

Men Who Practice Exclusively Oral Sex: Demographics, Sexual Behaviors, and Perceived Risk of Oral Acquisition of HIV Infection

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Introduction

- Several recent studies have quantified very low risk of HIV infection in association with receptive oral sex (ROS):
 - Independent OR of HIV seroconversion=1.01 per partner (95% CI=1.00-1.02) [Page-Shafer et al., AJE 1997]
 - Per contact risk (probability) of infection for unprotected ROS=0.04 (95% CI=0.001-0.17) [Vittinghoff et al, AJE 1999]
- Oral sex is a highly prevalent sexual practice, over 90% of MSM in San Francisco report this behavior. It is unknown however, what proportion of the population practice oral sex exclusively.
- Oral sex has been promoted as a “safer” risk behavior, however attitudes and perceived risk are ambiguous.
- Repeat HIV testing has been associated with oral sex, and hypothesized to be associated with perceived risk [Phillips et al., AIDS 1995]

Objectives

- To describe a sample of men seeking anonymous HIV testing who practice oral sex exclusively including:
 - demographics
 - sexual behaviors
 - clinical and oral health history
 - perceived risk of oral acquisition of HIV
- To examine the association between perceived risk of oral sex and HIV testing behavior.

Methods

- The HIV Oral Transmission (HOT) Study is a case-control study evaluating risk and cofactors for orally acquired HIV infection.
- Subjects: persons seeking HIV testing at an anonymous HIV counseling and testing site in San Francisco.
- Eligibility: oral sex only in the previous 6 months (no anal sex or IDU in previous 6 months).
- A pre-HIV test survey:
 - Demographics and HIV testing history.
 - 6 month history of oral sex practices including number of unprotected partners, ingestion of semen, venues, and drug use.
 - 6 month clinical history, including throat infections and medications, dental visits, and xerostomia (dry mouth).
 - Attitudes and perceived risk of oral acquisition of HIV infection.

Results

- 7% of persons seeking testing reported exclusively oral sex.
- 76 of 95 (80%) eligible participants agreed to participate.
- 99% identified as “gay” or “bisexual” male.
- 76% were White, 8% Mexican or Latino, 3% African-American, 8% Asian, 5% mixed or other.
- Almost half (44.7%) were under age 30.
- One HIV infection was detected (1.3%) among those who participated.
- Sexual Behaviors (Table 1)
 - Sexual partners in previous 6 months: median=3 (IQR=1-6)
- Clinical and oral health history (Table 2):
 - 62% are taking some prescription medication; of those 60% report taking some type of antidepressant/psych medication.
 - 72% had been treated or examined by a dentist in the past 6 months, 90% for cleaning, and 21% for oral or gum surgery
- HIV testing history:
 - 95% reported previous HIV testing
 - over 60% have tested at least four previous times
 - median time since the last test was 14 months (IQR=6-24)
- Attitudes and Perceived risk of HIV from oral sex (Figure 1)
 - HIV testing was significantly associated with risk-taking in association with oral sex. Those who had four or more previous HIV tests were over 9 times more likely to say they were willing to take the chance of a small risk of HIV infection through oral sex (Table 3).

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Table 1: Sexual behaviors reported by men who engaged exclusively in oral sex in the previous 6 months

Receptive Oral Sex (ROS) Behaviors	N	(%)
Any unprotected ROS partners in previous 6 months	73	(96)
Two or more ROS partners in previous 6 months	58	(68)
Semen in mouth	22	(39)
Swallow semen	15	(68)
ROS with known HIV positive partner	18	(31)
Did not use condom with HIV+ ROS partner	12	(75)
Swallow semen from HIV+ ROS partner	7	(58)
Don't like the taste of a condom during oral sex	55	(72)

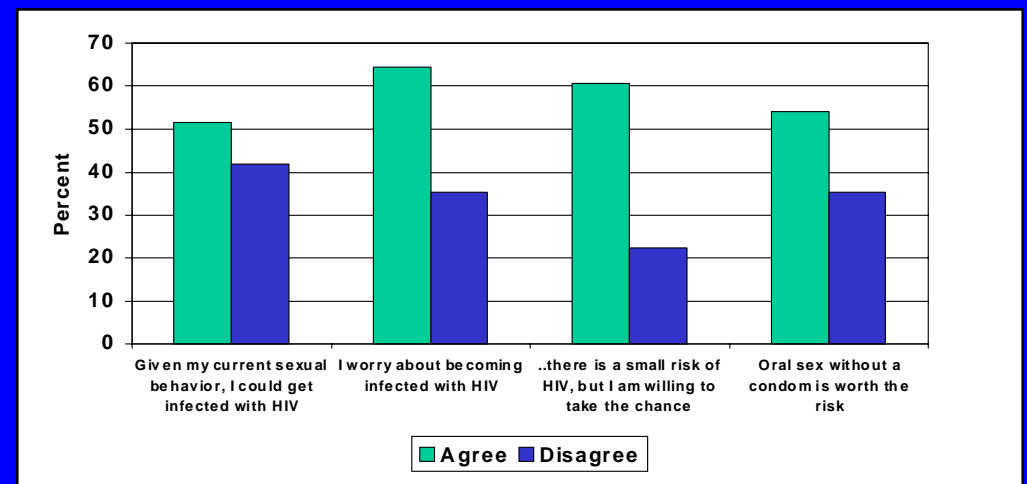
Table 2: Dental and clinical health characteristics of MSM who practice exclusively oral sex in the previous 6 months (N=76)

Variable	n/N	(%)
Seen or examined by a dentist in the past 6 months	51	(72)
Teeth cleaning	46/51	(90)
Gum surgery	11/51	(22)
Mouth/throat infection diagnosed in the past 6 months	9	(12)
Mouth/throat infection – no treatment sought	15	(20)
Xerostomia (dry mouth)	4	(5.6)
Prescription medication in the past 6 months	47	(62)
Antidepressant medication (of those on prescribed meds)	28	(60)

Table 3: Association between number of HIV tests and willingness to “take the chance” of HIV infection through oral sex

Number of previous HIV tests	Public Health officials say there's a small risk of HIV infection through oral sex, "but I am willing to take the chance"		
	Disagree N (%)	Agree N (%)	OR (95% CI)
0	2 (18)	3 (5.1)	1
1-3	6 (54.5)	15 (25.4)	1.7 (0.22-12.6)
≥4	3 (27.3)	41 (69.5)	9.1 (1.1-77.4)

Figure 1: Attitudes and risk perception about oral sex and HIV infection among men who practice oral sex exclusively



Discussion & Conclusions

- A small percentage of men seeking anonymous HIV testing engage exclusively in oral sex.
- A substantial proportion of MSM who practice oral sex exclusively report seeing a dentist, most for prophylactic cleaning.
- The relatively high proportion of MSM in this sample taking antidepressants was an unanticipated finding. Some antidepressants may cause xerostomia, which has been hypothesized to be a risk factor for orally acquired HIV.
- The very low number of HIV infections detected in this sample confirm that orally acquired HIV infection is a rare event.
- Most of these men correctly perceive that they are at very low risk of HIV infection, however many (60%) say they worry about becoming infected.
 - This paradox may be further reflected by the frequent HIV testing they report.
- Those who reported multiple HIV tests were more likely to agree that they were willing to take the chance of infection, despite knowing there was a very small risk.
- These data corroborate a previous report that repeat HIV testing is associated with oral sex and further support the hypothesis that MSM who practice oral sex test frequently in order to confirm their low risk status.

