

# John Potterat's Scholarly Publications (1 May 2020)

1. **Potterat JJ**, Rothenberg R. The casefinding effectiveness of a self-referral system for gonorrhea: a preliminary report. **American Journal of Public Health** 1977; 67: 174–176. [\[PDF\]](#) (Presented at the National VD Conference, San Diego, 9/1977.)

First published study comparing efficacy of sex partner tracing by health department workers with that of letting infected patients refer their own partners. For heterosexual men with gonorrhea, efficacy was identical using either approach.

2. **Potterat JJ**, Markewich GS, Rothenberg R. Prepubertal infections with *Neisseria gonorrhoeae*: clinical and epidemiologic significance. **Sexually Transmitted Diseases** 1978; 5: 1–3. [\[PDF\]](#)

First epidemiologic evidence that it is adult men with occult penile gonorrhea who are likely perpetrators of genital gonorrhea in little girls. First report of asymptomatic anogenital gonorrhea infection in a prepubertal girl.

3. **Potterat JJ**, Rothenberg R, Bross DC. Gonorrhea in street prostitutes: epidemiologic and legal implications. **Sexually Transmitted Diseases** 1979; 6: 58–63. [\[PDF\]](#)

First empiric evidence for "core group" concept. Demonstrated that use of the Health Hold Order (see publication # 75) helped to substantially decrease gonorrhea incidence in prostitutes and that it could be used to compel "human resistant strains" (recalcitrant asymptomatic carriers) to medical assessment.

4. Phillips L, **Potterat JJ**, Rothenberg RB, Pratts CI, King RD. Focused interviewing in gonorrhea control. **American Journal of Public Health** 1980; 70: 705–708. [\[PDF\]](#)

First empiric evidence that "core group focused" approach to contact tracing could reduce gonorrhea incidence. Also first evidence that detection and treatment of asymptomatic male carriers was associated with community-wide decline in gonorrhea incidence.

5. **Potterat JJ**, Phillips L, Rothenberg RB, Darrow WW. Gonococcal pelvic inflammatory disease: case-finding observations. **American Journal of Obstetrics and Gynecology** 1980; 138:1101–1103. [\[abstract\]](#) (Presented at the International Symposium on Pelvic Inflammatory Disease, Atlanta, 4/1980.)

Demonstrated importance of doing contact tracing on gonorrhea cases diagnosed in the private medical sector. Showed that women had little success referring their sex partners for treatment. Data also indicated that gonorrhea transmission was associated with women who

select black men as partners. First look at the impact of "assortative-disassortative" mixing on STD transmission.

6. **Potterat JJ**, King RD. A new approach to gonorrhea control: the asymptomatic man and incidence reduction. **Journal of the American Medical Association** 1981; 245: 578–580. [\[abstract\]](#) (Editorialized in same issue as The Silent Clap, pp. 609–610.)

Offers rationale for gonorrhea's stubborn endemicity (asymptomatic men as chronic carriers) and a mechanism for incidence reduction (identification and treatment of such carriers). First field trial of this hypothesis.

7. **Potterat JJ**, Muth JB. Economical gonorrhea control in Colorado. **Colorado Medicine** 1981; 78: 427–428. Reprinted in the **Rocky Mountain Medical Journal** 1982; 36–38 (Centennial Issue). [\[PDF\]](#)

Editorial argues that the major reason to control gonorrhea is to prevent upper reproductive tract damage in women. This goal can be frugally achieved by focusing interventions on the small number of cases responsible for sustaining gonorrhea transmission and for facilitating upper reproductive tract damage.

8. **Potterat JJ**, Woodhouse DE, Pratts CI, Markewich GS, Fogle JS. Women contacts to men with gonorrhea: case-finding yields. **Sexually Transmitted Diseases** 1983; 10: 29–32. [\[PDF\]](#)

This study's empiric findings undermined the consensus that tracing the sexual partners of infected women who were contacts to gonorrhea was a waste of public health resources.

9. Rothenberg R, **Potterat JJ**. Strategies for management of sexual partners, in Holmes KK, Mardh P-A, Sparling PF, Wiesner PJ, et al (eds): **Sexually Transmitted Diseases**. New York, McGraw-Hill Book Co. Inc. 1984: 965–972. [\[PDF\]](#)

Medical textbook chapter detailing what has been tried and what should be done with the sexual partners of patients with serious bacterial STD: identification of core groups, tracing of high priority partners, and routine treatment of contacts for exposure, irrespective of test results.

10. Woodhouse DE, **Potterat JJ**, Muth JB, Pratts CI, Rothenberg R, Fogle JS. A civilian-military partnership for the reduction of gonorrhea incidence. **Public Health Reports** 1985; 100: 61–65. [\[PDF\]](#)

Best documented community-wide reduction of gonorrhea incidence in the literature. It was achieved through conscientious tracing of exposed sexual partners. As in # 4 above, it required about two years of effort to note incidence declines.

11. **Potterat JJ**, Rothenberg RB, Woodhouse DE, Muth JB, Pratts CI, Fogle JS. Gonorrhea as a social disease. **Sexually Transmitted Diseases** 1985; 12: 25–32. [\[PDF\]](#) (Editorialized in the **Journal of the American Medical Association** 1993; 269: 1034. [\[abstract\]](#))

(Presented at the Fifth International Society for STD Research Conference, Seattle, 8/3/1983.)

Most convincing empiric demonstration (direct, rather than ecologic, evidence) that social milieu is the key determinant of STD acquisition, rather than sexual behavior alone. Showed that gonorrhea is a neighborhood disease. Implicitly used tools of social network analysis. Introduces new epidemiologic measure: the "force of infectivity" which quantifies a group's—as opposed to an individual's—contribution to STD transmission. All (public, private, and military) cases in the community were interviewed. Landmark paper—continuously cited for three decades.

12. **Potterat JJ**, Phillips L, Rothenberg RB, Darrow WW. On becoming a prostitute: an exploratory case-comparison study. **Journal of Sex Research** 1985; 21: 329–335. [\[preview\]](#) (Presented at the Scientific Study of Social Problems (SSSP) Conference, Phoenix, 8/26/1979.)

Exploratory study of why women enter prostitution, using matched controls (promiscuous women who don't charge for sex). Concludes that causes are most likely psychological or characterological rather than socioeconomic.

13. **Potterat JJ**, Muth JB, Markewich GS. Serological markers as indicators of sexual orientation in AIDS-virus infected men (Letter). **Journal of the American Medical Association** 1986; 256: 712. [\[abstract\]](#)

Offers actuarial technique to validate self-reports of risk factors by men with HIV using specific blood tests ("Patients may lie, but blood doesn't" idea).

14. **Potterat JJ**, Markewich GS, King RD, Merezicky L. Child-to-child transmission of gonorrhea: report of asymptomatic genital infection in a boy. **Pediatrics** 1986; 78: 711–712. [\[abstract\]](#)

First report of asymptomatic genital gonorrhea in a prepubertal male. First documentation of child-to-child gonorrhea transmission. Argues for consideration of peer sexual activity in the determination of infection source for gonorrhea in children, even though main mode is adult-child sexual contact.

15. The CDC Collaborative Group. Antibody to Human Immunodeficiency Virus in female prostitutes. **Morbidity and Mortality Weekly Report** 1987; 36 (11): 157–161. [\[fulltext\]](#) (Reprinted in the Journal of the American Medical Association 1987; 257: 2011–2013.) (Presented at the III Int. Conference on AIDS, Washington, D.C., 6/1987: Abstract #W.2.1) Also reported in: de-The G, AIDS: 89–90. Paris: Medsi/McGraw-Hill Co, 1989; 15–17. [\[PDF\]](#)

First national study of risk factors for HIV infection in US prostitute women. Prevalence is associated primarily with injecting drug use and mirrors local HIV prevalence in other women.

16. **Potterat JJ**, Phillips L, Muth JB. Lying to military physicians about risk factors for HIV infections (Letter). **Journal of the American Medical Association** 1987; 257: 1727.[\[abstract\]](#)

Provocative study that undermined the assertion by Walter Reed doctors that military men with HIV acquired it (heterosexually, from prostitutes) differently than their civilian counterparts (homosexually or via injecting drug use). Our interviews demonstrated that soldiers' risk factors mirrored those in the civilian sector and that they had lied to military doctors (because their doctors worked for the soldiers' employers). Incendiary title provided by JAMA editors, not us!

17. **Potterat JJ**, Dukes RL, Rothenberg RB. Disease transmission by heterosexual men with gonorrhea: an empiric estimate. **Sexually Transmitted Diseases** 1987; 14: 107–110. [\[PDF\]](#)

First estimate of the contribution to gonorrhea transmission by heterosexual men based on direct empiric evidence (partner tracing data). It showed that nearly half of women were infected by asymptomatic men and that most (75%) of the other half, by symptomatic men before they had symptoms. Also first direct estimate of the national gonorrhea burden based on extrapolations from these data; it showed that the official estimate is numerically correct, but that the true male-to-female ratio is the inverse of the CDC estimate.

18. **Potterat JJ**. The AIDS epidemic and media coverage: a critical review. **Critique: A Journal of Conspiracies & Metaphysics** 1987; 26: 36–38.[\[PDF\]](#)

Examines the questionable and probably political CDC decision in 1986 to classify AIDS cases as heterosexually acquired in the absence of direct evidence. Points to the difficulties of assessing risk factors in poor countries and argues that reuse of unsterile needles for medical purposes may be an important confounder for “heterosexual transmission”. Distinguishes between transmission rate and reproductive rate; predicts the wine-stain-on-cloth pattern (“islands of endemicity”) of HIV case distribution in the US; and predicts that heterosexual spread will be very low. Criticizes media for using AIDS epidemic to advance their own agendas and predicts that such distortions will support misallocation of resources.

19. **Potterat JJ**. Does syphilis facilitate acquisition of HIV? (Letter). **Journal of the American Medical Association** 1987; 258: 473–474.[\[abstract\]](#)

First empiric evidence that syphilis infection (via lesions) might facilitate sexual transmission of HIV. Early suggestion that syphilis patients should routinely be offered HIV testing and that blacks should be informed, as a high priority, of their very high risk for HIV infection.

20. **Potterat JJ**. "B" stands for bursa or its equivalent, bone (Letter). **Journal of the American Medical Association** 1988; 259: 1811.[\[pubmed\]](#)

Short query about the origin of nomenclature for our immune system's B-cells.

21. Rothenberg RB, **Potterat JJ**. Temporal and social aspects of gonorrhea transmission: the force of infectivity. **Sexually Transmitted Diseases** 1988; 15: 88–92. [\[fulltext/PDF\]](#) (Presented at the 6th Int. Society for STD Research Conf., Brighton, England, 8/1985.)

Best direct evidence for "core group" theory. First demonstration of importance of "mixing patterns" (which were labeled 'self-selectors' v. 'non-self-selectors' as early as 1985 at Brighton Conference—before use of 'assortative' v. 'disassortative') in STD dynamics. Showed that subgroups which comprised non-self-selectors accounted for most gonorrhea transmission locally.

22. **Potterat JJ**, Muth JB, Woodhouse DE. Discussing the implications of HIV infection in health care workers (Letter). **Journal of Acquired Immune Deficiency Syndromes** 1989; 2: 308–309. [\[PDF\]](#)

Makes estimates of the number and proportion of HIV-infected health care workers in the United States and reminds them that transmission can be bi-directional (from infected health care worker to patient). Suggests convening expert panel to explore implications.

23. **Potterat JJ**, Spencer NE, Woodhouse DE, Muth JB. Partner notification in the control of human immunodeficiency virus infection. **American Journal of Public Health** 1989;79: 874–876. [\[PDF\]](#)

Advocates implementation of universal contact tracing for AIDS/HIV cases in the United States, stating that this should be standard public health practice until shown not to be useful. Provides background and rationale and argues that opposition has been based on misperceptions.

24. Rothenberg R, **Potterat JJ**. Strategies for management of sexual partners, in Holmes KK, Mardh P-A, Sparling PF, Wiesner PJ, et al (eds): **Sexually Transmitted Diseases** (2nd Edition). New York, McGraw-Hill Book Co. Inc. 1990: 1081–1086. [\[PDF\]](#)

Update of medical textbook chapter—virtually identical to [reference 9](#) (above), except that it includes a short section on management of AIDS/HIV partners.

25. Khabbaz RF, Darrow WW, Hartley MT, Witte J, Cohen JB, French J, Gill PS, **Potterat J**, et al. Seroprevalence and risk factors for HTLV-I/II infection among female prostitutes in the United States. **Journal of the American Medical Association** 1990; 263: 60–64. [\[abstract\]](#) (Nominated for the 1991 Charles C. Shepard Science Award for outstanding contribution to the scientific literature; presented at the IV International Conference on AIDS, Stockholm, Sweden, 6/ 1988: Abstract #4042)

Study of serological markers for HTLV-I/II infection in opportunistically recruited samples of prostitute women in seven cities in the United States (1986–1987). Same cohort as # 15 (above) and # 26 (below). HTLV-I/II infection is strongly associated with injecting drug use. Tests were not optimal (antibody rather than PCR, which could have distinguished between the two serotypes) and no validity checks were used to evaluate veracity of self-reports from

these often disturbed and drug-addicted women. (Why this methodologically weak study should have been awarded the Shepard Prize is baffling.)

26. Darrow WW, and the Centers For Disease Control Collaborative Group for the Study of HIV-1 in Selected Women. Prostitution, intravenous drug use and HIV-1 in the United States, in Plant MA (ed.): **AIDS, Drugs, and Prostitution**. London, Routledge 1990: 18–40.

Chapter detailing methods and limitations of the CDC multicenter, cross-sectional study of six seromarkers (HIV, HTLV, hepatitis-B, hepatitis-D, syphilis, and herpes) in highly selected populations of prostitute women in the United States (CDC Project 72; see also # 15 & 25 above and # 35 below). Discusses significance of findings and suggests an improved research agenda.

27. **Potterat JJ**, Woodhouse DE, Muth JB, Muth SQ. Estimating the prevalence and career longevity of prostitute women. **Journal of Sex Research** 1990; 27: 233–243. [\[abstract\]](#)

First population-based estimate of the prevalence and career longevity of prostitute women in the United States. Concludes that there are far fewer (about 85,000) than previously estimated (250,000–500,000) and that most remain prostitutes for a relatively short time (about 4 to 5 years). Demonstrates that rare and elusive populations can be accurately estimated. Undermines the idea that "Once a prostitute, always a prostitute".

28. **Potterat JJ**, Muth JB, Murray C. Partner notification (Letter). **Annals of Internal Medicine** 1990; 113: 481.

Disagrees with editorial which concludes that STD partner notification (contact tracing) is not efficacious. Explains that its author fails to see the forest for the trees: contact tracing appears ineffectual at the individual tree (case interview) level and may be most efficacious at the forest (core group) level.

29. Zimmerman HL, **Potterat JJ**, Duker RL, Muth JB, Zimmerman HP, Fogle JS, Pratts CI. Epidemiologic differences between chlamydia and gonorrhea. **American Journal of Public Health** 1990; 80:1338–42. [\[PDF\]](#)

First epidemiologic study comparing gonorrhea and chlamydia, showing that although they are transmitted the same way and attack the same tissue yet they have a strikingly different community form (differing by age, ethnicity, and geography). Key to these differences may be immunological (asymptomaticity of chlamydia). Urges formal public health reporting of chlamydia infection and of control through targeted screening and contact tracing (to detect and treat asymptomatic men and to assure successful referral of asymptomatic partners).

