

The potential benefits of expanded male circumcision programs in Africa: Predicting the population-level impact on heterosexual HIV transmission in Soweto

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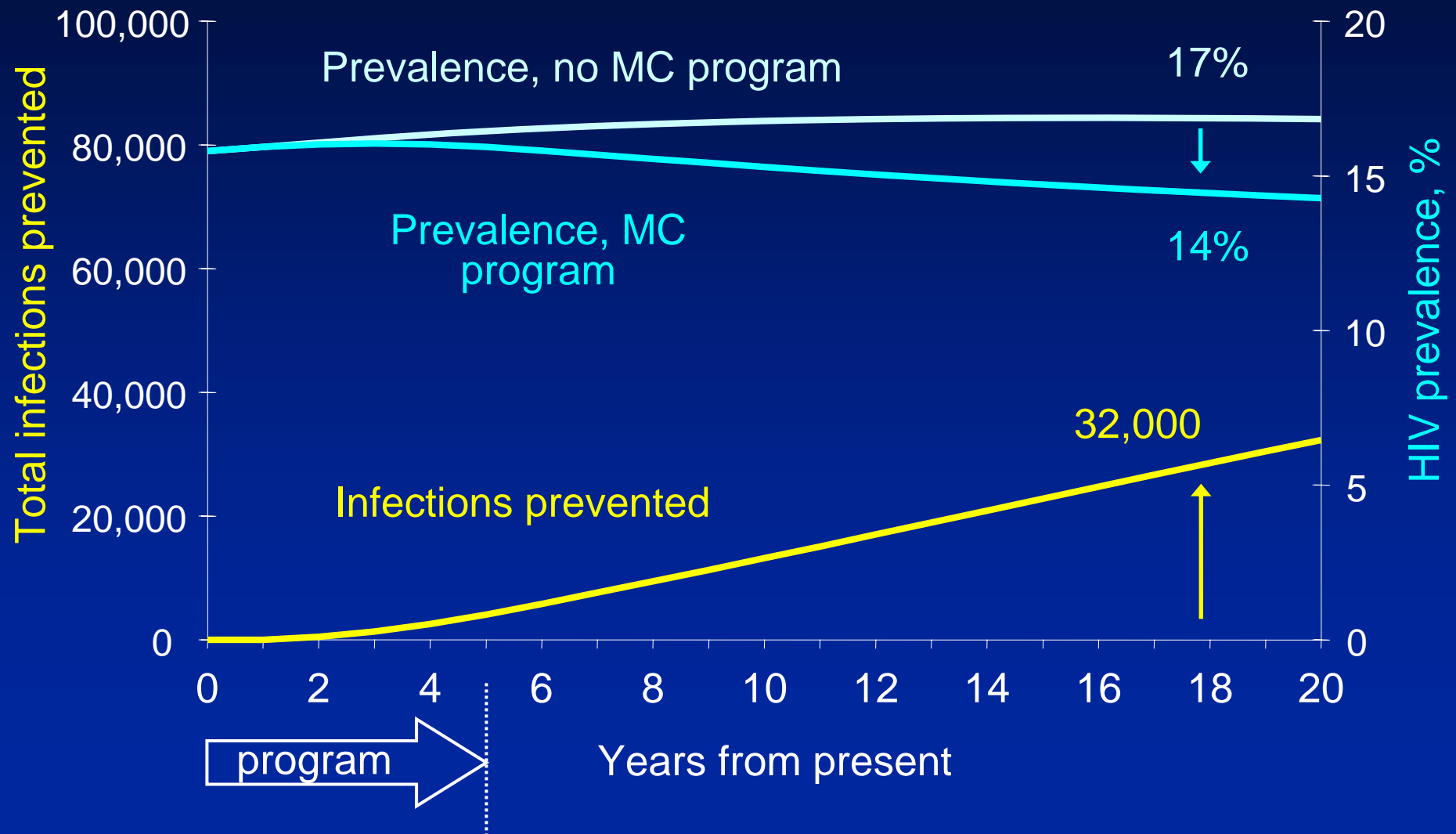




