

Updates on HIV/AIDS treatment and prevention

Current recommended first-line HAART regimen

- Sustiva + (Combivir or Truvada)
- Kaletra + Combivir
- Kaletra + Retrovir + Emtriva

Recently approved HIV meds

- Atripla (Efavirenz/Tenofovir/FTC) 7/12/06
- TMC114 (darunavir, Prezista) 6/23/06
- Generic AZT (zidovudine, Retrovir) 9/17/05
- Tipranavir (Aptivus) 6/22/05
- Generic ddl (didanosine, Videx) 12/03/04
- Epzicom (abacavir/3TC, Kivexa) 8/02/04
- Truvada (tenofovir/FTC) 8/02/04

New drugs in development

- TMC125
 - Non-nucleoside Reverse Transcriptase Inhibitors
 - treating HIV resistant to other NNRTIs.
- MK-0518
 - Integrase Inhibitors
 - integrase, a protein that HIV needs to enter human cells and make more copies of itself

ARV classes

- Nucleoside/nucleotide analogue reverse transcriptase inhibitor - NRTI
- Non-nucleoside reverse transcriptase inhibitor - NNRTI
- Protease inhibitor – PI
- Fusion inhibitor
- Integrase inhibitor

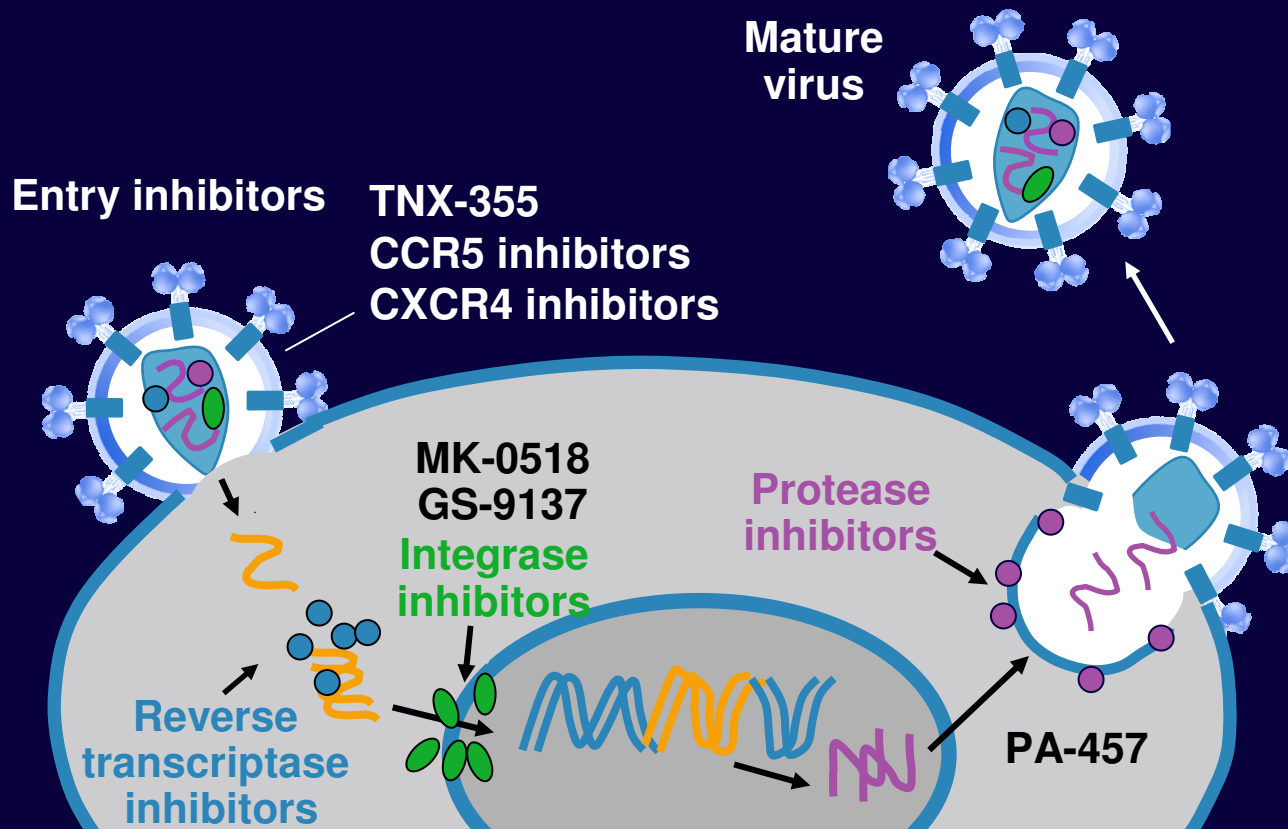


CLINICAL CARE OPTIONS
HIV

New Drugs for Treatment-Experienced Patients

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Novel Antiretrovirals in Development: Current Classes