30. **Potterat JJ**. The coming AIDS implosion. **Commentator** 1991; March/April: 19, 22.

At a time when virtually everyone was predicting a large and growing epidemic, this essay argues that the HIV/AIDS epidemic in the United States would implode during the 1990s. This because of preemption effect (HIV saturation of the most vulnerable persons) and high death rate of those infected early in the epidemic (who aren't being "replaced" fast enough



because of large scale adoption of safer behaviors by susceptibles). This prediction came much closer to reality than virtually all other estimates.

31. **Potterat JJ**. Notification works. In Chiras DD, **Human Biology: Health and Homeostasis**. St. Paul, West Educational Publishing Co. 1991; 277. Reprinted in Chiras DD, *Biology: The Web of Life*. St. Paul, West Educational Publishing Co. 1993: 377.

Point-Counterpoint debate in biology textbook. Argues that HIV name reporting and contact tracing are two useful, acceptable, and safe public health interventions. Neither threatens the dignity or privacy of the HIV patient. Stresses that relying on HIV-infected patients to refer their partners to medical attention is unsubstantiated wishful thinking.

32. (In alphabetical order) Adler MW, Borisenko KK, Brathwaite A, Campos B, Jayakuru GN, Laga M, Pallangyo KJ, **Potterat JJ**, Tabua T. Management of Patients with Sexually Transmitted Diseases. **World Health Organization Technical Report Series**. No. 810, 1991. [\[PDF\]](#)

Cookbook recipe for managing patients with sexually transmitted infection and their partners in poor countries. Emphasis is on syndromic management and encouraging partner self-referral.

33. **Potterat JJ**, Meheus A, Gallwey J. Partner notification: operational considerations. **International Journal of STD & AIDS** 1991; 2: 411–415. (Presented at the World Health Organization, Geneva, Switzerland, 7/1990 and, in part, at the First Sino-American HIV Symposium, People's Republic of China, 11/1990.)

Details the epidemiologic rationale and methods for notifying the sexual and/or drug partners of STD/HIV-infected patients and presents the activity as the ethical thing to do.

34. Woodhouse DE, **Potterat JJ**, Muth JB, Reynolds JU, Douglas J, Judson FN and the Centers for Disease Control. Street outreach for STD/HIV prevention - Colorado Springs, Colorado, 1987–1991. **Morbidity and Mortality Weekly Report** 1992; 41 (6): 94–95, 101. [\[fulltext\]](#)

Describes how a low-tech approach to protecting street prostitutes from STD/HIV infection was associated with a substantial decline in gonorrhea (and to a lesser extent chlamydia) cases in these women. Intervention consisted of distributing self-defense advice, condoms, and bleach directly to prostitutes where and when they worked.

35. Rosenblum L, Darrow W, Witte J, Cohen J, French J, Gill PS, **Potterat J**, et al. Sexual practices in the transmission of hepatitis B virus and prevalence of hepatitis Delta virus infection in female prostitutes in the United States. **Journal of the American Medical Association** 1992; 267: 2477–2481. [\[abstract\]](#)

First study to indicate that anal intercourse facilitates transmission of hepatitis-B to women. Reports that hepatitis-D infection is most closely associated with injecting drug use and less so with sex. Provides evidence for classifying prostitutes as a priority group for hepatitis-B vaccine.

36. Klovdahl AS, **Potterat J**, Woodhouse D, Muth J, Muth S, Darrow WW. HIV infection in an urban social network: a progress report. **Bulletin De Méthodologie Sociologique** 1992; 36: 24–33. (Presented at the XIth International Social Networks Conference, Tampa, FL, 2/1991.) [\[read online \(free\)\]](#)

Probably the earliest (graph-theoretic & empiric) demonstration that structural differences in risk networks could deeply affect transmission patterns of STD/HIV. Initial formal report of the pioneering Colorado Springs Network Study (CDC Project 90), which is the first prospective study of the influence of network configuration on the propagation of infectious disease. Methods and preliminary results of the first two years (May 1988–May 1990) are presented.

37. **Potterat JJ**. Socio-geographic space travel and sexually transmissible diseases in the 1990s. **Australian Microbiologist** 1992; 13 (5): 366. [\[fulltext\]](#)

One-page precis of article # 38 directly below. Argues that, with sexually transmissible infections, The Age of Viruses should usher The Age of Latex. Predicts that, by the year 2000, the cancer burden will reflect the contribution of (chronic infection) STD viruses acquired during the "sexual revolution" of the mid-1960s through mid-1980s.

38. **Potterat JJ**. 'Socio-geographic space' and sexually transmissible diseases in the 1990s. **Today's Life Science** 1992; 4 (12): 16–22, 31. (Presented at the Australia & New Zealand Microbiological Societies Conference, Sydney, Australia, 7/1992 and at the Xth International Society for STD Research Conference, Helsinki, Finland, 8/1993.)

Summarizes the two major shifts in the field of STD during the previous two decades, one in the mind (social structures ["Potterat structures"] emerge as fundamental units of STD propagation) and the other in nature (viruses are out-competing bacteria). Discusses core groups and their place in sociogeographic space, showing that different core groups maintain different STD. Suggests visualizing transmission networks as geodesic-shaped structures connected to others in syncytial fashion. Provides empiric evidence for fractal nature of STD case distribution. Suggests that microbial "fingerprinting" within characterizable networks be done to clearly delineate specific transmission universes. Concludes that, ecologically, the true niche for STDs is more likely to be social networks than sexual organs.

39. Woodhouse DE, Muth JB, **Potterat JJ**, Riffe L. Restricting personal behaviour: case studies on legal measures to prevent the spread of HIV. **International Journal of STD & AIDS** 1993; 4: 114–117. [\[abstract\]](#) (Presented at the VIII International Conference on AIDS/III STD World Congress, Amsterdam, The Netherlands, 7/1992: Abstract PoD 5443.)

First empiric evaluation of legal sanctions to HIV-infected persons who deliberately endanger others. Focuses on Colorado's use of sequentially-applied sanctions: 1) intensive counseling, 2) cease & desist orders, 3) restriction orders and 4) court orders of compliance. Illustrates process with 4 case reports. Concludes that Colorado law adequately protects the infected but limits the ability of health officers to respond quickly and effectively.



40. Bethea RG, Muth SQ, **Potterat JJ**, Woodhouse DE, Muth JB, et al. Gang-related outbreak of Penicillinase-Producing *Neisseria Gonorrhoeae* and other sexually transmitted diseases - Colorado Springs, 1989–1991. **Morbidity and Mortality Weekly Report** 1993; 42 (2): 25–28. [\[PDF\]](#) (Reprinted in the **Journal of the American Medical Association** 1993; 269: 1092, 1094.) (Presented at the VIII International Conference on AIDS/III STD World Congress, Amsterdam, The Netherlands, 7/1992: Abstract ThC 1516.)

Describes the emergence and epidemiologic impact of a new core group in STD transmission: crack-cocaine gangs and their affiliates. Reports what is the highest STD attack rate in the modern literature (a staggering 130,000 cases per 100,000 population: see ref # 55 below).

41. **Potterat JJ**. HIV infection in rural Florida women (Letter). **New England Journal of Medicine** 1993; 328: 1351–1352.

Criticizes CDC study claiming that women in rural Florida were infected through "heterosexual transmission" (read: penile-vaginal sex) when, in fact, the authors failed to collect data on anal intercourse. (The authors reply that high-risk women in Florida do indeed practice anal sex.)

42. **Potterat JJ**. 'Socio-geographic space' and focal condom use- in Cates W Jr., Campbell AA, (eds): **Behavioral Research On The Role Of Condoms In Reproductive Health**. Center For Population Research, National Institute of Health, Bethesda, MD 1993; 27–28, 33–34. (Presented at National Institute of Health, Bethesda, 5/1993.)

Discusses the advantage, for programs promoting condom use, of viewing STD transmission on the population level (core networks) rather than focusing on the individual behavior level. Argues that even modest levels of condom use, applied in the right place, may sufficiently break chains of transmission to allay the concern that only "100% condom use" would eliminate transmission.

43. **Potterat J**. Prostitution: a global public health issue. **Venereology** 1993; 6(3): 85.

Commissioned by Venereology to summarize the 130 prostitution reports at the IXth International Conference on AIDS in Berlin. Reports that there seems to be global effort to view prostitution as a public health problem and to design interventions (condom use and negotiation skills) accordingly. Prostitutes may be hard to reach but are not unapproachable; there were many reports about willingness to cooperate. Sessions on prostitution were often disrupted by activists.

44. **Potterat JJ**, Woodhouse DE, Rothenberg RB, Muth SQ, Darrow WW, Muth JB, Reynolds JU. AIDS in Colorado Springs: is there an epidemic? **AIDS** 1993; 7: 1517–1521. [\[fulltext\]](#)

First community-wide evaluation of HIV transmission patterns and epidemic trajectory based on virtually complete HIV/AIDS reporting, risk-factor, and contact tracing data. Demonstrates that HIV infection is at low endemic level and that incidence is declining. By extension to the

nation, suggests that predictions (common at the time) of widespread and rapid increases in HIV transmission are likely to be, in the absence of proper empiric data, exaggerations.

45. Klovdahl AS, **Potterat JJ**, Woodhouse DE, Muth JB, Muth SQ, Darrow W. Social networks and infectious disease: the Colorado Springs study. **Social Science and Medicine** 1994; 38: 79–88. [\[abstract\]](#) (Presented at the VI International Conference on AIDS, 6/1990, San Francisco (CA): Poster SC 679; and at the XII International Social Networks Conference, San Diego, 2/1992.)

"Birth announcement" of the Colorado Springs Networks Study (CDC Project 90)—the first prospective study evaluating the influence of network conformation on the propagation of infectious agents (see ref 121 below). Details rationale, methods, and initial (first year) results, which support the idea that social network concepts and tools are useful for studying STD/HIV transmission dynamics. First report demonstrating that people, even in the absence of STD/HIV infection, will provide names & locating information of their sexual and illicit-drug using partners.

46. **Potterat JJ**, Muth JB. AIDS and ethical issues. **Colorado Medicine** 1994; 91 (4): S1–S15. (Presented at the Osteopathic Foundation's Fifth Annual Conference on Medical Ethics, Colorado Springs, 11/1993)

Highly readable primer summarizing the history and principles of medical ethics. Ethics are said to be the immune system of a humane society. Offers concrete examples of the four ethical precepts as they apply to specific AIDS situations: autonomy, beneficence, harm avoidance, and justice. Intended for private physicians and public health workers.

47. Muth JB, **Potterat JJ**. Condom courage (Letter). **The Medical Reporter** 1994; 2 (10): 4.

Argues that medical knowledge is a trust and that doctors have a duty to offer accurate harm-reduction information to patients, free of ideological or religious constraints.

48. **Potterat JJ**, Muth JB. In the shadow of AIDS: the hidden chlamydia epidemic. **The Medical Reporter** 1994; 2 (10):8,10–11.

Presents chlamydia as a neglected public health problem living in the giant shadow of AIDS. There is neither a federal nor state control program. Argues that this "silent sterilizer" be accorded higher programmatic priority and provides evidence that it should be a reportable STD.

49. Woodhouse DE, Rothenberg RB, **Potterat JJ**, Darrow WW, Muth SQ, Klovdahl AS, Zimmerman HP, Rogers HL, Maldonado TS, Muth JB, Reynolds JU. Mapping a social network of heterosexuals at high risk of HIV infection. **AIDS** 1994; 8: 1331–1336. [\[fulltext/PDF\]](#) (Presented, in part, at the VI International Conference on AIDS, 6/1990, San Francisco (CA): Abstract # S.C. 679; also at the VII International Conference on AIDS, 6/1991, Florence, Italy: Abstract # W.C. 100; and at the VIII International Conference on AIDS/III STD World Congress, Amsterdam, The Netherlands, 7/1992: Abstract ThC 1519.)

First empiric demonstration that network location of infected persons may serve to accelerate or dampen HIV propagation on a population level. Specifically, the isolated or marginalized network positions of HIV-infected persons in Colorado Springs probably served to impede transmission.

50. Rothenberg RB, Woodhouse DE, **Potterat JJ**, Muth SQ, Darrow WW, Klovdahl AS. Social networks in disease transmission: the Colorado Springs study, in Needle RH, Genser SG, Trotter II RT, (eds): **Social Networks, Drug Abuse and HIV Transmission**. National Institute of Drug Abuse Research Monograph No. 151 (NIH Publication No. 95-3889); 1995: 3–19. [\[PDF\]](#) (Presented at National Institute on Drug Abuse, Rockville, 8/1993.)

Chapter providing more detail of what is reported in reference # 49 (above) and offering a preliminary analysis of central actors in the large network connected component (see # 52 below).

51. Woodhouse DE, **Potterat JJ**, Rothenberg RB, Darrow WW, Klovdahl AS, Muth SQ. Ethical and legal issues in social networks research: the real and the ideal, in Needle RH, Genser SG, Trotter II RT (eds): **Social Networks, Drug Abuse and HIV Transmission**. National Institute of Drug Abuse Monograph No. 151 (NIH Publication No. 95-3889); 1995: 131–143. [\[PDF\]](#) (Presented at National Institute on Drug Abuse, Rockville, 8/1993.)

First analysis of the legal and ethical issues likely to arise in social network research. Explores problems attending the network study (connecting the dots) of outlaw populations (prostitutes, "johns", and illegal-drug injectors). Outlines responsibilities of researchers vis-à-vis participants and society, noting that ethical principles often conflict with each other and with study design.

52. Rothenberg RB, **Potterat JJ**, Woodhouse DE, Darrow WW, Muth SQ, Klovdahl AS. Choosing a centrality measure: epidemiologic correlates in the Colorado Springs study of social networks. **Social Networks** 1995; 17: 273–297. [\[abstract\]](#) (Presented at the XIVth International Social Networks Conference, New Orleans, 2/1994.)

First study comparing the relative efficacy of eight measures of network prominence (three forms of information centrality; degree; betweenness; mean & median distance; and eccentricity) using real data. Although these measures differ in theoretical formulation and distributional shapes, they showed substantial concordance with the epidemiologic variables tested. Surprisingly, theoretical strength did not provide analytic superiority.

53. **Potterat JJ**, Rothenberg, RB. Acquired immunity to gonorrhoea? (Letter). **Sexually Transmitted Diseases** 1995; 22: 261–264. [\[PDF\]](#)

Uses reasoning and data to undermine Brunham and colleagues' conclusion that infection with gonorrhoea and chlamydia confers immunity, especially in populations that are repeatedly exposed.

54. **Potterat JJ**, Muth JB. Core groups by any other name? (Letter). **Sexually Transmitted Diseases** 1996; 23: 164–165. [\[fulltext\]](#)

Opposes CDC-proposed nomenclature change from "core groups" to "spread clusters", arguing that name change must reflect what has been learned since core groups were christened. Proposes "core networks" as being more concordant with current understanding of transmission dynamics: the shift from focus on core populations (people) to network conformation (structure).

