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**Spatial Networks of Sexual Partnerships
in a Rural Ugandan Population:
Implications for HIV Transmission**

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POPULATION: IMPLICATIONS FOR HIV TRANSMISSION**

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Abstract

Using data from The 1994 Ugandan Sexual Network Study, we examine the spatial structure of sexual partnerships and implications for HIV transmission from urban to rural areas. Results show that direct contact between urban and rural residents is less common than multi-step links through partners in intermediate and trading centers. Respondents living in intermediate centers report high rates of partnerships with trading center and rural village residents, reflecting their central role in the network. Most spatially discordant partnerships are non-spousal, while those who report both spatially concordant and discordant partnerships (the "bridge population") is mostly male. Occupation, residence, and travel play major roles in this partnership selection process. While some respondents report using condoms, few report consistent use. The results have implications for HIV transmission and diffusion in this high risk population. Programs that target condom use to bridge populations and those who report spatially discordant partnerships are recommended.