CLINICAL CARE OPTIONS
HIV

Technological Advances in HIV Prevention

Willard Cates, Jr., MD, MPH

Institute for Family Health

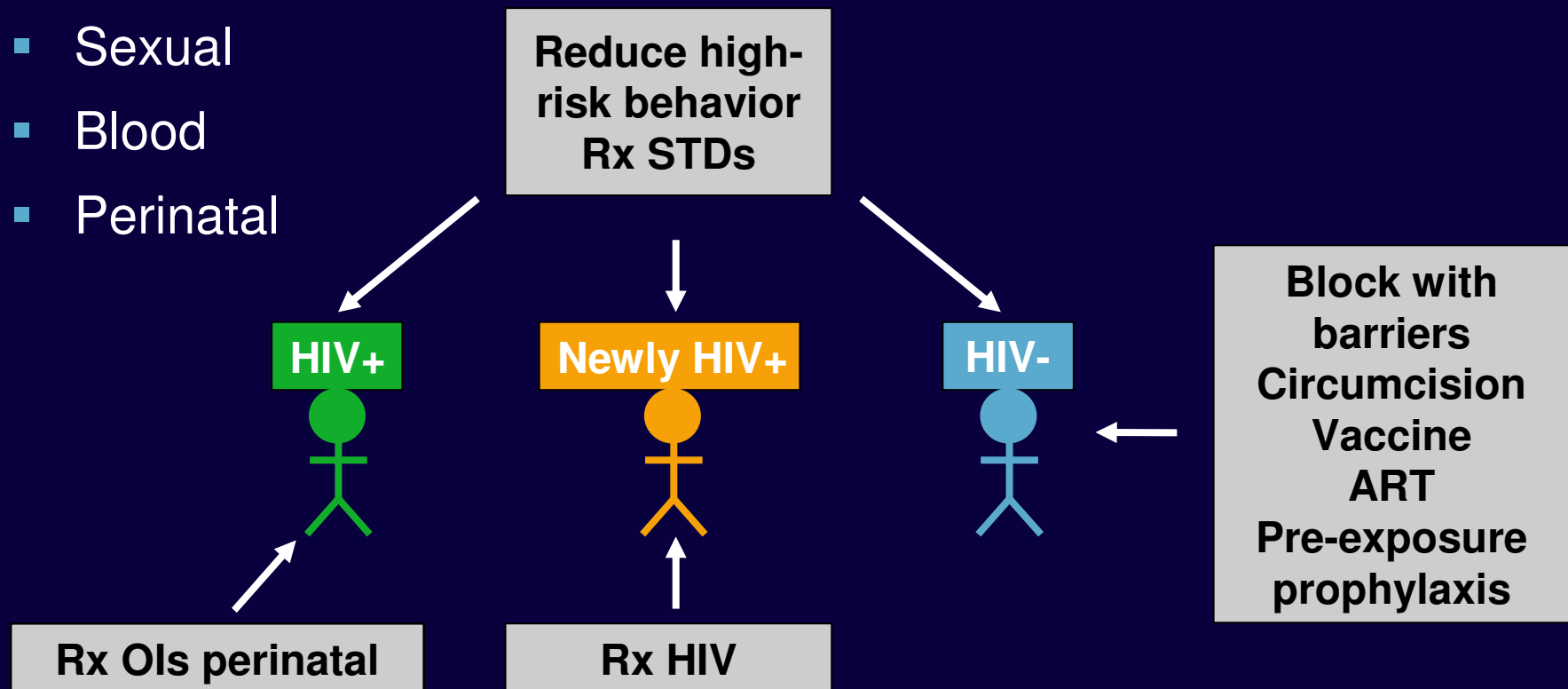
Family Health International

Durham, California

Interventions to Prevent HIV

Routes

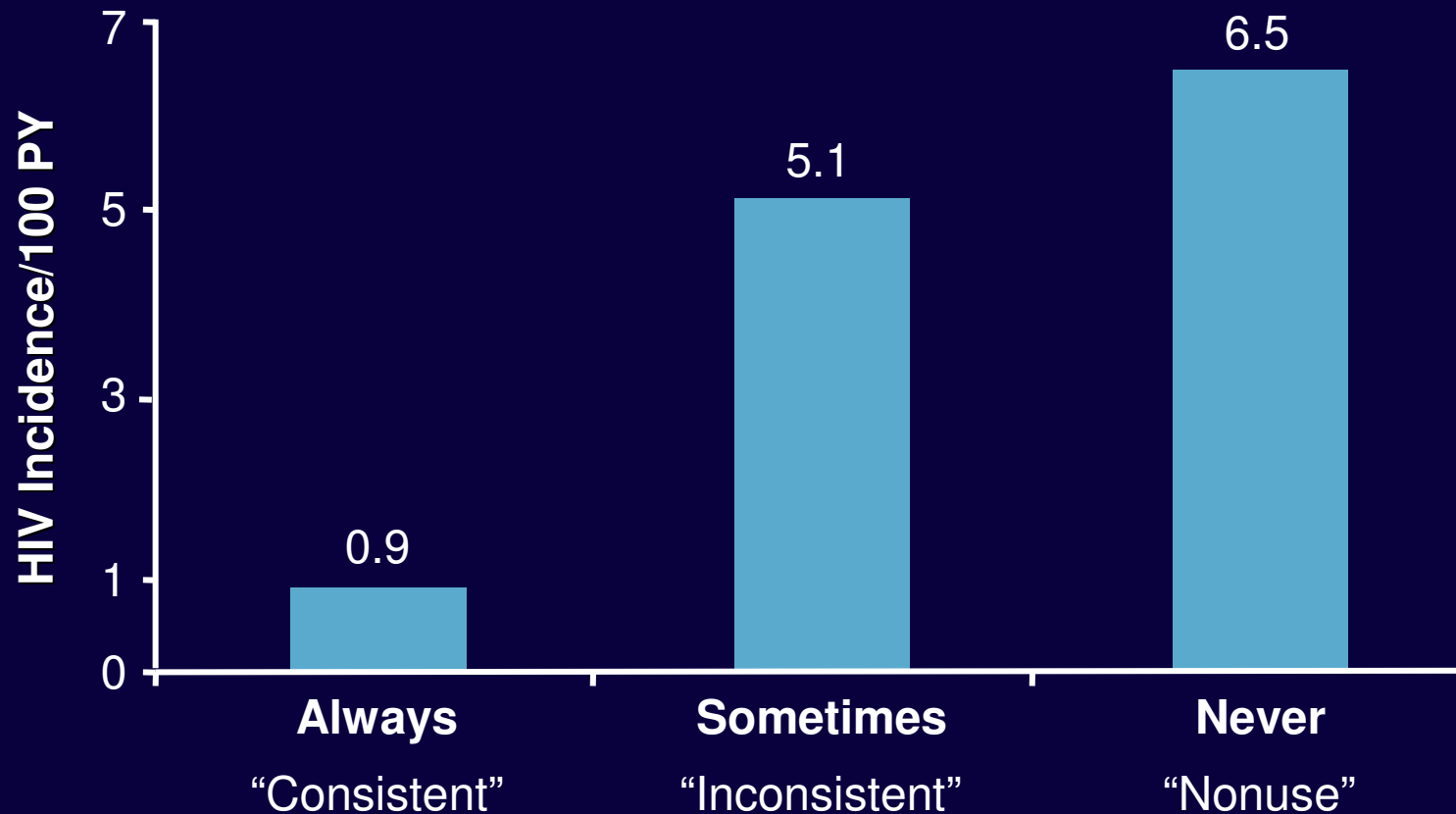
- Sexual
- Blood
- Perinatal



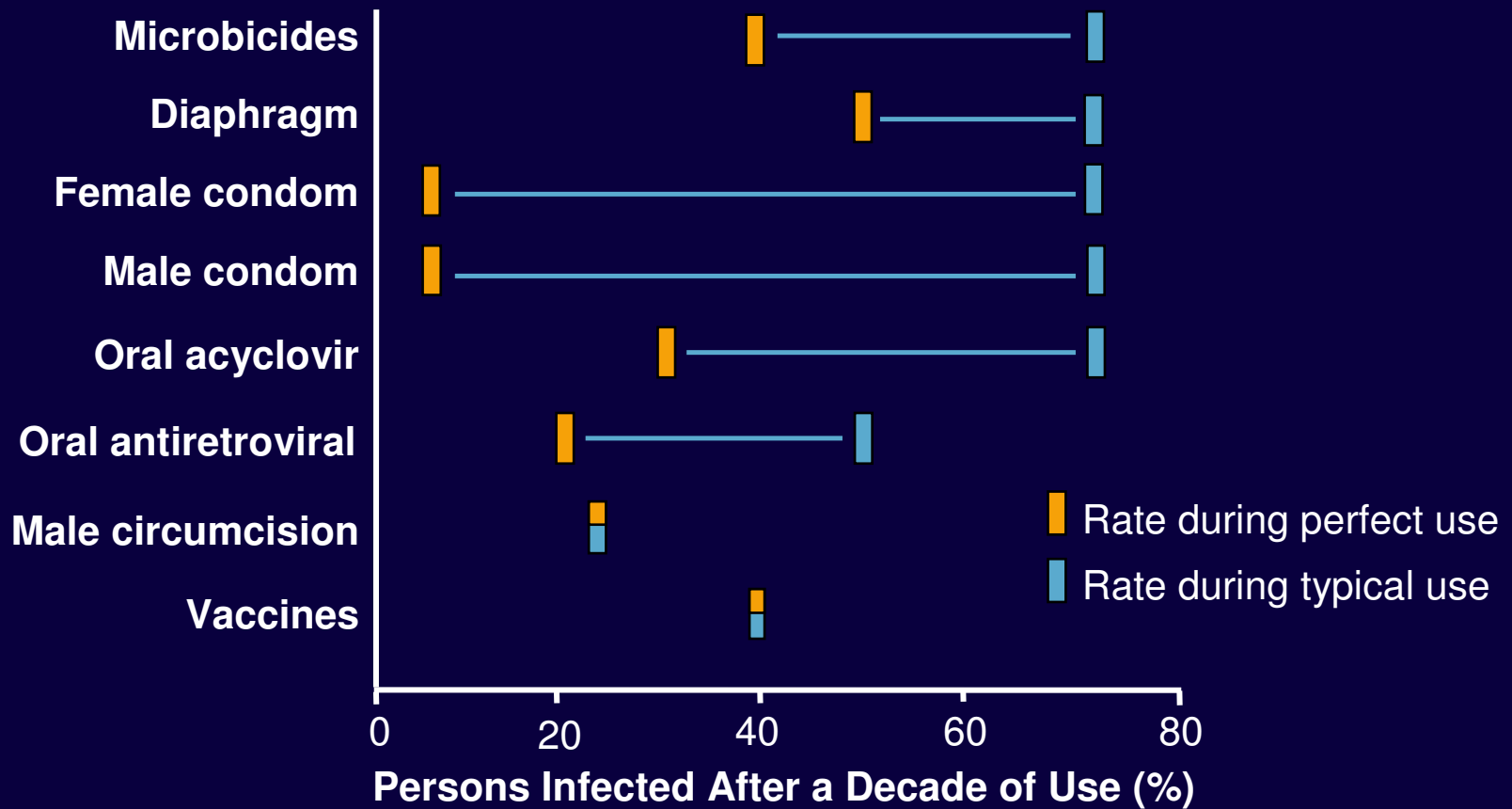
Efficacy and Effectiveness: 2 Levels

| | Efficacy | Effectiveness |
|------------|------------------------------|---------------|
| Individual | Perfect use | Typical use |
| Population | Randomized controlled trials | Scale-up |

HIV Transmission Risk by Consistency of Condom Use, Discordant Couples



HIV Prevention Tools: Infection Rates



Topical Microbicides: 2nd-Generation Products

| Viral Target | Microbicide |
|-----------------------|----------------------------------|
| Free virus | <i>Savvy</i> <i>BufferGel</i> |
| Fusion/Attachment | PRO2000 Cellulose sulfate |
| Reverse transcription | Tenofovir |

Potential Interventions in Acute HIV to Simultaneously Slow HIV Spread

| Pathway | Intervention |
|------------|--|
| Biologic | Antiretroviral to lower viral load |
| Behavioral | Counseling to promote safer behaviors |
| Social | Structural interruption of network processes |

Future Challenges

- Study participant care/treatment
- Standards of preventive care
- Community engagement
- Disinhibition
- Product interruption
- Additional study sites