55. **Potterat JJ**, Muth SQ, Bethea RP. Chronicle of a gang STD outbreak foretold. **Free Inquiry in Creative Sociology** 1996; 24: 11–16.

Describes the identification of a large PPNG (resistant gonorrhea) outbreak in the socio-sexual networks of crack-cocaine gangs and the tools (street ethnography and network analysis) used to control and analyze the 16-month outbreak. Demonstrates that although gang members are alienated, they are not aliens and will, properly approached, cooperate with health department STD control efforts. Details the 'risk space' for rapid epidemic transmission and its potential dangers.

56. Rothenberg RB, **Potterat JJ**, Woodhouse DE. Personal risk-taking and the spread of disease: beyond core groups. **Journal of Infectious Diseases** 1996; 174 (Suppl 2): S144–149. [[abstract/PDF](#)]

Questions the idea that risk behaviors (like votes in an election) determine epidemics and thus questions whether prevention strategies aimed at minimizing risky acts will minimize STD/HIV transmission. It is risk behaviors in risk space that matter, with contents of this space acting as modifiers (amplification or dampening) of transmission. One form of risk space, network conformation, provides the link between risk behaviors and transmission dynamics. Suggests implementing strategies to segment networks. In a word, intervention should focus on affecting group structures. Takes us one step beyond the basic core group concept.

57. Plummer L, **Potterat JJ**, Muth SQ, Muth JB, Darrow WW. Providing support and assistance for low-income or homeless women (Letter). **Journal of the American Medical Association** 1996; 276: 1874–1875. (Presented, in part, at the Behavioral Research and Evaluation Program Targeting Communities of Color Conference, Centers For Disease Control, Atlanta, 3/1995.)

Response to a JAMA article advocating that women in economic and social crises be assisted to assure access to ameliorative social services, via professional case management. Presented are data on 67 women at high-risk for crises (young prostitutes and their closely matched controls) who were offered such services in a rigorously supportive manner. Efforts were labor intensive and modestly successful and failed to assure that the women would avail themselves of needed services, probably because of mental disorders (e.g., clinical depression, post-traumatic stress).

58. Brace NE, Zimmerman HP, **Potterat JJ**, Muth SQ, Muth JB, Maldonado TS, Rothenberg RB. Community-based HIV prevention in presumably underserved populations - Colorado Springs, Colorado, July–September 1995. **Morbidity and Mortality Weekly Report** 1997; 46:

152–155. [\[fulltext\]](#) (Reprinted in the [Journal of the American Medical Association](#) 1997; 277: 876–877.)

Describes street outreach efforts to identify under-served persons perceived to be at high-risk for HIV infection: the homeless, out-of-treatment drug users, and the mentally ill. They were shown to be accessible and willing to receive HIV prevention services. Probably the first report to demonstrate low HIV prevalence among these persons and the first to provide the explanation: that such persons are often social isolates and thus occupy fragmented networks, where STD/HIV transmission is not likely to be sustained despite presence of high-risk behaviors (IDU, anal sex).

59. **Potterat JJ.** The numismatic legacy of a passionate man. [The Numismatist](#) 1997; 110 (8): 888–890, 918.

Describes the history and content of France's only provincial museum dedicated solely to numismatics, Le Musée Joseph Puig, in Perpignan (southwestern France).

60. **Potterat JJ.** Contact tracing's price is not its value (Editorial). [Sexually Transmitted Diseases](#) 1997; 24: 519–521. [\[fulltext\]](#)

Argues that contact tracing is more about efficacy than (cost-) effectiveness and that the proper question is not "How much bang for our buck?" but "What do we lose if we don't do it (right)?" Contact tracing takes you where the problem is and is the best magnifying lens through which to view the transmission picture. Argues that 'partner notification' is a unidimensional term for a multidimensional (ethical, control, and epidemiologic) activity; 'contact tracing' has better body language and should replace the "newspeak" term 'partner notification'.

61. **Potterat JJ, Rothenberg RB.** Sexual network data help assess putative STD reporting bias (Letter). [Sexually Transmitted Diseases](#) 1997; 24: 552–553. [\[fulltext\]](#)

Provides empiric network data to show that frequent sexual mixing between black men and white women in gonorrhea transmission accounts for the under-representation of white men in case reports (viz., it's not an artifact of private physicians under-reporting cases in white men).

62. **Potterat JJ, Muth SQ, Muth JB.** 'Partner notification' early in the AIDS era: misconstruing contact tracers as bedroom police, in Margolis, E (Ed): [AIDS Research/AIDS Policy: Competing Paradigms of Science and Public Policy](#). Greenwich, CT, JAI Press, 1998; Vol. 6: 1–15. (Presented, in part, at the "Future Directions in Partner Notification: Policy, Practice, and Research" Conference, 10/1996, Centers For Disease Control and Prevention, Atlanta, and at the 10th Annual Texas HIV/STD Conference, 7/1997, Austin.)

Provides brief history of STD/HIV contact tracing and contact interviewing techniques, detailing advantages, shortcomings, and grounds for opposition. Critiques misperceptions (that it's an ineffective and unnecessary intrusion) perpetuated by AIDS activists, civil libertarians, and ill-informed (politically-intimidated?) public health officers during the first two



decades of the HIV epidemic. In brief, contact tracing was viewed as a tool to control people, rather than disease.

63. Rothenberg R, Sterk C, Toomey KE, **Potterat JJ**, Johnson D, Schrader M, Hatch S. Using social network and ethnographic tools to evaluate syphilis transmission. **Sexually Transmitted Diseases** 1998; 25: 154–160. [\[fulltext\]](#)

Data-based rationale for augmenting 'partner notification' with network and ethnographic approaches to elucidate and control syphilis transmission. Diagrams of network growth are shown to be useful alternatives to traditional epidemic curves. Reports details of the notorious biracial syphilis outbreak among Atlanta-area teenagers during 1995–96. Shows importance of network density and of concurrency (i.e., network "architecture") to STD transmission, and of interviewing uninfected, as well as infected, patients in the sexual network.

64. Rothenberg RB, **Potterat JJ**, Woodhouse DE, Muth SQ, Darrow WW, Klovdahl A. Social network dynamics and HIV transmission. **AIDS** 1998; 12: 1529–1536. [\[fulltext/PDF\]](#) (Presented at the National Academy of Sciences, Institute of Medicine, 7/1995, Washington, DC; at the 1995 Annual Meeting of the American Public Health Association, San Diego, 10/1995; and at the XVIth International Social Networks Conference, Charleston, 2/1996)

First prospective study demonstrating changes in STD/HIV network dynamics over time and first to show that diminution of network structural elements thought to foster disease propagation was associated with lack of endogenous transmission. Argues for reassessment of behavioral-only explanations of the HIV epidemic; personal risk behavior puts one at risk for disease acquisition, while disease transmission seems to depend more on network structures.

65. **Potterat JJ**, Rothenberg RB, Muth SQ, Darrow WW, Phillips-Plummer L. Pathways to prostitution: the chronology of sexual and drug abuse milestones. **Journal of Sex Research** 1998; 35: 333–340. [\[fulltext\]](#) (Recipient, Hugo Beigel Award, for being the best article published during 1998 in JSR; presented at the IXth International Conference on AIDS/IVth STD World Congress, Berlin, Germany, 6/1993 (Abstract # WS-CO8-5))

To search for etiologic cues, the sequence, timing, and prevalence of sexual and illegal drug use milestones in a representative sample of 237 prostitute, and 407 comparison, women was assessed. Drug use precedes sexual activity (for both groups) and injecting drug use precedes prostitution. Self-report information is shown to be reliable, via unannounced re-interview one year later. Pathway into prostitution appears to be: psychological disorder or/and characterological factors precede substance abuse, which precedes prostitution. This undermines the dominant research paradigm that views prostitutes as victims of external factors, particularly abusive environments.

66. Rothenberg R, **Potterat JJ**. Partner notification for sexually transmitted diseases and HIV infection, in Holmes KK, Sparling PF, Mardh P-A, et al (eds): **Sexually Transmitted**

**Diseases** (Third Edition). New York, McGraw-Hill Book Co, Inc. 1999; 745–752. (Presented at the STD/AIDS World Congress 1995, Singapore, 3/1995.)

Third incarnation of medical textbook chapter (see refs # 9 & 24 above). Reviews usefulness of contact tracing for STD/HIV, especially in light of the emergence of network analysis as a tool to elucidate transmission dynamics.

67. **Potterat JJ**. Flawed syphilis analysis (Letter). **Science News** 1999; 155: 51.

Criticizes the CDC conclusion that the late-1990s Baltimore syphilis outbreak was caused by crack-cocaine prostitution and decrements in public health services. Associates outbreak with the contemporaneous implosion of public housing, which shattered social networks and dispersed syphilis transmitters to other parts of Baltimore (syphilis diaspora, as it were)

68. Zimmerman-Rogers H, **Potterat JJ**, Muth SQ, Bonney MS, Green DL, Taylor JE, White HA. Establishing efficient partner notification periods for patients with chlamydia. **Sexually Transmitted Diseases** 1999; 26: 49–54. (Presented at 12th International Society for STD Research Conference, Seville, Spain, 10/1997; Abstract # 775.)

First empiric study of contact interview periods (infectious interval) for chlamydia patients. Demonstrates presence of untreated asymptomatic men far beyond the 60-day-prior-to-diagnosis interval specified by the CDC. These men probably serve as the substrate for chlamydial endemicity. Recommends highly targeted chlamydia screening program for men.

69. **Potterat JJ**, Muth SQ. Of vice and men: reflections on drug abuse and male prostitution (Letter). **Sexually Transmitted Diseases** 1999; 26: 93–94.

Questions article that sees prostitution by male injecting drug users as economically motivated; infers that it's more likely to be a function of characterological and/or psychological factors.

70. Muth SQ, **Potterat JJ**. Every picture tells a story: mapping STD cases to depict risk. **Colorado Public Health Association Newsletter**. Spring 1999, p.2. [\[fulltext\]](#)

Emphasizes importance of mapping STD/HIV cases using neighborhoods as unit of analysis, since people live there and not in artifactual neighborhoods like 'census tracts' or 'zip codes'. Demonstrates differences in STD case distribution between artifactual and real neighborhoods.

71. **Potterat JJ**, Rothenberg RB, Muth SQ. Network structural dynamics and infectious disease propagation. **International Journal of STD & AIDS** 1999; 10: 182–185. [\[abstract\]](#) (Presented at the 2nd European Conference on Methods and Results of Social and Behavioral Research on AIDS, Paris, France, 1/1998: Abstract SY 6.4; and at Measurement of Risk and Modeling of AIDS Conference, Copenhagen, Denmark, 6/1998)

Provides definitive evidence that network cohesion (intensity of "connectivity") is associated with intensification or diminution of STD/HIV transmission. Concludes that "just as language

can be conceptualized as a flow of words structured by rules of grammar, so may epidemics be viewed as a flow of microbes structured by the 'grammar' of network structures"

72. **Potterat JJ**, Brody S. Interpretation of research on sexual abuse of boys (Letter). **Journal of the American Medical Association** 1999; 281:2185–2186.

Critiques JAMA review of childhood sexual abuse, pointing out that researcher bias (evidenced by frequent use of "sequelae") and retrospective study design contribute to confusing association with causation. Calls for consideration of "upstream" variables, such as preexisting psychological susceptibility or disorders in respondents, before concluding how much of downstream morbidity is related to childhood sexual abuse.

73. Darrow WW, **Potterat JJ**, Rothenberg RB, Woodhouse DE, Muth SQ, Klovdahl AS. Using knowledge of social networks to prevent human immunodeficiency virus infections: the Colorado Springs study. **Sociological Focus** 1999; 32: 143–158. [\[fulltext\]](#) (Presented at the 1995 Meeting of the American Sociological Association, 8/1995, Washington)

Traces genealogy of applying social science concepts to the elucidation and control of STD transmission. Discusses key findings of the Colorado Springs study, comparing network and other attributes of HIV-positive persons (shown to have low network prominence) with those of highly central (but HIV-negative) network nodes. Explains dearth of observed HIV transmission.

74. The UNAIDS Working Group. Trends in HIV incidence and prevalence: natural course of the epidemic or results of behavioural change? **The United Nations AIDS Program Technical Report**. No. 99.12E, June 1999, Geneva, Switzerland. (Proceedings of the UNAIDS Working Group, Oxford University, England, 7/1997)

Attempts to evaluate validity of HIV incidence reduction noted in some developing countries (e.g., Uganda and Thailand) and to assess whether related to natural progression of the epidemic, to changes in behavior, or to specific interventions. Analysis fails to consider modes of transmission other than sex and injecting drug use (viz., contaminated sharps in medical/dental settings) and is thus flawed. While recommending collection of valid surveillance information, yet overlooks consideration of iatrogenic transmission.

75. **Potterat JJ**, Rothenberg RB, Muth JB, Woodhouse DE, Muth SQ. Invoking, monitoring and relinquishing a public health power: the Health Hold Order. **Sexually Transmitted Diseases** 1999; 26: 345–349. [\[fulltext/PDF/EPUB\]](#) (Editorialized in the same issue as, The role of the police power in 21st century public health, pp. 350–357. [\[PDF\]](#))

Analyzes impact, over a quarter century, of using the public health power to assure medical examination of prostitutes for sexually transmitted diseases. The women viewed temporary detention as inconvenient, but not as inappropriate. This "Health Hold" system was associated with substantial and sustained declines in reportable STD from the 1970s through the 1990s.

76. Brody S, **Potterat JJ**. RE: "Is there really a heterosexual AIDS epidemic in the United States? Findings from a multisite validation study: 1992–1995" (Letter). **American Journal of Epidemiology** 1999; 150: 429–430. [\[PDF\]](#)

Criticizes as inadequate the CDC decision rules for assigning AIDS cases to the "heterosexual" category. Recommends use of multi-method searches of invalidating patients' self-reports of risk factors and use of specific biological markers. Also recommends replacing the ambiguous and confounded CDC classificatory system for AIDS/HIV to more precisely reflect specific high-risk behaviors (e.g., receptive anal intercourse).

77. **Potterat JJ**, Zimmerman-Rogers H, Muth SQ, Rothenberg RB, Green DL, Taylor JE, Bonney MS, White HA. Chlamydial transmission: concurrency, reproduction number and the epidemic trajectory. **American Journal of Epidemiology** 1999; 150:1331–1339. [\[PDF\]](#)

Community-wide attempt to measure chlamydia's reproductive rate in specific individuals and in groups of patients. Correlates reproductive rate (much less than unity) to epidemic phase (most likely declining). First direct (contact tracing) empiric evidence that concurrency (overlapping sexual partners) boosts STD transmission. Proposes that the frequently observed lopsided male-to-female ratio is related to spontaneous cure (twice as likely in men than women).

78. **Potterat JJ**, Plummer L. Contact tracing in the real world: a practical partnership. **AIDS Reader** 1999; 9: 618–620.

Views contact tracing as the sick man of HIV control, having suffered from bad press since the epidemic's beginning. Provides reasons for HIV clinicians to forge a partnership with local health departments. To engender trust, article details the contact interviewing and contact tracing process and corrects misperceptions. Dismisses auto-referral of partners as "the tried and untrue".