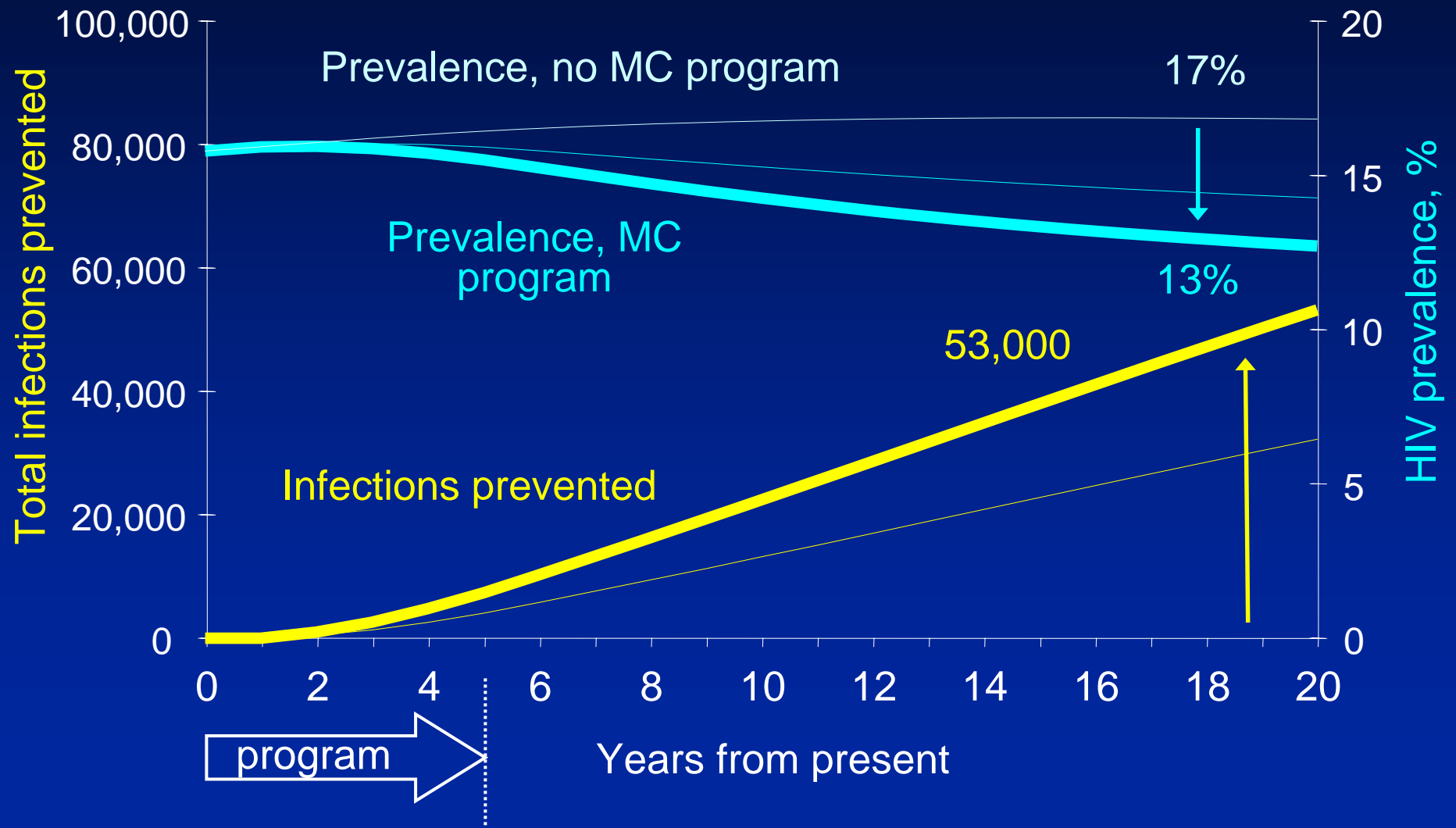




Impact of a 5-year expanded circumcision program targeting additional 10% males/year



Impact of a 5-year expanded circumcision program targeting additional 20% males/year

