# The Context of Biomedical Prevention for Youth

Michelle Lally, MD, MSc

June 18, 2009

Consultation on the Inclusion of Adolescents in HIV

Prevention Clinical Trials

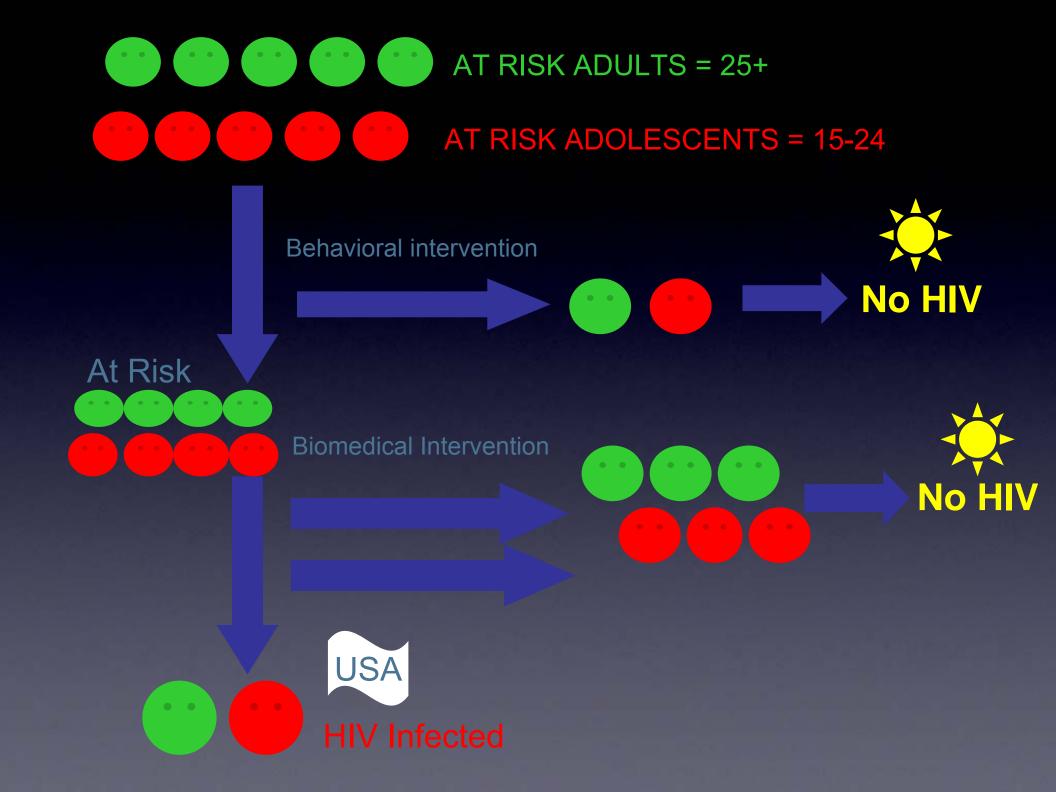
## What we know: Adolescents and HIV prevention

- Adolescents in the US and worldwide are a priority population for HIV prevention.
- Adolescents make prevention decisions in a complex risk environment.
- One size does not fill all for effective prevention (not all youth at equal risk).
- Youth need prevention options:



### Why include biomedical prevention for adolescents?

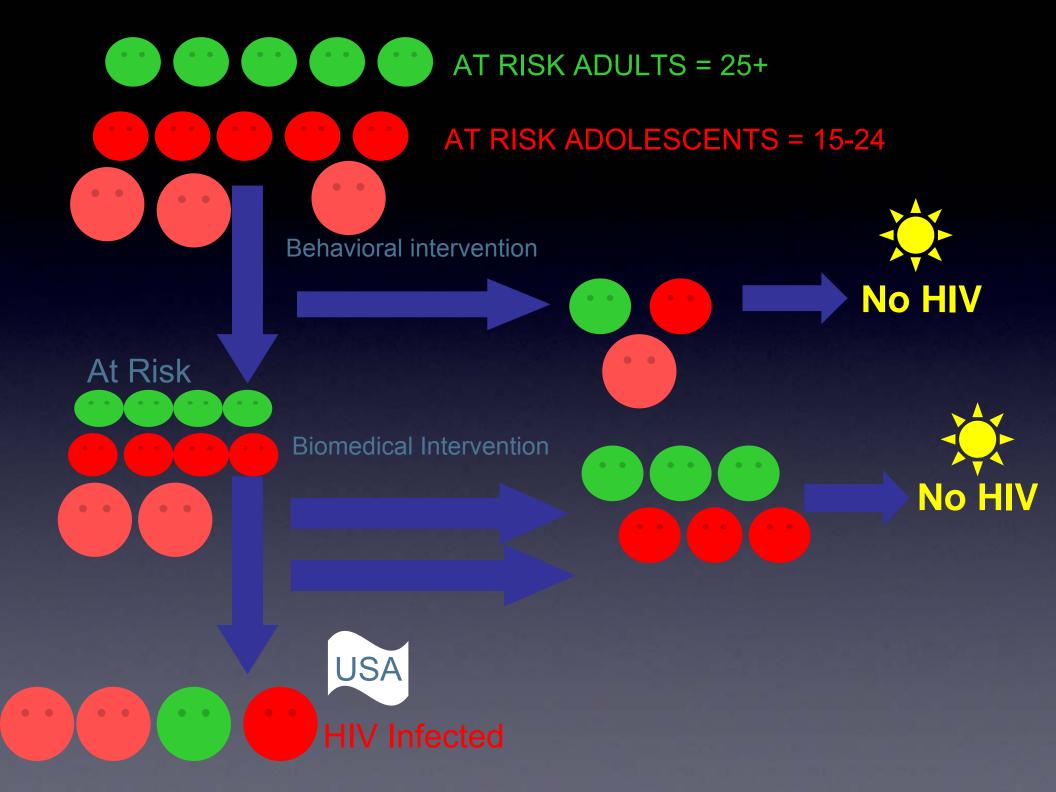
- Delivery of a safe, effective product to adolescents before sexual debut is best hope to curb epidemic.
- Current behavioral, community, and structural interventions are limited in reach and efficacy.
- Biomedical prevention may catch adolescents who do not participate in or fully benefit from current behavioral programs.
  - Vaccines, microbicides, PrEP, circumcision.
  - HPV vaccine as example of an effective biomedical intervention.