79. **Potterat JJ**, Brody S. More of the same is not validation (Letter). **Sexually Transmitted Diseases** 2000; 27: 60–61. [\[fulltext\]](#)

Criticizes article that views use of multiple sources of patient self-reports as validation; such an approach gauges reliability, not validity. Advocates use of quality clinical and laboratory evidence for markers of high-risk behaviors (e.g., hepatitis-C testing). Regrettably, health workers probing for risk factors place more emphasis on civility (fear of offending) than on scientific accuracy.

80. Brewer D, **Potterat JJ**. Name-based surveillance for HIV-infected persons (Letter). **Annals of Internal Medicine** 2000; 132; 922–923. [\[fulltext\]](#)

Criticizes a study of HIV patients, who reportedly notified their own partners, for failing to validate these claims. Presents empiric evidence undermining their unvalidated assertion.

81. Rothenberg R, Wasserheit JN, St.Louis ME, Douglas JM and the Ad Hoc STD/HIV Transmission Group. The effect of treating sexually transmitted diseases on the

transmission of HIV in dually infected persons: a clinic-based estimate. **Sexually Transmitted Diseases** 2000; 27: 411–416. [\[fulltext\]](#) (Presented at the 12th World AIDS Conference, Geneva, Switzerland, 6/1998, Abstr.# 23369)

Assesses the effect on HIV transmission of treating STD in dually (STD/HIV) infected patients using retrospective chart review data from eight STD clinics in the United States. The achievable reduction in HIV transmission is estimated to be about 27%.

82. Rothenberg RB, Sterk C, Long D, Pach A, **Potterat JJ**, Muth SQ. The Atlanta urban networks study: a blueprint for endemic transmission. **AIDS** 2000; 14: 2191–2200. [\[fulltext\]](#) [\[PDF\]](#)

Explores impact of simultaneity of risk taking in an urban setting (Atlanta) with moderate HIV prevalence to study the impact of joint-risk factors and of network structure on HIV incidence. Inspired by the Colorado Springs study, which unfolded in a low prevalence area, and to which it contrasts outcomes. Multiplicity of risks undermines the usefulness of the standard (hierarchical) method of risk-category classification because the standard scheme, by failing to tease out the relative contribution of different risks, muddies understanding of HIV transmission dynamics.

83. Muth SQ, **Potterat JJ**, Rothenberg RB. Birds of a feather: using a rotational box plot to assess ascertainment bias. **International Journal of Epidemiology** 2000; 29: 899–904. [\[fulltext/PDF\]](#) (Presented at the XVIIIth International Social Networks Conference, Sitges, Spain, 5/1998)

Advocates use of geography as a tool to assess ascertainment bias in respondent samples. Comparing participants vs. non-participants usually relies on contrasting the distributions of socio-demographic characteristics only. A new method is offered: a rotational box-plot to visualize sampling bias.

84. Brewer D, **Potterat JJ**, Garrett SB, Muth SQ, Roberts JM, Kasprzyk D, Montano DE, Darrow WW. Prostitution and the sex discrepancy in reported number of sexual partners. **Proceedings of the National Academy of Sciences** 2000; 97: 12385–12388. [\[fulltext\]](#) [\[PDF\]](#) (Presented at the XIXth International Social Networks Conference, Charleston, 2/1999)

Data from national sex surveys and studies of prostitutes and their clients are analyzed to see if prostitution can account for the customary finding that men report more sex partners than women. Article concludes that prostitute women are underrepresented in national surveys and that once this under-sampling and their large numbers of partners are factored in, the large differences in number of sex partners between men and women disappears. Additionally, data show that men frequently under-report contact with prostitutes. Article thus undermines the orthodox view that differences are due to women underreporting, and men over-reporting, numbers of sexual partners.

85. **Potterat JJ**, Muth SQ, Brody S. Evidence undermining the adequacy of the HIV reproductive number formula. **Sexually Transmitted Diseases** 2000; 27: 644–645. [\[fulltext\]](#)



Theoretic and empiric evidence is presented undermining the adequacy of the STD/HIV field's most central mathematical formula:  $R=B c (x) D$ . The crucial parameter "c" fails to take network structure (spatial conformation of contact patterns) into account. Usefulness may depend on scale.

86. **Potterat JJ**, Dowe T, Brewer DD. Response to Who among us? (Review) (Letter). **Journal of Sex Research** 2000; 37: 387–388. [\[fulltext\]](#)

Response to book review stating that Colorado Springs had the highest concentration of prostitutes in the United States and that much of it was connected to cadets at the U.S. Air Force Academy. Data are presented to rebuke author's view, which was unencumbered by real data.

87. **Potterat JJ**, Muth SQ, Stites HK. Twenty-year mortality in a 1981 cohort of homosexuals with gonorrhoea: a preliminary estimate (Letter). **International Journal of STD & AIDS** 2001; 12: 414–5.

Assesses mortality rate in a cohort of men diagnosed with gonorrhea just before the discovery of AIDS (early 1981) through the present (end of 2000). Gay men are shown to have died at 6.5 times the rate of heterosexuals. Evidence point to AIDS as leading cause of death for gay men.

88. Jolly AM, Muth SQ, Wylie JL, **Potterat JJ**. Sexual networks and sexually transmitted infections: a tale of two cities. **Journal of Urban Health** 2001; 78: 433–445. [\[excerpt\]](#)

Compares the conformation of chlamydia sexual networks in two similar North American cities to elucidate features associated with endemic transmission, and to assess whether artifacts of data collection are responsible for observed patterns/structures. Neat primer on network analysis.

89. Foster KC, Muth SQ, **Potterat JJ**, Rothenberg RB. A faster Katz status score algorithm. **Computational & Mathematical Organization Theory** 2001; 7: 275–285. [\[abstract\]](#)

Presents new graph theoretical algorithm to calculate (Katz) status scores which reduces computational complexity from  $O(n^3)$  to  $O(n + m)$  form. Ease of calculation is compared to traditional, computationally intensive methods using simulations as well as real data.

90. **Potterat JJ**, Brody S. Does sex explain HIV transmission dynamics in developing countries? (Letter). **Sexually Transmitted Diseases** 2001; 28: 730. [\[fulltext\]](#)

Critiques an article that, like virtually all work coming out of Africa, fails to consider modes of HIV transmission other than sex. Maintains that until contaminated sharps are controlled for, assertions about sexual transmission's predominant role remain scientifically suspect. States that anomalies need to be properly investigated.

91. Gisselquist D, Rothenberg R, **Potterat J**, Drucker E. Non-sexual transmission of HIV has been overlooked in developing countries (Letter). **British Medical Journal** 2002; 324: 235. [\[extract\]](#)

Challenges the assertion that heterosexual transmission of HIV has as large—and that use of unsterile medical equipment as small—a role as supposed by experts. First published outline of Gisselquist's main arguments, which appear in detail below (ref. # 96).

92. Rothenberg R, **Potterat J**, Gisselquist D. Concurrency and sexual transmission (Letter). **AIDS** 2002; 16: 678–680. [\[fulltext\]](#)

Responds to a study in Africa that did not find the predicted association between HIV levels and sexual concurrency. We show that such an association does indeed exist, but only with classic STD. Proposes that this anomaly supports the view for HIV transmission other than sex (e.g., unsafe skin puncturing practices).

93. **Potterat JJ**, Muth SQ, Rothenberg RB, Zimmerman-Rogers H, Green DL, Taylor JE, Bonney MS, White HA. Sexual network structure as an indicator of epidemic phase. **Sexually Transmitted Infections** 2002; 78: Suppl 1, i152–i158. [\[fulltext/PDF\]](#) (Presented at the "Phase-specific Strategies for the Prevention, Control and Elimination of Sexually Transmitted Diseases" Conference, Rome, Italy, 10/2000.)

First assessment of the reliability of using sexual network structure to determine epidemic phase for STD. Shows that dendritic network structure is associated with endemicity and cyclic structure with epidemicity. Suggests use of phase-tailored interventions, including sexual network segmentation strategies. Part I of two papers (see directly below).

94. **Potterat JJ**, Phillips-Plummer L, Muth SQ, Rothenberg RB, Woodhouse DE, Maldonado-Long TS, Zimmerman HP, Muth JB. Risk network structure in the early epidemic phase of HIV transmission in Colorado Springs. **Sexually Transmitted Infections** 2002; 78:Suppl 1, i159–i163. [\[fulltext/PDF\]](#) (Presented, in part, at the "Phase-specific Strategies for the Prevention, Control and Elimination of Sexually Transmitted Diseases" Conference, Rome, Italy, 10/2000.)

First assessment of the reliability of using risk network structure to determine epidemic phase for HIV. Shows that hybrid (dendritic-cyclic) network structure is associated with moderate epidemic transmission. Uses community-wide HIV contact tracing data spanning a 15-year period.

95. Rothenberg R, Gisselquist D, **Potterat J**, Drucker E. Le rôle des partenariats sexuels simultanés dans l'épidémie en Afrique (Concurrent sexual partnerships and HIV transmission in Africa). *Transcriptase* 2002 (June): 101; 25–29. [\[link\]](#)

French version of [reference # 92](#) above.

96. Gisselquist D, Rothenberg R, **Potterat J**, Drucker E. HIV infections in Sub-Saharan Africa not explained by sexual or vertical transmission. [International Journal of STD & AIDS](#) 2002; 13: 657–666. [\[PDF\]](#)

First article summarizing data from studies in sub-Saharan Africa suggestive of non-sexual HIV transmission. This includes: lack of association between sexual behaviors and epidemic trajectories, similarity in heterosexual transmission efficiency in both developed and developing worlds, non-trivial HIV prevalence levels in sexually naïve populations (adult & children), and higher than expected rates of infection in women receiving OBGYN care or/and abortions. Such data challenge the orthodoxy that 90% of HIV transmission in adults is attributable to sex.

97. Gisselquist D, **Potterat JJ**, Epstein P, Vachon F, Minkin SF. AIDS in Africa (Letter). [The Lancet](#) 2002; 360: 1422–1423. [\[PDF - requires free registration\]](#)

Critiques Lancet's 5-part series on AIDS in sub-Saharan Africa for focusing exclusively on heterosexual transmission and ignoring-dismissing parenteral exposures. Outlines, in skeletal form, evidence pointing to its probable importance and thus concludes that HIV interventions must include strongly supported "safe health care" components.

98. Rothenberg RB, **Potterat JJ**. Gonorrhoea surveillance: the missing links. [Sexually Transmitted Diseases](#) 2002; 29: 806–810. [\[fulltext/PDF/EPUB\]](#)

Decomposes short-term epidemic trends in gonorrhoea cases between 1996 and 2000 to show that certain data, not presently being captured, are needed to properly interpret secular trend changes. The key lies with small-area (neighborhood level, where gonorrhoea is actually being transmitted) analysis and reporting these observations to the national surveillance program. It is these "missing links" in the current reporting system that makes overall trend interpretation a guessing game. The potential utility of this approach for focal and rapid intervention is described.

99. **Potterat JJ**, Brody S. HIV epidemicity in context of STI declines: a telling discordance. (Letter). [Sexually Transmitted Infections](#) 2002; 78: 467. [\[PDF\]](#)

Points out that the anomaly between the contradictory epidemic trajectories of HIV and STD in Zimbabwe during the 1990s is evidence that transmission vectors other than sex—not studied by the article's authors—should be seriously investigated as a source of HIV transmission in Africa.

100. **Potterat JJ**. Partner notification for HIV: running out of excuses (Editorial). [Sexually Transmitted Diseases](#) 2003; 30: 89–90. [\[fulltext/PDF/EPUB\]](#)

Editorializes 2 simultaneously published articles which provide evidence that notifying partners of HIV infected patients does not promote partnership dissolution (hence promoting new risky liaisons) nor lead to intra-partnership violence. Reviews and undermines the rationales for discouraging partner notification during the first 20 years of the HIV epidemic

and concludes that avoidance of partner notification as a public health intervention is no longer defensible.

101. (In alphabetical order) Brewer DD, Brody S, Drucker E, Gisselquist D, Minkin SF, **Potterat JJ**, Rothenberg RB, Vachon F. Mounting anomalies in the epidemiology of AIDS in Africa: cry the beloved paradigm. **International Journal of STD & AIDS** 2003; 14: 144–147. [\[PDF\]](#) (Presented, in part, at the joint WHO/UNAIDS Consultation on Unsafe Injection and HIV Infection, 14 March 2003, Geneva, Switzerland.)

Summarizes the 12 notable anomalies between the epidemiologic evidence and the orthodoxy that sex is driving HIV epidemics in sub-Saharan Africa. Calls for evidence-based evaluation of the heterosexual hypothesis rather than continued reliance on ecological reasoning/analysis.

102. Gisselquist D, **Potterat J**, Brody S, Vachon F. Let it be sexual: how health care transmission of AIDS in Africa was ignored. **International Journal of STD & AIDS** 2003; 14: 148–161. [\[abstract\]](#)

Traces the origins of the 1988 consensus that sex is driving HIV epidemics in sub-Saharan Africa. Retracing steps via the published literature through 1988 shows that health care exposures were implicated in as much, if not more, HIV transmission than sex. Preconceptions about African sexuality, fear that Africans would discontinue condom use (encouraged, as well, for population control), and fear of losing the public's trust in modern health care, encouraged discounting this evidence (not to mention the political need to find a place where "heterosexual" transmission could be demonstrated). WHO-CDC asserted sexual transmission without solid empiric evidence (such as tracing/testing sexual partners, or seeking information on puncture exposures to control for confounding) and routinely rejected anomalous evidence.

103. Gisselquist D, **Potterat JJ**. Heterosexual transmission of HIV in Africa: an empiric estimate. **International Journal of STD & AIDS** 2003; 14: 162–173. [\[PDF\]](#) [\[abstract\]](#)

First evidence-based estimate of the proportion of HIV transmission in sub-Saharan Africa attributable to sex. Uses published risk factors data and shows that 25%–30% of HIV in women and 30%–35% in men is associated with sex. Calls for re-conceptualization of HIV transmission research in Africa since this estimate is only about one-third of the official estimate of 90%.

104. Gisselquist D, **Potterat J**. Confound it: latent lessons from the Mwanza trial of STD treatment to reduce HIV transmission. **International Journal of STD & AIDS** 2003;14:179–184. [\[abstract\]](#)

Calls for re-analysis of the Mwanza randomized community trial because published analyses fail to control for parenteral exposures to HIV; questions the claim that improved management of STD reduced HIV incidence by 38%. Proposes that coeval (and unreported) injection safety initiatives could account for this HIV incidence reduction; researchers are

urged to disclose these data. Appeals for implementation and monitoring of safe medical practices in Africa.

105. Collaborative Group, Centers for Disease Control and Prevention, Division of STD Prevention, National Center for HIV, STD & TB Prevention. **Recommendations for Public Health Surveillance of Syphilis in the United States**. Atlanta GA: U.S. Department of Health and Human Services, March 2003: 1–49. [\[PDF\]](#)

Summarizes recommendations for improved surveillance of syphilis infection in light of the 1999 CDC national plan to eliminate the disease in the U.S.; this plan requests enhanced surveillance. Five areas are targeted for standardizing guidelines: case reporting, prevalence monitoring, congenital infection, active surveillance (including outbreak investigation), and behavioral-social variables surveillance.