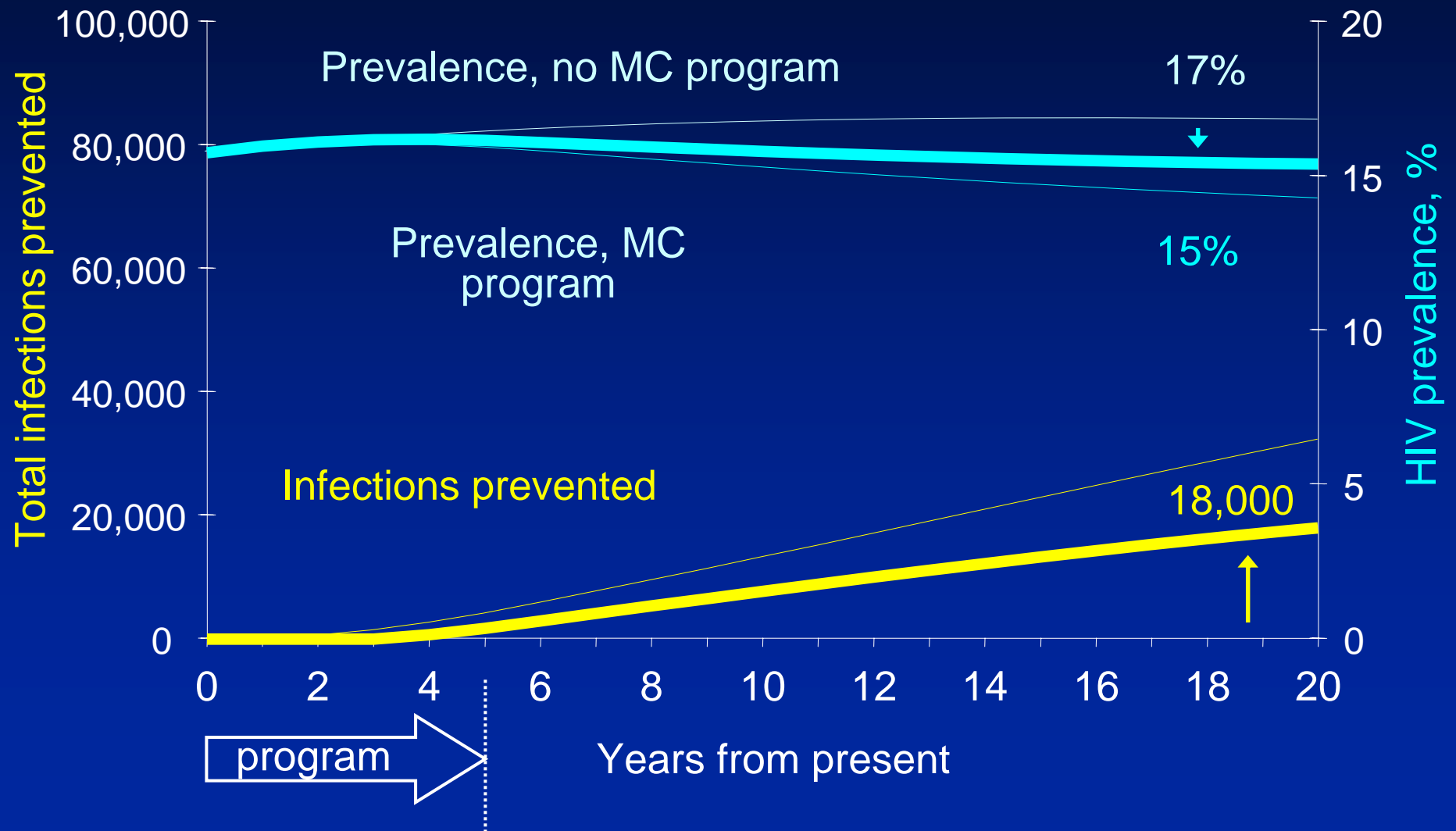


Infections prevented for 5-year programs: varying coverage levels & circumcision effects