≥ 18



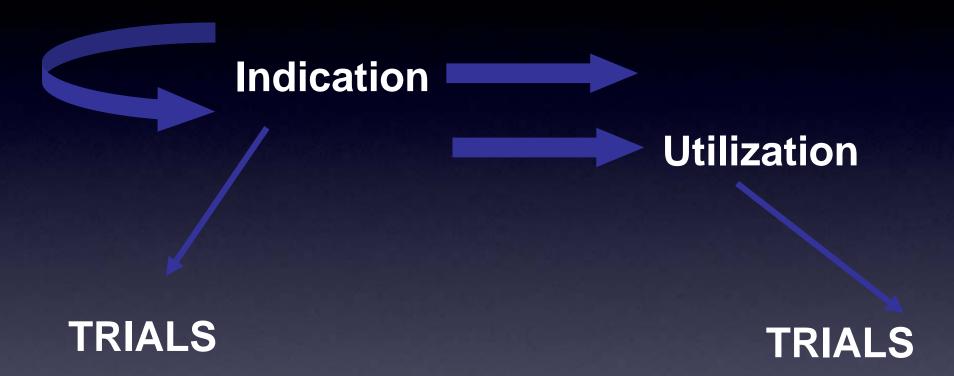
AT RISK ADOLESCENTS = 15-24



#### Goals and Planning

- General Goal: Develop safe, efficacious biomedical interventions that prevent HIV infection.
  - -- May be vaccines, microbicides, or PrEP
- Specific Goal: Newly licensed biomedical interventions will have an indication for use in at risk adolescents.
- How do we prepare so we can provide ready dissemination to adolescents under 18 ?

#### **Biomedical Intervention**



Utilization TRIALS Indication TRIALS USA At Risk 15-17 years left out 18+? Go To TRIAL

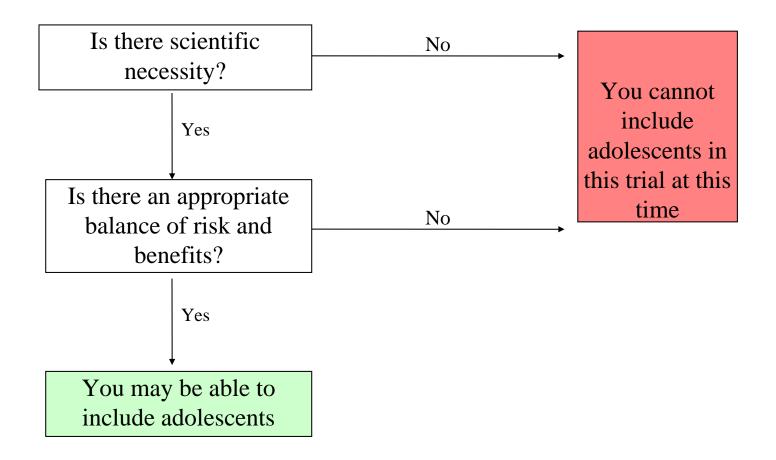
#### Laws in the US

- CFR codifies the regulations
- More recent laws recognize the importance of studying younger populations

### What are the CFR regulations? Appropriate balance of risk and benefit

	Prospect of Direct Benefit	No Direct Benefit
Minimal Risk	A	В
More than Minimal Risk	C	

#### When can we include adolescents in clinical trials?



#### Question 1: Scientific Necessity?

- Is there a scientific question we need answered to safely and effectively apply product to adolescents?
- Can data be extrapolated from adults?
  - If yes, no necessity.
- Is there regulatory necessity?
  - Do we need to include adolescents in this study to get an indication on the initial license? If so, how do we navigate the regulatory pathways?

### Question 2: Adequate Risk and Benefit Ratio?

- What are the risks and benefits to adolescents for their participation?
- Do they understand them?
- Do we need to demonstrate direct benefit specific to adolescents to justify more than minimal risk? Define 'prospect of direct benefit'?
- Need for consensus among legal, ethical, and physiological perspectives.

- Reassons to Great at the action of the second of the secon
- Immunogenicity
- Not yet acquired HSV or other factors
- Practical: Adolescents 15-17 will need biomedical interventions too.
- Ethical: Protect vulnerable populations: Excluding adolescents because of potential risks may cause more harm than good.

### Making connections between Vaccines, Microbicides, and PrEP.

- Despite differences in method, biomedical interventions will have common barriers to enrolling adolescents in trials.
- Different biomedical interventions will have in **common need to evaluate** safety, efficacy, acceptability, feasibility, and delivery.
- Work with regulatory bodies to get direction, identify scientific questions, and anticipate required data for approval/licensure in youth.
- Collaboratively address operational issues, informed consent, recruitment and retention, behavioral disinhibition, adequate prevention counseling, and other legal and ethical issues.
- Include behavioral interventionists in planning to optimize willingness to participate and uptake.