106. Collaborative Group, Centers for Disease Control and Prevention, Division of STD Prevention, National Center for HIV, STD & TB Prevention. Control of *Neisseria Gonorrhoeae* infection in the United States: Report of an external consultants' meeting 10–11 October 2001, Atlanta, GA: U.S. Department of Health and Human Services, April 2003: 1–35.

In light of gonorrhea's recrudescence between 1997 and 2001 this report examines challenges to successful gonorrhea control. Experts address 5 areas (screening, partner services, health care access, treatment, and behavior change) and develop recommendations for gonorrhea prevention activities and research priorities, ranked by workshop participants.

107. Brody S, Gisselquist D, **Potterat JJ**, Drucker E. Evidence for iatrogenic HIV transmission in children in South Africa. **British Journal of Obstetrics & Gynaecology** 2003; 110: 450–452. [\[fulltext\]](#) (Editorialized in same issue under Editor's Choice.)

Discusses the implications of the surprisingly high HIV rates derived from South Africa's representative national sample conducted in 2002, especially among children 2–14 years old (5.6% positive). Data are presented to show that such levels, if confirmed, argue against vertical (mother-to-child) transmission and against child sexual abuse as vectors AND for the possibility of HIV transmission via contaminated health care procedures. Recommends widespread testing of children 5–11 years old, then testing the biological mothers of infected children, and then exhaustively investigating exposure histories of HIV-infected children with HIV-negative mothers.

108. Wohlfeiler D, **Potterat J**. How do sexual networks affect HIV/STD prevention? **Center for AIDS Prevention Studies Fact Sheet**, University of California, San Francisco, April 2003: 1–4. [\[link\]](#)

Brief primer explaining the importance of network conformation on STD/HIV transmission dynamics. Outlines implications for targeted interventions, particularly for gay men.



109. Gisselquist D, **Potterat JJ**. Uncontrolled Herpes Simplex Virus-2 as a cofactor in HIV transmission (Letter). **Journal of Acquired Immune Deficiency Syndromes** 2003; 33: 119–120. [\[fulltext\]](#) [\[PDF\]](#)

Challenges the emerging hypothesis that genital herpes is a major co-factor for the heterosexual transmission of HIV in developing countries, since studies which claim this association have not controlled for parenteral confounding (i.e., patients with lesions being treated at STD clinics where contaminated medical procedures may be transmitting HIV).

110. Golden MR, Hogben M, Handsfield HH, St. Lawrence J, **Potterat JJ**, Holmes KK. Partner notification for HIV and STD in the United States: low coverage for gonorrhoea, chlamydial infection, and HIV. **Sexually Transmitted Diseases** 2003; 30: 490–496. [\[fulltext\]](#) [\[fulltext/PDF\]](#) (Presented at the National STD Conference, San Diego CA, March 2002, Abstract # LB7.)

Survey of partner notification (PN) efforts by health departments with the highest reported rates of STD/HIV in the United States in 1999. PN was done on 89% of early syphilis, but only 17% of gonorrhoea, 12% of chlamydia, and about one-third of newly reported HIV, cases. Encourages implementation of novel PN initiatives (patient-delivered therapy) and focus on core transmitters.

111. Gisselquist D, **Potterat J**, Rothenberg R, Drucker E, Brody S, Brewer D, Minkin S. Examining the hypothesis that sexual transmission drives Africa's AIDS epidemic. **AIDScience** 2003; 3: 10 (10 June). [\[fulltext\]](#)

Challenges the WHO/UNAIDS response to our 4 controversial papers (# 96, 101–103 above) which dismisses our evidence and reasserts, ex cathedra, sexual transmission as the predominant mode of HIV transmission in sub-Saharan Africa. The anomalies we detailed now require that the sexual transmission hypothesis be substantiated, not simply asserted using circumstantial, indirect, or ecologic evidence.

112. Brody S, Gisselquist D, **Potterat JJ**, Drucker ED. Health care transmission of HIV in South African children. **AIDScience** 2003; 3: 14 (15 July). [\[fulltext\]](#)

Briefly recapitulates findings of the South African national HIV serosurvey conducted in 2002 (see # 107 above).

113. Brody S, **Potterat JJ**. Assessing the role of anal intercourse in the epidemiology of AIDS in Africa. **International Journal of STD & AIDS** 2003; 14: 431–436. [\[abstract\]](#)

Reviews the anthropological, proctologic, and infectious disease literature to show that male bisexuality and anal intercourse are probably common in sub-Saharan Africa. This has been overlooked by HIV researchers, who have generally asserted that unprotected heterosexual (read: penile-vaginal) intercourse drives Africa's HIV epidemics. Calls for properly conducted studies to measure this under-suspected transmission vector in Africa and for public health messages to candidly address the dangers of anal intercourse.

114. Vachon F, Gisselquist D, **Potterat JJ**, Rothenberg RB. Les liaisons négligées: transmissions iatrogènes du VIH en Afrique (A neglected relationship: iatrogenic transmission of HIV in Africa). **La Presse Médicale** 2003; 32 (26): 1205–1207.

Summary, for the French medical community, of the 4 controversial papers about iatrogenic HIV transmission in Africa published in the Int J STD & AIDS (see # **96**, 101–103 above).

115. **Potterat JJ**, Brewer DD, Rothenberg RB, Muth SQ, Brody S. HIV and hepatitis C epidemics in Africa: continuing the debate. **AIDScience** 2003; 3: 19 (16 October). [[link](#)]

Reply to article in Nature claiming that lack of parallel transmission between HIV and hepatitis-C in Africa disproves the iatrogenic hypothesis advanced by Gisselquist and colleagues. Article shows that the two viruses are not transmitted the same way: hepatitis-C is not efficiently transmitted intramuscularly, while HIV is. Also details the relative insensitivity of hepatitis-C tests (disappearance of antibody in many HIV positive patients, frequent transience of primary infection, and testing artifacts).

116. Gisselquist D, Friedman E, **Potterat J**, Minkin SF, Brody S. Four policies to reduce HIV transmission through unsterile health care. **International Journal of STD & AIDS** 2003; 14: 717–722. [[fulltext](#)]

To reduce HIV transmission through unsterile health care procedures in poor countries 4 policies that can be immediately and inexpensively implemented are recommended: public education, transparent sterile procedures (POST, or patient observed sterile treatment), same advice to patients and to staff, and zero tolerance for iatrogenic infection. Recommends viable health care quality control efforts and investigation of unexplained infections.

117. Rothenberg R, **Potterat JJ**, Brewer D. The case against sexual transmission of HIV (Letter). **International Journal of STD & AIDS** 2003; 14: 784–786.

Reply to a letter criticizing our view that sexual transmission is an inadequate explanation for the HIV epidemics in Africa and other poor countries. Critics are challenged to construct an epidemiologic model, using penile-vaginal transmission only, that can reproduce the epidemic curves observed in the 11 sub-Saharan countries accounting for half of HIV cases in Africa.

118. Brody S, **Potterat JJ**. Establishing valid AIDS monitoring and research in countries with generalized epidemics. **International Journal of STD & AIDS** 2004; 15: 1–6. [[PDF](#)]

Details guidelines for valid HIV/AIDS surveillance and epidemiologic research in both the developed and developing worlds. Most HIV/AIDS epidemiologic studies have suffered from poor research design. Recommends accurate risk factor identification, control for confounding, and high (and persistent) index of suspicion for pejorative behaviors. Efficacious allocation of prevention resources depends on valid empiric findings, not preconceptions, ideology, or civility.

119. Brewer D, Rothenberg R, **Potterat JJ**, Gisselquist D, Brody S. HIV epidemiology in Africa: rich in conjecture, poor in data (reply to letter by Boily et al.) (Letter). [International Journal of STD & AIDS](#) 2004; 15: 63–65. [\[excerpt\]](#)

Reply to critics of our papers, which detail the surprisingly weak empiric foundation for viewing heterosexual exposure as principal vector for Africa's HIV epidemics. Because critics' objections are speculative, we outline the required research designs for settling the controversy: in-depth contact tracing, with typing of HIV genetic sequences, and delineation of the conformation of sexual networks. (We note that in the only available study, viral profiles did not cluster in any way consistent within [or between] networks in Ugandan communities.) Data and evidence-based reasoning, not continual conjecture, are necessary to elucidate epidemic patterns.

120. Brody S, **Potterat JJ**. Autoinoculation of human papilloma virus and vaginal transmission of human immunodeficiency virus: an appeal for rigorous verification. [Sexually Transmitted Diseases](#) 2004; 31: 65–66. [\[fulltext/PDF/EPUB\]](#)

Points out that uncritical acceptance by health workers of potentially pejorative information about sexual and drug-using behaviors are the chief threat to scientific validity. Recommends use of specific tests and techniques to validate patients' self-reports. Tolerance of low evidentiary standards and use of untested default assumptions belong to a scientifically primitive age.

121. Gisselquist D, **Potterat JJ**, Brody S. HIV transmission during paediatric health care in sub-Saharan Africa: risks and evidence. [South African Medical Journal](#) 2004; 94: 109–116. [\[PDF\]](#)

Reviews published evidence on: HIV prevalence in pediatric clinics in Africa, on risks for horizontal HIV transmission to patients, and on non-mother-to-child transmission. Advocates research to determine true extent of iatrogenic HIV infection in African children and to identify high-risk procedures and settings. Warns that HIV-infected children less than 1 year old have high viral loads and are thus dangerous reservoirs for iatrogenic infection to medical workers and to other children using the same health care facilities. Concludes that evidence supports according high priority to infection control in health care settings and for the testing of blood transfusions.

122. **Potterat JJ**, Woodhouse DE, Muth SQ, Rothenberg RB, Darrow WW, Klovdahl AS, Muth JB. Network dynamism: history and lessons of the Colorado Springs study, in Morris M (Ed) [Network Epidemiology: A Handbook for Survey Design and Data Collection](#). Oxford University Press Inc., New York 2004: 87–114. (Presented at the IUSSP Conference on Partnership Networks and the Spread of HIV, Chiang Mai, Thailand, 2/2000.)

First prospective investigation of the influence of network structure on the propagation of infectious disease. Details its history, major findings, and shortcomings. Conducted between 1987 and 1991, this path-breaking study showed that network conformation was a critical context influencing HIV epidemic flow. First to demonstrate that intimate personal

information, including names and addresses of sex or/and drug partners of outlaw groups (prostitute women, injecting drug users, and customers of prostitutes) could be obtained from such marginalized persons in the absence of a "legitimate" stimulus (e.g., presence of communicable disease). (Called CDC Project 90.)

123. **Potterat JJ**, Brewer DD, Muth SQ, Rothenberg RB, Woodhouse DE, Muth JB, Stites HK, Brody S. Mortality in a long-term open cohort of prostitute women. **American Journal of Epidemiology** 2004; 159: 778–785. [\[PDF\]](#)

First empiric study of mortality in prostitute women with verified cause of death in a representative prostitute population. Long observation period (1967–1999). Drug use and violence are predominant causes of death. The overall Standard Mortality Ratio (SMR) was 1.9, the SMR while being a prostitute was 5.9, and the SMR for death by homicide was 17.7. Prostitute women face the most dangerous work environment in the United States.

124. **Potterat JJ**. Partner reduction for AIDS prevention: good luck (online letter). **British Medical Journal** 2004; 328. [\[fulltext\]](#)

Criticizes article calling for "reduction of sexual partners" as key strategy to dampen HIV transmission in countries with generalized epidemics, because such a recommendation rests on ecologic, rather than direct, evidence of what is driving epidemics in these countries. Hard data, not insights, are needed to guide efficacious HIV prevention efforts.

125. Gisselquist D, **Potterat JJ**. Review of evidence from risk factor analyses associating HIV infection in African adults with medical injections and multiple sexual partners. **International Journal of STD & AIDS** 2004; 15: 222–233. [\[abstract\]](#)

Reviews studies of risk factors for HIV from sub-Saharan Africa for data associating HIV infection with medical injections and with having more than one sex partner. Shows that median and mean PAFs (population-attributable fraction) for injections exceed those for having multiple partners for both prevalent and incident HIV. Calls for confirmation of these conclusions using properly controlled (e.g., "reverse causation" confounding) field studies, especially from regions experiencing rapid epidemics.

126. **Potterat JJ**, Gisselquist D, Brody S. Still not understanding the uneven spread of HIV within Africa (Letter). **Sexually Transmitted Diseases** 2004; 31: 365. [\[fulltext/PDF\]](#)

Points out that, after 20 years of HIV epidemiology in sub-Saharan Africa, researchers have not identified even a single sexual variable that is an important personal risk for HIV acquisition and that is consistently higher in communities with higher HIV prevalence. This negative finding is important because it suggests that a substantial amount of HIV transmission is not due to sex. Also asks researchers in Tanzania to release their data on medical injections and HIV incidence.

127. Gisselquist D, **Potterat JJ**, Brody S, Minkin SF. Does selected ecologic evidence give a true picture of HIV transmission in Africa? **International Journal of STD & AIDS** 2004; 15: 434–439.

Comprehensive response to critics of our hypothesis that unsafe health care fuels sub-Saharan Africa's HIV epidemics. Summarizes the evidence and arguments advanced by these critics, who have mostly presented selected, indirect, and speculative evidence; ignored or rejected important evidence; and failed to systematically address the stubborn anomalies. Requests adoption of higher evidentiary standards and urges specific research projects in Africa to fully disclose relevant evidence on HIV risk. Models the downstream impact of having dismissed or ignored iatrogenic transmission during the last 20 years.

128. Gisselquist D, **Potterat JJ**, Brody S. Running on empty: sexual cofactors are insufficient to drive Africa's turbocharged HIV epidemic. **International Journal of STD & AIDS** 2004; 15: 442–452.

Critically examines hypotheses advanced over time to account for the intensity of HIV transmission in sub-Saharan Africa: African promiscuity, bacterial STD, circumcision status, genital herpes, primary infection, chronic disease-induced immune suppression, mixing patterns (older men with young girls), sexual concurrency, genetic differences, and epidemic stage. Shows that none of these factors, singly or in combination, can account for the 6–18 times faster HIV transmission speed noted in Africa compared to the developed world and, importantly, none of these factors differentiates the heterogeneous HIV trajectories noted in Africa.

129. Rothenberg R, Gisselquist D, **Potterat J**. A simulation to assess the conditions required for high level heterosexual transmission in Africa. **International Journal of STD & AIDS** 2004; 15: 529–532.

A compartment model simulation is used to estimate the parameters necessary for heterosexual transmission to account for 80% of HIV cases in sub-Saharan Africa. What is required exceeds values derived from studies: rates of HIV transmission would have to be 2–4 times higher than observed and numbers of sexual partners would have to be 2–3 fold higher than reported. The gap between empiric evidence and orthodox view is too substantial for heterosexual transmission to be considered the predominant mode of HIV transmission in Africa.

130. Gisselquist D, **Potterat JJ**, Brody S. Response: Debate about iatrogenic HIV transmission should not be a pretext for inaction (Clinical Debate). **International Journal of STD & AIDS** 2004; 15: 623–625.

