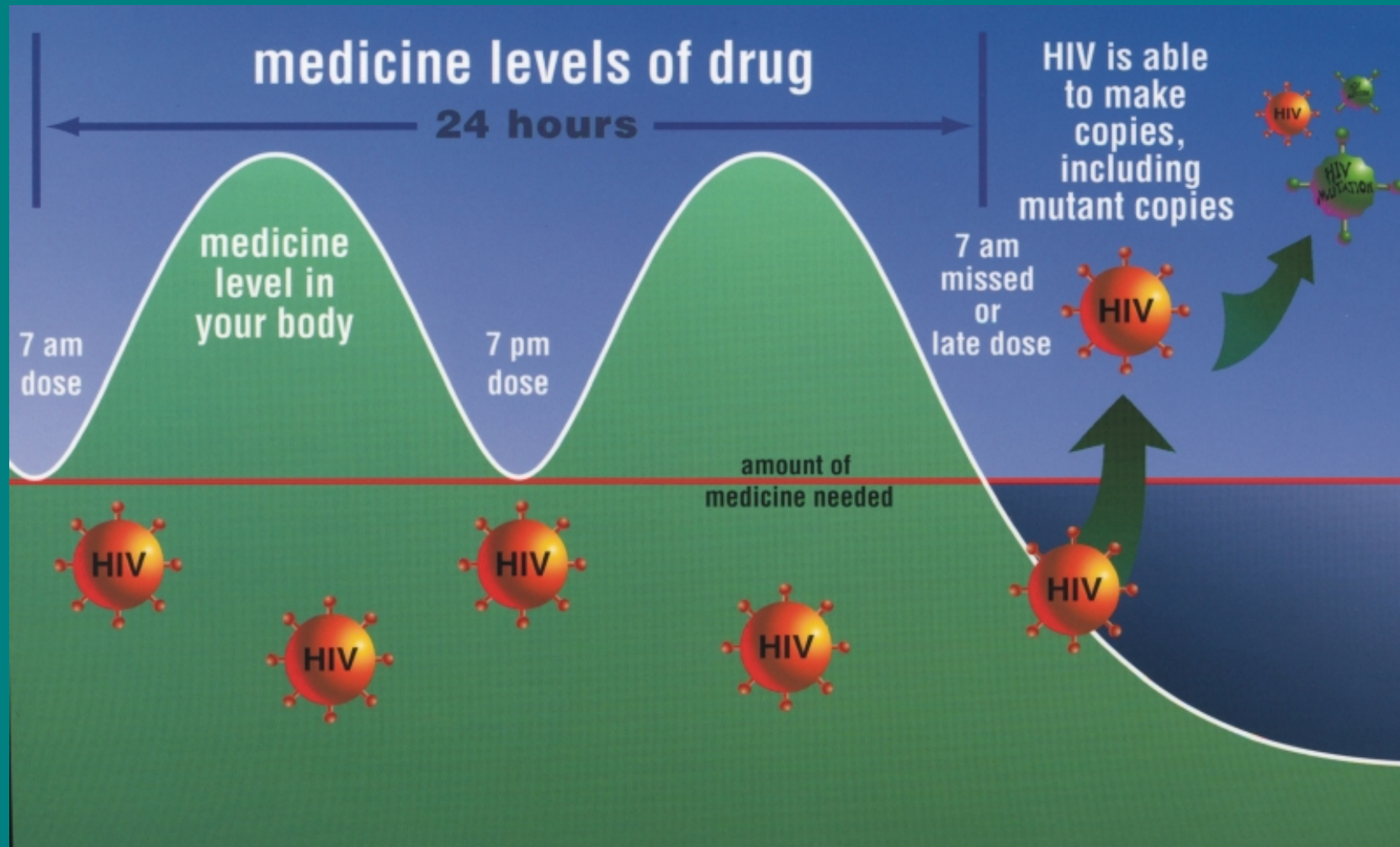
MOST RESISTANCE IS A RESULT OF NON-ADHERENCE

- Good adherence makes your drugs work for a long time
- Lack of adherence allows the virus to overcome your drugs
- Even missing few doses can quickly make the virus grow