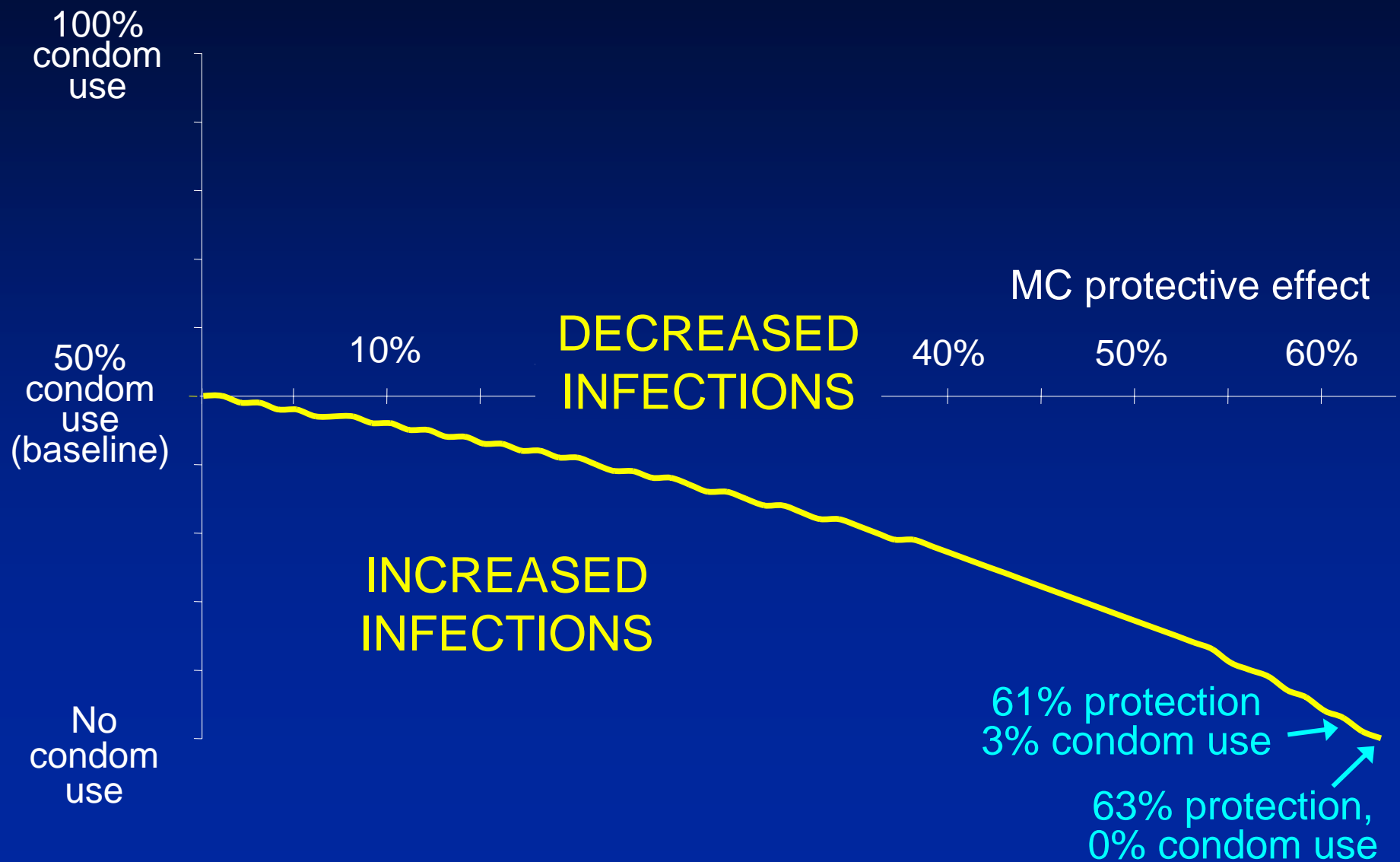
Circumcision protective effect

		20%	40%	60%	80%
Coverage level	10%	11,000	21,000	32,000	41,000
	20%	18,000	36,000	52,000	68,000

Impact of a 5-year 20% coverage program with a 30% increase in risk behavior



Equivalent combinations of circumcision protective effect & risk behavior change



Conclusions

- The protective effects of male circumcision should be routinely included in HIV epidemic models.
- Circumcision is already having a tangible impact on the HIV epidemic.
- Even modest expanded male circumcision programs can confer substantial health benefits and should be implemented immediately.
- These findings are sensitive to the impact of circumcision on subsequent risk behavior.
- Programs to reduce risk behavior will remain an important component of successful prevention programs.

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