Response to critics who claim that we selected evidence to support the iatrogenic hypothesis (without providing any that we missed!). Among other details, we challenge the assertion that Uganda's decline in HIV incidence during the 1990s was caused by changes in sexual behaviors, for this claim does not weigh the changes in medical safety precautions implemented in the 1990s.

131. Gisselquist D, **Potterat JJ**. HIV transmission dynamics in Africa: still a major matter to resolve—authors' reply (Letter). **International Journal of STD & AIDS** 2004; 15: 710–711.



Reply to critics who plea for a return to the orthodox view that medical injections are not a "major" cause of HIV transmission in poor countries. We ask: how "major" does the attributable fraction have to be before implementing safe health care and warning the public?

132. Golden MR, Hogben M, **Potterat JJ**, Handsfield HH. HIV partner notification in the United States: a national survey of program coverage and outcomes. **Sexually Transmitted Diseases** 2004; 31: 709–712. [\[fulltext/PDF/EPUB\]](#)

First report of the scope and case-finding success of partner notification (PN) for HIV nationally. Focus is on cities reporting more than 200 cases of AIDS in 2001. Only one-third of cases are actually interviewed and it takes about 14 interviews to yield one previously unidentified HIV positive contact. PN is less productive for cases diagnosed in gay men than in heterosexuals, including injecting drug users. Calls for improved PN approaches for gay men.

133. Gisselquist D, **Potterat JJ**. Request for disclosure of available data associating HIV with medical injections (Letter, 20 December 2004). **SIGNPOST** 2005; published online Jan 5.

Bluntly reiterates our multifarious (and ignored) requests for researchers in sub-Saharan Africa to fully report data associating medical injections with HIV incidence. Specifically, we request data from research teams in Mwanza, Masaka, and Rakai and we identify their funding agencies.

134. Brody S, **Potterat JJ**, Muth SQ, Woodhouse DE. Psychiatric and characterological factors relevant to excess mortality in a long-term cohort of prostitute women. **Journal of Sex & Marital Therapy** 2005; 31:1–16. [\[abstract\]](#)

Infers psychological profile of street prostitutes by reviewing the literature on prostitutes and psychopathology, linking these population attributes with their reported association to mortality and then comparing them for consonance with data on causes of death reported in a representative sample of American prostitutes. Concludes that the primary mediator between prostitution and elevated mortality is presence of antisocial, and of borderline, personality features commonly observed in samples of prostitutes. Such data may be useful to inform interventions.

135. Brewer DD, **Potterat JJ**, Muth SQ, Malone PZ, Montoya P, Green DL, Rogers HL, Cox P. Randomized trial of supplementary interviewing techniques to enhance recall of sexual partners in partner notification contact interviews. **Sexually Transmitted Diseases** 2005; 32: 189–193. [\[PDF\]](#) (Presented at the XXII Social Networks Conference, New Orleans, February 2002, and at the National STD Conference, San Diego CA, March 2002, Abstract # P107 and, in part, at the 15th ISSTD Conference, Ottawa, Canada, 28 July 2003, Abstract # 0340.)

Because forgetting is the predominant cause of underreporting of partners in STD/HIV contact interviews, this study implements a randomized trial of supplementary interview

techniques using two study, and one control, group(s). Respondents are STD patients with multiple sexual partners. Use of specific techniques (i.e., location and first name cues), by stimulating memory, improved STD case detection by 12% and identified previously unconnected parts of sexual networks.

136. Rothenberg RB, **Potterat JJ**, Koplan JP. The algebra of condoms and abstinence. **Sexually Transmitted Diseases** 2005; 32: 252–254. [\[fulltext/PDF/EPUB\]](#)

Shows, via Bernoulli equation model, that use-effectiveness of condoms is in part determined by mathematics of transmission. May explain differential impact of condom use on transmission of specific STDs.

137. Ellen JM, Brown BA, Chung Shang-en, **Potterat JJ**, Muth SQ, Valente TW, Padian NS. Impact of sexual networks on risk for gonorrhea and chlamydia among low income urban African American adolescents. **Journal of Pediatrics** 2005; 146: 518–522. [\[abstract\]](#) (Presented at the International Society for STD Research Conference, Ottawa, Canada, July 2003. Abstract #0039.)

Attempts to determine if African American adolescents are at increased risk for STD due to sexual network conformation. Uses a household sampling (rather than a contact tracing) frame. Finds that adolescents whose recent sex partner has other sex partners are at higher risk and that adolescents in networks where there is greater average age discordance between them and their partners are, in turn, more likely to find partners who have outside partners. This observation may explain association between age disparity and elevated STD/HIV risk.

138. Brody S, **Potterat JJ**. HIV epidemiology in Africa: weak variables and tendentiousness generate wobbly conclusions (Letter). **Public Library of Science Medicine** 2005; 2 (5): 458–460. [\[fulltext\]](#)

Critiques use of hastily implemented, underpowered variables to evaluate iatrogenic HIV transmission in Africa, especially by researchers who are invested in dismissing non-sexual means of HIV transmission and who gratuitously dismiss anomalous evidence. Shows that the authors' own evidence strongly suggests non-sexual transmission, especially for their HIV positive women.

139. **Potterat JJ**. Estimating female-to-male infectivity of HIV-1 in Kenya: potential threats to validity (Letter). **The Journal of Infectious Diseases** 2005; 191: 2154–2155. [\[fulltext/PDF\]](#)

Criticizes a report from Kenya for failing to collect data that are sufficiently precise to validly estimate the female-to-male HIV transmission efficiency in both uncircumcised and circumcised men. Their data should have included questions about anal intercourse (with men and/or women), receiving medical care for STD symptoms, and parenteral exposures.

140. **Potterat JJ**. Active detection of men with asymptomatic chlamydial or gonorrhoeal urethritis. (Letter) **International Journal of STD & AIDS**; 2005: 16: 458. (Debated at the Workshop

on the Current Chlamydia Epidemics in Western Societies, University of Stockholm Mathematical Sociology Department, Sweden, August 30, 2007.)

Criticizes a CDC study for failing to frame its clinical findings in light of the epidemiologic literature. Recapitulates the empiric evidence overlooked by the authors which demonstrates the pivotal role of asymptomatic men in the transmission of gonorrhea and chlamydia. Asymptomatic urethritis in men is common, accounts for half of all transmissions to women, and removal of such undetected infections is associated with substantial (25%–33%) decreases in gonorrhea and chlamydia incidence. Silence = transmission.

141. Rothenberg RB, Muth SQ, Malone SL, **Potterat JJ**, Woodhouse DE. Social and geographic distance in HIV risk. **Sexually Transmitted Diseases** 2005; 32: 506–512. [\[fulltext/PDF/EPUB\]](#) (Presented at the XVIIIth International Network Conference, Sitges, Spain, 5/1998 and at the Infectious Disease Society of America Conference, Boston, MA, October 2004, Abstract # 834.)

Examines the relationship between social and geographic distance using network analysis and people's residential address. Uses data on the sexual and drug partners of prostitutes and injecting drug users. Shows that most people and relationships are geographically tightly clustered, with average distance between people and partners being about 4 km. Demonstrates the importance of geographic compactness in the maintenance of STD endemicity, because at-risk persons are likely to meet other at-risk persons preferentially. First plotting of a network in precise geographic space.

142. Gisselquist D, **Potterat JJ**. Questioning Wawer et al's estimated rate of sexual HIV transmission from persons with early HIV infections (Letter). **The Journal of Infectious Diseases** 2005; 192: 1497–1499. [\[fulltext/PDF\]](#)

Critiques a report from the Rakai (Uganda) Community Trial which claims a very high rate of seroconversion (0.0082 per sexual act) in initially HIV-negative couples. Rakai researchers failed to analyze potentially relevant evidence and failed to control for non-sexual exposures, especially the sharing of home medical injection equipment (common in Uganda). These oversights may account for the unusually high seroconversion rate noted.

143. Wohlfeiler D, **Potterat JJ**. Using gay men's sexual networks to reduce sexually transmitted disease (STD)/Human immunodeficiency virus (HIV) transmission. **Sexually Transmitted Diseases** 2005; 32 (Suppl.): S48–S52. [\[fulltext/PDF/EPUB\]](#)

Probes ways other than individual risk-behavior modification to reduce STD/HIV burden in gay men. Proposes implementation of sexual network fragmentation strategies. Specifically, suggests ways to discourage sexual mixing between high and low-risk persons in bathhouses, sex clubs, and the Internet. Encourages gay men to become better shoppers using preferred partner profiles and screening algorithms when soliciting partners using sex web-sites. Good diagrams of concurrency.

144. **Potterat JJ**, Brewer DD, Brody S, Muth SQ. The protective effect of male circumcision as a faith lift for the troubled paradigm of HIV epidemiology in sub-Saharan Africa (Letter). **Public Library of Science Medicine** 2006; 3 (1), e64. DOI: 10.1371/journal.pmed.0030064 [\[PDF\]](#)

Assesses the quality of the evidence from a prospective study of HIV incidence in South Africa that is being used to support the contention that circumcision has a substantial protective effect. Their study failed to control for non-sexual (e.g., puncturing) exposures and for anal (especially receptive) intercourse. It also failed to report some relevant data and analyses.

145. **Potterat JJ**, Brewer DD, Brody S. Miscarriage of HIV epidemiology in sub-Saharan Africa (Letter). **AIDS** 2006; 20: 955–956. [\[fulltext/PDF/EPUB\]](#)

Criticizes singular focus on sexual risk factors in sub-Saharan Africa and recommends no longer tolerating incomplete approaches (not considering exposures to sharps) in the assessment of HIV transmission in poor countries. "Unasked questions yield no answers."

146. **Potterat J**. The literary merits of Presidential speeches (Letter). **The Numismatist** 2006; 119 (4): 14.

Comments on contemporary (1863) negative review of Lincoln's Gettysburg Address and suggests that these criticisms may well apply to speeches by the current Republican President.

147. Brewer D, Rothenberg R, Muth SQ, Roberts Jr JM, **Potterat JJ**. Agreement in reported sexual partnership dates and implications for measuring concurrency. **Sexually Transmitted Diseases** 2006; 33: 277–283. (Presented at the Workshop on the Current Chlamydia Epidemic in Western Societies, Department of Mathematics, University of Stockholm, Sweden, 30 August 2007 and at the XXVIII International Sunbelt Conference, St. Pete Beach, FL, 22–27 January 2008.) [\[PDF\]](#)

Evaluates the adequacy of routinely collected STD/HIV contact tracing information for reliably assessing concurrency (overlapping sexual partnerships). Retrospective analysis of data from more than 700 case-contact pairs shows that their self-reports displayed good agreement on dates of first and last sexual exposure. Simulations (pair-based and distribution-based approaches) reveal high (circa 80%) positive predictive values for estimating concurrency using such contact tracing data.

148. Brewer DD, **Potterat JJ**, Brody S. Research design determines what can be known about modes of HIV transmission (Letter). **AIDS** 2006; 20: 1208–1209. [\[fulltext/PDF/EPUB\]](#)

Faults HIV researchers in India for allowing their preconceptions (that the observed positive association between HIV prevalence and exposures to medical injections is due to HIV patients seeking injections for their illness) to discount evidence supportive of iatrogenic transmission. Requests analogous analyses for sexual behavior correlates of HIV

prevalence that they used for assessing association with medical injections. Reiterates need for better evidence: tracing of incident cases and sequencing of HIV DNA.

149. Gisselquist D, Upham G, **Potterat JJ**. Efficiency of Human Immunodeficiency Virus transmission through medical procedures: evidence, estimates, and unfinished business. **Infection Control & Hospital Epidemiology** 2006; 27: 944–952. [\[fulltext/PDF\]](#)

Reviews studies of iatrogenic outbreaks and percutaneous exposures to estimate HIV transmission efficiency through medical procedures. Transmission probabilities range from 0.5% to 3% (lower-risk procedures, like medical injections) and from 10% to 20% for high-risk ones (like intravenous lines). Odds ratios have large margins of error, hence the need for improved investigations to obtain robust estimates for a range of medical procedures.

150. Brewer DD, Dudek JA, **Potterat JJ**, Muth SQ, Roberts JM Jr, Woodhouse DE. Extent, trends, and perpetrators of prostitution-related homicide in the United States. **The Journal of Forensic Sciences** 2006; 51 (5): 1101–1108. [\[fulltext\]](#) [\[online appendix\]](#)

Analyzes 9 large and diverse homicide data-sets to study prostitution-related homicide in the United States. Such crimes, though substantially under-ascertained, suggest that about 3% of female homicides are prostitution-related. Prostitutes are killed primarily by clients; clients, mostly by prostitutes; and pimps, by pimps. Serial killers account for one-third of prostitute homicides.

151. **Potterat JJ**. A passage to India's HIV epidemics: sending out an S.O.S. (Editorial). **International Journal of STD & AIDS**; 2006: 17: 718–719. [\[fulltext/PDF\]](#)

Editorializes 3 simultaneously published papers by researchers in India who question the orthodox view that the preponderance of HIV infections in India are, directly and indirectly, prostitution related. Details strengths and weaknesses and concludes that there is sufficient evidence for health authorities to reassess HIV propagation dynamics in India.

152. Brewer DD, **Potterat JJ**, Muth SQ, Roberts JM Jr. A large specific deterrent effect of arrest for patronizing a prostitute. **Public Library of Science ONE** 2006; 1 (1): e60. doi 10.1371/journal.pone.0000060. (Presented at the American Society of Criminology conference, 19 November 2004, Nashville, TN, Abstract RC-005 and at the 2006 National Institute of Justice Conference, 24 July 2006 in Washington D.C.) [\[fulltext/PDF\]](#)

Examines the deterrent effect of police arrest for soliciting a prostitute, using data from more than 2,000 male clients identified in Colorado Springs between 1970 and 2000. Arrest reduced the likelihood of a subsequent arrest by approximately 70%. Hence post-arrest interventions such as court-ordered "john school" may be a superfluous deterrence strategy.

153. Brewer DD, **Potterat JJ**, Muth SQ, Roberts JM Jr. Rationale for using the term "prostitute" In scientific research (Letter). **Public Library of Science ONE** 2006; 1 (1): e60. [\[fulltext\]](#)



Responds to critic who objects to our using "prostitute" instead of "commercial sex worker"; we contend that "sex worker" is broadly encompassing and, thus, undermines scientific precision.

154. Brewer DD, Rothenberg R, **Potterat JJ**, Muth SQ. Data-free modeling of HIV transmission in sub-Saharan Africa (Letter). **Sexually Transmitted Diseases** 2007; 34: 54–56. [\[fulltext/PDF/EPUB\]](#)

Criticizes mathematical modelers French and colleagues for using parameter estimates that are distantly related to empiric values; such procrustean modeling preordains a devoutly wished (yet invalid) conclusion: that heterosexual, rather than iatrogenic, exposures drive Africa's epidemics.

155. Brewer DD, **Potterat JJ**, Roberts JM Jr., Brody S. Male and female circumcision associated with prevalent HIV infection in virgins and adolescents in Kenya, Lesotho, and Tanzania. **Annals of Epidemiology** 2007; 17: 217–226. [\[abstract\]](#)

Presents evidence that HIV is being transmitted to both males and females during genital cutting (circumcision) in African adolescents. Cautions against promoting circumcision as an HIV prevention tool unless such procedures are demonstrably safe.