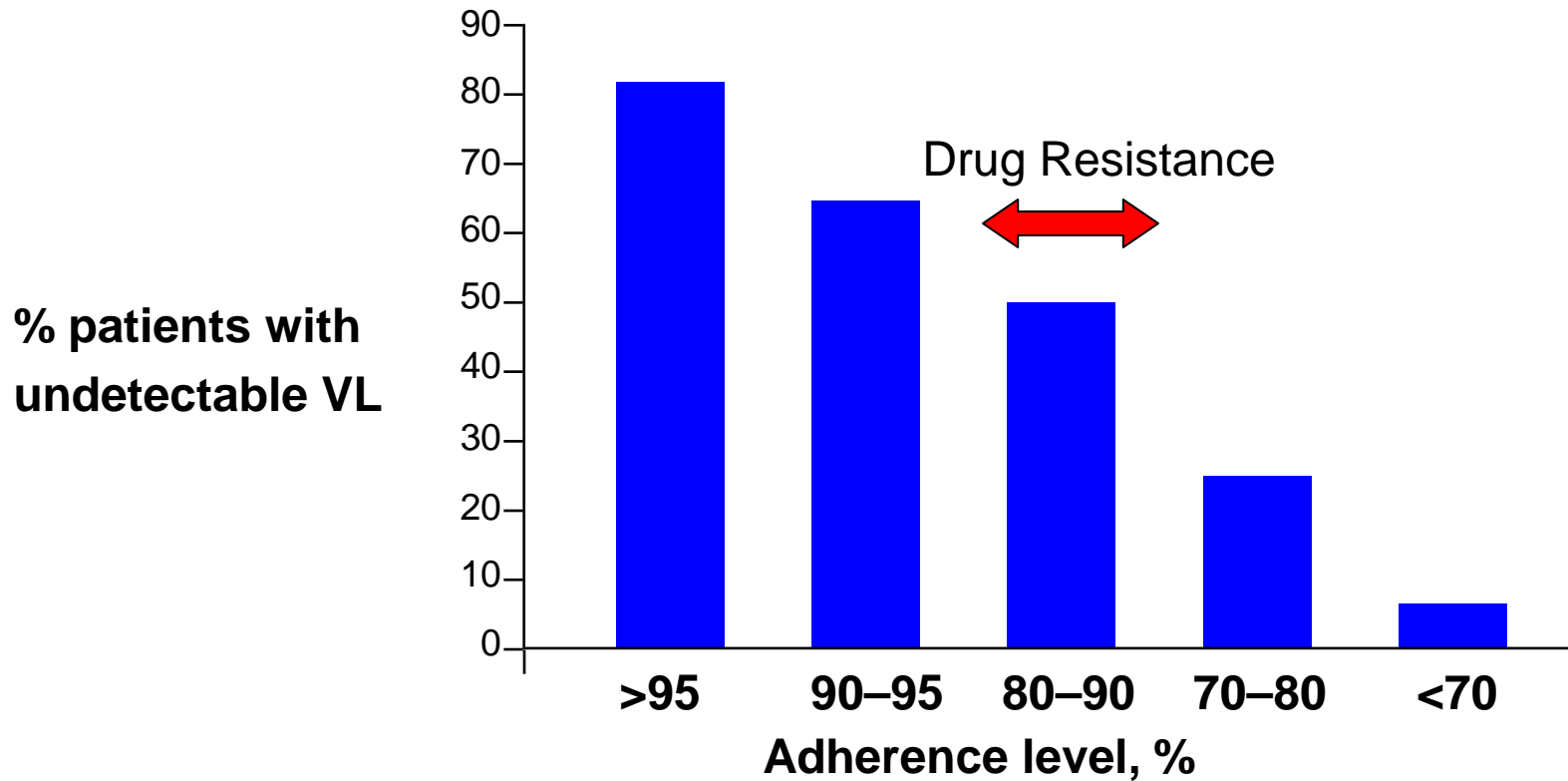


3. HOW DOES RESISTANCE HAPPEN?

YOUR BODY NEEDS A CERTAIN AMOUNT OF MEDICINE TO SUPPRESS THE VIRUS



3. HOW DOES RESISTANCE HAPPEN?



Poor adherence leads to ARV ineffectiveness, faster progression to AIDS and development of resistance.



WHAT IS 95% ADHERENCE?



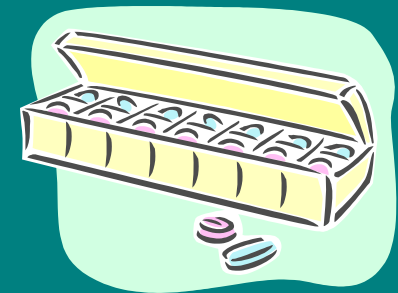
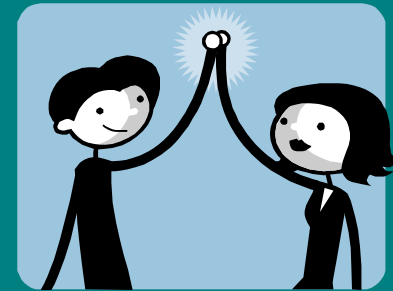
95% or greater adherence is needed to prevent emergence of resistance and maximize viral suppression.

IF YOU MISS YOUR DRUGS FOR EVEN TWO DAYS IN A MONTH, YOU ARE NOT 95% ADHERENT.



4. WHAT CAN HELP ME BE ADHERENT?

- Find a treatment partner
- Use a pillbox and/or alarm
- Link your medication time to a routine activity (prayer, the news, etc)
- Make it a habit
- Talk to your care team about other strategies that may help





QUESTIONS?



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June 2006