156. Brewer DD, **Potterat JJ**, Muth SQ, Brody S. Converging evidence suggests nonsexual HIV transmission among adolescents in sub-Saharan Africa (Letter). **Journal of Adolescent Health** 2007; 40: 290–291. [\[fulltext/PDF - free registration required\]](#)

Challenges the conclusion of researchers in Zimbabwe who, faced with the finding that 41% of their 192 HIV-positive adolescent girls report no sexual exposure, suspect that the virgins lied about their sexual past. We propose that researchers investigate nonsexual (e.g., blood) exposures instead of simply dismissing the girls' self-reports as untrue.

157. Brody S, Brewer DD, **Potterat JJ**. Association of HIV infection with poor genital hygiene and medical treatment for prior serious illness suggests iatrogenic transmission (Letter). **Journal of Acquired Immune Deficiency Syndromes** 2007; 44 (3): 365–366. [\[fulltext/PDF/EPUB\]](#)

Offers an explanation for Meier et al's finding that good genital hygiene was associated with lower risk of HIV positivity in Kenyan men: that genital cleanliness reduces both the risk of infection and the (consequent) risk of exposure to HIV-contaminated health care for infection.

158. **Potterat JJ**. Partner referral tools and techniques for the clinician diagnosing a sexually transmitted infection. **International Journal of STD & AIDS** 2007; 18: 293–296.

Action-oriented primer for primary care clinicians on managing sex partners of their STI patients. Outlines counseling techniques (the "how" and "who" of notification) and obstacles.

159. Brewer DD, **Potterat JJ**, Brody S. Male circumcision in HIV prevention (Letter). **The Lancet** 2007; 369: 1597.

Comments on the 3 circumcision trials in Africa, cautioning against precipitous implementation of its recommendation (circumcise HIV-susceptible men) until confounding is more rigorously controlled for and until the protective effect (physiologic mechanism) is more clearly understood.

160. Brewer DD, Gisselquist D, Brody S, **Potterat JJ**. Investigating iatrogenic HIV transmission in Ugandan children (Letter). **Journal of Acquired Immune Deficiency Syndromes** 2007; 45: 253–254.

Questions Biraro et al's conclusion that 90% of children in their cohort acquired HIV vertically. Highlights data from their study that suggest iatrogenic rather than vertical transmission; requests additional analyses (especially from unreported study rounds); and suggests considering/assessing overlooked confounding factors.

161. Gisselquist D, **Potterat JJ**, Salerno L. Injured and insulted: women in Africa suffer from incomplete messages about HIV risks. **Horn of Africa Journal of AIDS** 2007; 4 (1): 15–18. (Presented at the "Gender, Survival and HIV/AIDS: From Evidence to Policy" conference, Toronto, Canada, 7–9 May 2006.)

Focus on sexual transmission risks for HIV to the exclusion of considering, or warning about, non-sexual risks has failed to prepare people to avoid non-sexual (e.g., skin piercing or cosmetic) exposures and placed HIV-infected women in the position of being unfairly accused of infidelity or promiscuity. Silence about non-sexual exposures destroys reputations and lives.

162. **Potterat JJ**. Attractive theory is not enough (Book review). **International Journal of STD & AIDS** 2007; 18: 645–646.

Reviews 3 simultaneously published books (by Henry Bauer, Helen Epstein, and James Chin) about the global AIDS epidemic, arguing that these reports are mirrors for the failings of HIV epidemiology during the last 25 years: reliance on indirect (ecologic inference, mathematical modeling, and risk factor analysis) rather than direct evidence to elucidate HIV transmission dynamics in Africa.

163. Brewer DD, **Potterat JJ**, Roberts Jr JM, Brody S. Circumcision-related HIV risk and the unknown mechanism of effect in the male circumcision trials (Letter). **Annals of Epidemiology** 2007; 17: 928–929. [\[fulltext/PDF - free registration required\]](#)

Responds to critics (of our [paper # 155](#) above) who argue that our measurement of virginity and our small numbers have biased our results. We reply that measurement of sexual behavior is entirely irrelevant to the association we found between circumcision and HIV infection in adolescents, virgin or not—not to mention that our sample numbers were adequate for statistical assessment. We recommend that the mechanism for circumcision's protective effect be validly investigated.

164. Brewer DD, **Potterat JJ**, Gisselquist D, Dinsmore W, St Lawrence J, Brody S. Valid evaluation of iatrogenic and sexual HIV transmission requires proof (Letter). **AIDS** 2007; 21: 2556–2558.

Critiques a study reporting a very strong relationship between medical injections and incident HIV in Uganda. Whereas the authors self-servingly dismiss its significance without proper empiric evidence, we present data to undermine their interpretation and request additional analyses (which they ignore by essentially reasserting their belief that their interpretation has to be right).

165. **Potterat JJ**, Brewer DD, Brody S. Blind spots in the epidemiology of HIV in black Americans. **International Journal of STD & AIDS** 2008; 19: 1–3.

Because neither traditional risk factors nor community contexts explain why African American women are at 20 times greater risk for HIV infection than white women, we call for a return to fundamentals: detailed studies of transmission vectors (e.g., anal intercourse and un[der]assessed blood exposures) coupled with tracing of sexual and nonsexual partners and linking of HIV cases via DNA sequencing.

166. Centers for Disease Control and Prevention. Male Chlamydia Screening Consultation. **[PDF]**

167. Brewer DD, Muth SQ, **Potterat JJ**. Demographic, biometric, and geographic comparison of clients of prostitutes and men in the US general population. **Electronic Journal of Human Sexuality** 2008 Volume 11. **[link]**

Compares men who have patronized prostitutes with men in the general population of several U.S. metropolitan areas. Prostitute clients tend to be less educated, younger, unmarried, Hispanic or Black, and to have lower body mass, when compared to men in the general population. Clients of street prostitutes had profiles similar to those who patronized off-street prostitutes.

168. Brewer DD, **Potterat JJ**, Muth SQ, Gisselquist D, Brody S. Disconnects in presumed heterosexual HIV transmission in Malawi (Letter). **AIDS** 2008; 22: 1377–1379.

Suggests that both the "paradoxical distribution of HIV prevalence" in a Malawian sexual network and the lack of association between any measured sexual variable with HIV prevalence could be resolved by investigating unmeasured (especially blood) exposures.

169. **Potterat JJ**. Disease intervention specialists as a corps, not corpse (Letter). **Sexually Transmitted Diseases** 2008; 35: 703.

Responsibility for notifying sex partners of STD cases has traditionally rested with public health workers; it is shifting to the STD patient, who is now expected to bring Rx medication to exposed partners. Reminds STD program managers of the importance of retaining trained "shoe-leather" epidemiologists (contact tracers) for enhanced disease surveillance and control.

170. **Potterat JJ**, Brody S, Brewer DD, Muth SQ. Assessing anal intercourse and blood exposures as routes of HIV transmission in Mombasa, Kenya (Letter). **Sexually Transmitted Infections** 2008; [PDF]

Suggests that an anomaly noted in a Kenyan HIV prevention trial could be resolved by considering non-sexual (blood) exposures to HIV, which the researchers failed to assess. Implications for prevention messages are mentioned.

171. Brewer DD, Roberts JM Jr., Muth SQ, **Potterat JJ**. Prevalence of male clients of street prostitute women in the United States. **Human Organization** 2008; 67 (3): 346–356. [abstract/online free with registration] (Presented at the American Society of Criminology conference, 18 November 2004, Nashville, TN, Abstract VO-029 and at the 25th International Sunbelt Social Network Conference, Redondo Beach, CA, 17 February, 2005, Abstract # Thurs D2.)

Using capture-recapture data from several U.S. metropolitan areas, this analysis estimates the prevalence of prostitute clients. About 2%–3% of adult men patronized local prostitutes during the 2–5 year observation period—an estimate nearly twice as large as that derived from surveys using self-report information.

172. **Potterat JJ**. Preventing HIV in young people in Africa: time to cut the Gordian knot (Letter)? **British Medical Journal** 2008. [link]

Comments on editorial that expresses astonishment that an HIV intervention in South Africa moderately reduced herpes transmission, but had little impact on HIV. We suggest that, because herpes is sexually transmitted while HIV can be transmitted non-sexually, such studies should control for blood, in addition to sexual, exposures. This anomaly may then be resolved.

173. Centers for Disease Control and Prevention. Recommendations for Partner Services Programs for HIV infection, Syphilis, Gonorrhea, and Chlamydial infection. **Morbidity and Mortality Weekly Report** 2008; 57: 1–83. [fulltext]

Replaces previous recommendations for the management of partners to STD/HIV cases. Integrates guidelines for the Big Four: HIV, syphilis, gonorrhea, and chlamydia. Recommends direct health department partner notification involvement for newly diagnosed HIV and early syphilis cases and for (at least) selected gonorrhea and chlamydia cases, resources permitting.

174. **Potterat JJ**. Sexual network configuration of STD hyperendemicity as harbinger of epidemicity (Editorial) **Sexually Transmitted Diseases** 2009; 36: 49–50.

Critiques a sexual network study conducted among black adolescents. Points out that the authors should have simultaneously studied the sexual networks of non-black adolescents in the same neighborhood. Importantly, the authors are seemingly unaware that they stumbled on data delineating the (previously undescribed) conformation of a pre-epidemic phase network.

175. Brewer DD, **Potterat JJ**, Roberts JM Jr., Brody S. Unhygienic male circumcision procedures and HIV transmission (Letter). **South African Medical Journal** 2009; 99: 11–12.

Comments on a South African study that found no association between male circumcision status and HIV prevalence, while warning of the potential for HIV transmission from unhygienic circumcision procedures. We summarize evidence from our study (# 155 above) which supports their conclusions and outline recommendations for confirmatory empiric studies.

176. **Potterat J**. First depiction of Christ (Letter). **The Numismatist** 2009; 122 (2): 17.

Corrects error in a Numismatist article: the first depiction of Christ on a non-gold coin appeared not on a silver penny issued by the Vikings in the mid-11th century, as stated by the author, but on an earlier piece issued by a Byzantine Emperor (Justinian II, late 7th century.)

177. Gisselquist D, **Potterat JJ**, St Lawrence JS, Hogan M, Arora NK, Correa M, Dinsmore W, Mehta G, Millogo J, Muth SQ, Okinyi M, Ounga T. How to contain generalized HIV epidemics? A plea for better evidence to displace speculation. **International Journal of STD & AIDS** 2009; 20: 443–446.

Because differences in HIV transmission between concentrated and generalized HIV epidemics remain poorly understood, we briefly review weaknesses in epidemiologic understanding and recommend on-the-ground tracing of incident HIV infections, especially in women of all ages. Above all, this is a plea for high-quality empiric evidence of both sexual and non-sexual modes of transmission to inform local interventions, especially in poor countries.

178. **Potterat JJ**. AIDS denialism is not the same as AIDS dissent (Book Review). **International Journal of STD & AIDS** 2009; 20: 515–516.

Reviews Seth Kalichman's "Denying AIDS" book, detailing its strengths and singling out an important weakness: confusing legitimate AIDS epidemiology dissenters with AIDS Denialists.

179. **Potterat JJ**. The end of laissez-faire HIV partner notification? Trust but verify (Editorial) **Sexually Transmitted Diseases** 2009; 36: 463–464.

Comments on article whose findings help expose the fundamental weakness of current HIV partner notification (PN): unverified sex partner outcomes. Advocates formal verification (tracing of contacts) to permit valid assessment of PN's efficacy and public health impact.

180. Brewer DD, **Potterat JJ**, Muth SQ, Brody S. Raising the standard of evidence for determining modes of HIV transmission (Letter). **Public Library of Science One** 2009; 20 May. [[PDF](#)]



Compliments the authors for their strong study of HIV transmission patterns within Georgia State prisons, requesting additional detail and pointing out that the evidence presented suggests a much greater role in HIV transmission for tattooing than the authors conclude.

181. Okinyi M, Brewer DD, **Potterat JJ**. Horizontally acquired HIV infection in Kenyan and Swazi children. **International Journal of STD & AIDS** 2009; 20: 852–857. [\[abstract\]](#)

First case-control study in sub-Saharan Africa to comprehensively assess correlates of horizontally acquired HIV in children; compared to their HIV-negative siblings, HIV-positive children had many kinds of puncturing exposures, mostly related to conventional health care and to dental care by informal providers. Implications for prevention are discussed.

182. Peters EJ, Brewer DD, Udonwa NE, Jombo GTA, Essien OE, Umoh VA, Otu AA, Eduwern DU, **Potterat JJ**. Diverse blood exposures associated with incident HIV infection in Calabar, Nigeria. **International Journal of STD & AIDS** 2009; 20: 846–851. [\[PDF\]](#)

First empiric study of HIV incidence in sub-Saharan Africa which comprehensively assessed both sexual and blood exposures. Blood exposures were varied and common and were (unlike sexual exposures) associated with new HIV infection.

183. **Potterat JJ**. AIDS epidemiology in Africa: a changing of the guard (Review). **International Journal of STD & AIDS** 2009; 20: 812–815. [\[abstract\]](#)

Summarizes articles appearing in special issue of the International Journal of STD & AIDS devoted to AIDS in Africa. Emphasizes the burgeoning evidence for a much greater role for blood exposures in the continent's HIV burden than asserted by the received wisdom. Notes arrival of a new generation of investigators, especially within Africa, whose research focus is on improving validity of the epidemiologic evidence.

184. **Potterat JJ**. Randomised controlled trials for HIV/AIDS prevention in Africa: learning from unexpected results (Editorial). **Future Virology** 2010; 5: 21–24. [\[PDF\]](#)

Critiques the disappointing results of a prematurely terminated randomized controlled trial (RCT) in Uganda which assessed whether circumcision in HIV-infected men would reduce HIV transmission to their uninfected female partners. Many different kinds of RCTs in sub-Saharan Africa have reported unexpected or disappointing results, most probably because RCTs have focused on sexual HIV transmission, ignoring the contribution of non-sexual (blood) exposures.

185. Brody S, Brewer DD, **Potterat JJ**, Muth SQ. Lack of association between heterosexual lifetime number of sexual partners and prevalent HIV infection: a crucial implication (Letter). **International Journal of STD & AIDS** 2010; 21: 74–75.

Comments on McQuillan et al's failure to discuss the lack of association between black heterosexual men's lifetime number of sexual partners and HIV prevalence, a datum which supports the view that penile-vaginal intercourse is not a significant mode of HIV transmission.

186. **Potterat JJ**. Kudos for Spiegel (Letter). **The Numismatist** January 2010; 123 (1): 14.

Critiques a NUMISMATIST article featuring coins of the Second Punic War which failed to include one showing the victorious general Scipio Africanus's portrait — the first portrait of a living person struck under Roman minting authority (circa 209 B.C.).

187. Brewer D, Okinyi M, **Potterat J**. The facts about HIV infected Swazi children. **Times of Swaziland** 2009 (16 December). [\[link\]](#)

Corrects the misrepresentation of our empiric studies in sub-Saharan Africa reported by the British and Swazi press and suggests the way forward to assuring safe health care: rigorous, comprehensive, transparent, conflict-of-interest free, non-punitive investigations of blood-borne HIV infections.

188. Brewer DD, **Potterat JJ**, Muth SQ. Withholding access to research data (Letter). **The Lancet** 2010; 375: 1872. [\[fulltext\]](#)

Comments on Lancet editorial advocating data sharing in public health, despite probable obstacles, and points out that one of its authors is, ironically, part of a team that has denied us access to their data on several occasions.

189. Brody S, **Potterat JJ**. Assessing mental health and personality disorder in prostitute women (Letter). **Acta Psychiatrica Scandinavica** 2010; 122: 167. [\[abstract\]](#)

Critiques a study of mental health in prostitute women that failed to assess personality disorders or to consider relevant published evidence, hence drawing inappropriate conclusions and recommendations.

190. Brewer DD, **Potterat JJ**, Gisselquist D, Collery S. Vaginal tenofovir gel trial results suggest substantial nonsexual HIV transmission. **WebmedCentral EPIDEMIOLOGY** 2010; 1 (12): WMC001292.

Comments on the CAPRISA 004 placebo-controlled trial of tenofovir vaginal gel which demonstrated a partial HIV acquisition protective effect in South African women. The data, however, strongly suggest that protection may be due to systemic absorption of tenofovir via the genital tract, which then would protect against either sexual and/or blood exposures.

191. **Potterat JJ**, Brewer DD. Age disparity between sex partners of MSM is only a marker of HIV risk (Letter). **Journal of Acquired Immune Deficiency Syndromes** 2011; 56 (1): e35.

Points out that the association between older age of gay men's partners and risk for HIV acquisition is less likely to be a risk factor than risk marker. The authors' assessment probably reflects mismeasurement of HIV exposure. Therefore, prevention messages should continue to focus on such direct risk factors as unprotected anal intercourse and sex between serodiscordant men.

192. **Potterat JJ**, Brewer DD, Brody S. Receptive anal intercourse as a potential risk factor for rectal cancer (Letter). **Cancer** 2011; 117 (14): 3284–3285. DOI: 10.1002/cncr.25909.

Presents evidence that the increase in rectal cancer in young (< 40 years) Americans during the last 25 years may well be due to a parallel increase in receptive anal intercourse and proposes that risk factor analyses of rectal cancer patients include assessment of anal sex practices.

193. **Potterat JJ**. Puzzling observations in a trial of Human Immunodeficiency Virus partner notification in sub-Saharan Africa (Editorial). **Journal of Acquired Immune Deficiency Syndromes** 2011; 56: 381–383. [\[fulltext\]](#)

Notes that the extraordinarily high HIV partner notification (PN) yields observed in the first prospective trial of HIV PN in sub-Saharan Africa need further study; specifically suggests expanded investigation into non-sexual HIV modes of transmission to clarify their remarkable and puzzling findings.

194. Brewer DD, Okinyi M, **Potterat JJ**. Data trump speculation and distortion on routes of HIV transmission in sub-Saharan Africa (Letter). **International Journal of STD & AIDS** 2011; 2011; 22: 118–120.

Replies to two letters to the editor that criticized our study of horizontal HIV transmission in Kenyan and Swazi children (see # 181 above). Clarifies methods and data presented in original article and, especially, presents stronger evidence than heretofore provided for how common unsafe health care is in Swaziland.

195. Gisselquist D, Hancock L, **Potterat JJ**, Brewer D. Grand jury report - suspect transmission of bloodborne viruses: Who can help to get an outbreak investigation underway? **SIGNPOST** 2011; (Letter, posted 20 April 2011). [\[fulltext\]](#)

Appeal to invite (the predominantly poor and black) women attending an abortion clinic in Philadelphia to be tested for blood-borne infection. Non-sterile medical procedures in that clinic (and similar sub-standard health care settings) may help explain the high HIV infection rates in such women.

196. Brewer DD, **Potterat JJ**. Accumulated evidence of substantial iatrogenic HIV transmission ignored and mischaracterized (Comment). **Journal of the International AIDS Society** (posted 30 June 2011). [\[PDF\]](#)

Critiques a JIAS article defending concurrency as the sexual behavior pattern most responsible for the generalized HIV epidemics in Africa. Defenders of concurrency overlook or discount plausible evidence pointing to substantial non-sexual HIV transmission in poor countries.

197. Gisselquist D, **Potterat JJ**, St Lawrence JS, Hogan M, Correa M, Dinsmore W, Muth SQ. Repeating a plea for better research and evidence (Letter). **International Journal of STD & AIDS** 2011; 416–417.

Replies to a critique of our article (# 177 above) that missed our point—which was that the available evidence for HIV transmission in Africa is not sufficiently reliable to effectively guide prevention efforts. The need is clearly for higher quality, field-based evidence, such as the tracing of HIV infections.

198. **Potterat JJ**. 2010 European guideline for Chlamydia trachomatis infections: recommendation for partner notification look-back periods (Letter). **International Journal of STD & AIDS** 2011;22:615.

Points out that the 2010 Chlamydia Guidelines erroneously report that empiric data are not available to recommend specific contact tracing "look back" periods, and refers readers to correct references.

199. **Potterat JJ**, Brewer DD, Gisselquist D, Brody S. Blood exposures ignored in racial disparities in HIV prevalence (Letter). **American Journal of Reproductive Immunology** 2011; 66: 249. Doi: 10.1111/j.1600-0897.2011.01061.x

Comments on article calling for exploration of biological reasons for racial disparities in HIV prevalence, but which fails to consider likely confounding due to nonsexual HIV transmission.

200. Bell G, **Potterat J**. Partner notification for sexually transmitted infections in the modern world: a practitioner perspective on challenges and opportunities (Commentary). **Sexually Transmitted Infections** 2011; 87:ii34–ii36.

Updates partner notification / contact tracing recommendations for sexually transmitted infections in light of modern realities: budget restrictions, new(er) patient-referral technologies, and availability of social media tools.

201. **Potterat JJ**, Brewer DD, Gisselquist D, Brody S. Sexual behavior, HIV and South African youth (Letter). **Journal of Adolescent Health** 2012; 50:207–208.

Suggests that the substantial differences in HIV prevalence noted between South African and North American youths may be caused by differing modes of transmission, and that such differences should be empirically investigated.

202. Brewer DD, **Potterat JJ**, Brody S. Comprehensive assessment of blood and sexual exposures needed for rigorous investigation of HIV transmission (Letter). **AIDS Research and Human Retroviruses** 2012; 28:435–436. Doi: 10.1089/AID.2011.0237

Urges researchers in Uganda to re-interview all their patients who have phylogenetically similar viruses for BOTH sexual and non-sexual risk factors to determine which persons are linked by which mode of HIV transmission.

203. Gisselquist D, **Potterat JJ**, Class D, Collery S, Sonnabend J, St. Lawrence J, Correa M, Dinsmore W, Vachon F. An open letter to Michel Sibide, Executive Director of UNAIDS,

Margaret Chan, Director-General of WHO, and Jim Kim, President of the World Bank.  
**SIGNPOST** 24 October 2012 (Post # 0672). [\[fulltext\]](#)

Calls attention to international agencies of findings from recent surveys in Africa indicating HIV transmission via skin-piercing procedures in health and cosmetic care. Recommends that African public be specifically warned about often overlooked blood-borne transmission risks.

204. **Potterat John J.** The enigma of HIV propagation in Africa: mainstream thought has narrowly focused on "heterosexual sex". **Social Science Research Network** 2310200 (August 14, 2013). [\[PDF\]](#)

Despite mounting evidence suggesting a substantial role for non-sexual (puncturing) exposures in HIV transmission, researchers still have not systematically investigated its impact on HIV propagation; this research design flaw has been THE Achilles Heel of efforts to explain "Why Africa?" Three decades after its identification, epidemiologists still do not fully understand HIV transmission dynamics in sub-Saharan Africa, nor its differential geographic and demographic spread.

205. **Potterat JJ.** Are immature psychological defense mechanisms recently associated with junk food, alcohol, and television also associated with age? (Letter) **Psychiatry Research** 2013; 210: 1326. [\[abstract\]](#)

Requests that the authors of a recently published study in **Psychiatry Research**, who did not control for age (the possibility that with greater age comes greater maturity), newly examine their data using partial correlation analysis to assess association.

206. **Potterat JJ.** Perspective on providing partner notification services for HIV in sub-Saharan Africa. **Retrovirology: Research and Treatment** 2014; 6: 17–21. [\[PDF\]](#)

This commentary encourages public health authorities in sub-Saharan Africa to routinely trace and refer to medical care high-risk contacts of HIV infected persons.

207. Brewer DD, **Potterat JJ**, Muth SQ, Rothenberg R. Comparison of direct estimate and partner elicitation methods for measuring number of sexual and injection partners. **Social Science Research Network** 2548807 (January 2015). [\[PDF\]](#) (Presented at the 126th Annual Meeting of the American Public Health Association, Washington, DC, 11/1998.)

Assesses inter-method and test-retest reliability of people estimating the number of sex and/or injection drug partners for a given recall period, comparing these estimates to direct partner elicitation, in which each partner is elicited and then counted.

208. Brewer DD, Muth SQ, Dudek JA, **Potterat JJ**, Roberts JM Jr. Geographic profiles of violent clients of prostitute women and clients overall. **Social Science Research Network** 2542635 (December 26, 2014). [\[PDF\]](#) (Presented at the 8th Annual Crime Mapping Research Conference, September 7–10, 2005, Savannah, GA, and at the 8th International



Investigative Psychology Conference ["Perpetrators, Profiling, Policy: Theory & Practice"], December 15–16, 2005, London, England.)

Uses national media and police sources to identify perpetrators of violence against prostitutes and compares them to non-violent clients arrested in the same soliciting areas at approximately the same time. A partial profile emerges indicating that violent clients were likelier to be non-white and to have criminal histories of violent, rape, and property, offenses. Profiled attributes may be useful for investigators of prostitution homicides.

209. Brewer DD, **Potterat JJ**, Muth SQ. Interviewer effects in the elicitation of sexual and drug injection partners. **Social Science Research Network** 2552976 (January 22, 2015). [\[PDF\]](#) (Presented at the XXIV International Social Networks Conference, Portoroz, Slovenia, May 12–14, 2004.)

Examines whether elicitation of the sexual or/and injecting drug partners of respondents—heterosexual or homosexual, using open-ended questions—is affected by interviewer attributes. On average, male and female interviewers were equally effective with interviewees of either sex.

210. **Potterat JJ**. [Seeking The Positives: A Life Spent on the Cutting Edge of Public Health](#) (338 pages). CreateSpace Publishing, 4900 Lacross Rd., North Charleston, South Carolina, 29406. 1 Dec 2015. (ISBN-13: 978-1519 63 8182) (Paperback available at [Amazon.com](#), [Amazon UK](#), and [Amazon EUR](#).)

Professional biography describing what it's like to be on the front lines of STD/HIV control and what it takes to reliably assess patterns of transmission. Draws from the author's more than 3 decades of experience running an exceptionally effective STD/HIV program—exceptional because this program habitually challenged received wisdom, bringing scientific rigor to a previously anemic public health domain. It also introduced innovative tools—such as network analysis—to elucidate STD/HIV propagation dynamics. Science is the major theme unifying both this control program and this book. Lastly, the author details the failures of the international health agencies (CDC, WHO, UNAIDS) and of researchers from academia, to implement scientifically rigorous studies of HIV transmission that could reliably answer the question: "Why Africa?".

211. Brewer DD, Roberts JM Jr, **Potterat JJ**. Punctures during prenatal care associated with prevalent HIV infection in sub-Saharan African women (Presentation slides). **Social Science Research Network** 2813459 (25 July 2016). [\[PDF\]](#) (Presented at the 17th meeting of the International Society for Sexually Transmitted Diseases Research, Seattle, July 2007.)

Analyzes puncturing exposures during prenatal care and HIV infection in 11 African countries using probability household surveys. Women who received tetanus vaccine and/or a blood test during prenatal care were likelier to be HIV-infected than women who had not, although the association was modest.

212. Brewer DD, Muth SQ, Dudek JA, Roberts JM Jr, **Potterat JJ**. A comparative profile of violent clients of prostitute women. [Social Science Research Network](#) 2543592 (31 Dec 2014). [\[PDF\]](#) (Presented at the 8th Annual Crime Mapping & Public Safety Research Conference, Savannah, GA, 7-10 September 2005.)

Matched case-control study comparing clients who assaulted, raped, and/or killed prostitute women with clients simply arrested for patronizing prostitutes in the same jurisdictions and time periods. Violent clients were less likely than comparisons to be white, be underweight or severely obese, and likelier to have a criminal history of violence, rape, and property offenses.

213. Brewer DD, Muth SQ, Roberts JM Jr, **Potterat JJ**. Reliability of reported sexual partnership dates and measures of concurrency. [Social Science Research Network](#) 2542657 (26 Dec 2014). [\[PDF\]](#) (Presented at the Workshop on the Current Chlamydia Epidemic in Western Societies, University of Stockholm, Sweden, 30-31 August 2007.)

The timing of sexual exposure(s) using STD/HIV contact tracing data is used to prioritize partners for interventions and classify source/spread cases. Good test-retest consistency and inter-partner agreement on exposures dates are noted using six contact tracing datasets and 1 study of sexual networks. Date of last sex with partner was more reliably reported than date of first sex. Reliability of partnership concurrency was moderately high to high. Women were more likely than men to provide reliable reports.

214. **Potterat JJ**, Spencer NE, Muth SQ (Eds). [In The Shadow Of Venus: Vignettes from the Venereal World](#) (250 pages). CreateSpace Publishing, 4900 Lacross Rd., North Charleston, South Carolina, 29406. 9 Sep 2017. (ISBN-13: 978-1976 20 0175) (Paperback available at [Amazon.com](#), [Amazon UK](#), and [Amazon EUR](#).)

A series of 121 true stories gleaned from the experiences of mostly Colorado-area contact tracers, this accessible book covers a wide emotional range using vignettes interspersed with sketch art.

215. The Colorado Springs Country Club HOA History Committee (Debbie Berwick, Janice Marie-Gallof, **John Potterat**, Judie Werschky). [Uncovering A Hidden Gem: A History Of The Colorado Springs Country Club Neighborhood](#). (99 pages). **Rhyolite Press**, Colorado Springs, Colorado 80960. September 2019.

Traces the history of the Country Club neighborhood in Colorado Springs from early days (1958) to the present (2019). In way of background, it also summarizes the history of the area from the early 19<sup>th</sup> Century until 1960, prior to its development as a residential neighborhood. Fleshing out its history relied heavily on interviewing some three dozen residents who had each lived in this "Buy and Die" neighborhood for at least forty years; their individual interviews are recorded as brief vignettes. Features 47 illustrations, consisting of old photographs, old maps, and cadastral maps (plats). The book is a gem, just like the neighborhood.

216. **Potterat JJ.** [Autobiography of a Lucky Guy](#) (197 pages). Kindle Direct Publishing, 410 Terry Ave. N, Seattle, WA 98109, U.S.A. 1 Dec 2019. (ISBN-13: 978-1670 21 3983) (Paperback available at [\*\*Amazon.com\*\*](https://www.amazon.com).)

In this delightfully written autobiography, John reveals the surprising and unexpected details of his lucky life's 8 decades odyssey. His story may also serve as a way for the reader to (partially) experience what it was like to live in America during the second half of the twentieth century.