Targeted HIV seroprevalence among Vietnamese in southern California

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Abstract

Objective—The prevalence of HIV among southern California Vietnamese is unknown. We collected seroprevalence data on targeted Vietnamese in Orange County, California who may be at risk for HIV infection.

Methods—The assumption of elevated risk was based on rates of infection reported among other U.S. groups. Vietnamese (N = 874) from six county sites were tested during 1992: (1) attendees at county HIV/STD clinics and (2) IDU program; (3) male inmates of the county jail and (4) of a juvenile detention centre; (5) males in a driving under the influence of alcohol (DUI) remedial program; and (6) patients for nonpregnancy-related syphilis screening.

Results—The number of cases detected and risk factors were: (1) county HIV/STD clinics—5/223 (2.3%), all men who had sex with men; (2) men's jail—1/122 (0.8%), risk factors unknown; (3) juvenile hall—1/145 (0.7%), risk factors unknown; (4) IDU program—0/33; (5) syphilis screening—0/284; and (6) DUI program—0/67.

Conclusions—HIV infection exists among southern California Vietnamese, and men who have sex with men appear to be at a risk for HIV infection similar to others practicing high risk behaviors in the U.S. population. Preventive education needs to be targeted explicitly at these individuals.

By 1990 the U.S. Vietnamese population had grown to 600 000, and the largest community is in California where 46% reside. In Orange County, California, the Vietnamese population comprises 3% of the county's 2.4 million residents. Since 1984 there has been a cumulative total of 18 Southeast Asian cases of AIDS in Orange County, and the rate of Vietnamese AIDS in California as of 1991 was 6.4 per 100 000. The prevalence of HIV infection in the Vietnamese community of Orange County is unknown. For the first decade of the epidemic in the U.S., Southeast Asians were often presumed to be at comparatively less risk than the general population. The low proportion of reported AIDS cases among Asians has contributed to misconceptions about their risk for HIV. The absence of many individuals with elevated risk of HIV infection and poorly understood protective behaviors have been assigned to this culture with little substantiation. Vietnamese culture has strong taboos against open discussions or exhibits of sexuality, and heavy stigmatization of homosexuality. In Orange County, anecdotal information indicated that some Vietnamese physicians were treating STDs empirically without laboratory diagnosis to ensure client confidentiality while not breaching disease reporting laws. This practice could obscure HIV surveillance by reducing the motivation of individuals with confirmed STDs to undergo HIV testing. Low infection rates have been observed and many asymptomatic HIV-infected Asians are quite possibly not accounted for. Although Vietnamese Americans have participated in national HIV serosurveillance, this community has not been frequently targeted for specific study. Our objective was to selectively target Vietnamese residents of Orange County with possibly elevated risk of HIV infection to assess seroprevalence.

Methods

Test sites were identified based on assumptions of elevated risk derived from traditional HIV exposure profiles, such as STD clients or men who have sex with men. National and county seroprevalence data suggested a maximum detection rate of 1 seropositive per 1000 Vietnamese residents tested. All subjects were of Vietnamese ethnicity and were drawn from six testing sites in Orange County during 1992: (1) males and females at county clinics for HIV/STD testing and services; (2) male inmates in the county jail and (3) a juvenile detention centre; (4) male and female clients of the county drug abuse HIV outreach program (IDUs); (5) males and females seen by physicians (sampled through a private local laboratory) and submitted for nonpregnancy-related syphilis screening; and (6) males attending a mandatory driving under the influence (DUI) remedial program.

Blinded testing was performed on specimens from juvenile hall, the IDU program, and the private laboratory. Tests were confidential and voluntary in the HIV/STD test sites, the men's jail, and the DUI program. All tests were performed using ELISA procedure with IFA or Western blot confirmation. Data
were tabulated by test site and seroprevalence rates calculated. Analysis compared seroprevalence rates in HIV/STD test sites to other individuals seeking anonymous or confidential testing over the same time period.

### Results

The table illustrates the individuals tested according to test site, sex, test type and result, and seroprevalence rate by test site. The sample was 73% male. Because three test sites used blinded testing, no risk factor/exposure data were available from individuals attending these sites. We estimate that 40% of the sample was drawn from moderately elevated risk categories (physician STD screening, DUI program), and the remainder from traditional HIV high risk categories (HIV/STD clinic attendees, incarcerated populations, IDUs). Seven seropositives were found in a total of 874 tests (0.8%). Five positives were detected in the HIV/STD clinic, and one each in the men’s jail and juvenile detention centre. Contrasting HIV/STD test site rates to the overall clinic population shows that the 2.2% seroprevalence among Vietnamese was less than the rate among non-Vietnamese seeking anonymous testing (3.3%), but higher than that for non-Vietnamese who were tested confidentially (1.8%).

<table>
<thead>
<tr>
<th>Test Site</th>
<th>Number Tested</th>
<th>Male</th>
<th>Female</th>
<th>Type</th>
<th>Test</th>
<th>Seroprevalence Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health HIV/STD Clinic</td>
<td>147</td>
<td>76</td>
<td>5</td>
<td>Voluntary</td>
<td>5</td>
<td>2.2%</td>
</tr>
<tr>
<td>Men’s jail</td>
<td>122</td>
<td>—</td>
<td>1</td>
<td>Voluntary</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Juvenile detention centre</td>
<td>136</td>
<td>—</td>
<td>1</td>
<td>Blinded</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Drug Abuse Program (IDUs)</td>
<td>31</td>
<td>2</td>
<td>1</td>
<td>Blinded</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physician syphilis specimens</td>
<td>131</td>
<td>153</td>
<td>0</td>
<td>Blinded</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Driving under the influence (DUI)</td>
<td>67</td>
<td>—</td>
<td>0</td>
<td>Voluntary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>654</strong></td>
<td><strong>240</strong></td>
<td><strong>7</strong></td>
<td><strong>N/A</strong></td>
<td><strong>N/A</strong></td>
<td></td>
</tr>
</tbody>
</table>

All five individuals testing positive in HIV/STD clinics were Vietnamese men whose reported risk for infection was having sex with another male. The two seropositives detected in the jail and juvenile detention centre were male but the exposures were not reported. The largest reported exposure category was heterosexuals with multiple sexual partners (33%) (fig). This was followed by 17% having sexual contact with persons at high risk for HIV (that is, female sexual partners of a man who has had sex with another man, sex partners of an IDU or a person who received a blood/blood product transfusion after 1977 that was not tested for HIV, and sex partners of a heterosexual who has had multiple sex partners). Only 8% of men reported risk from sex with another man, and their seroprevalence rate was 28%.

For the five Vietnamese men testing positive in HIV/STD clinic sites, the mean age was 28.8 years and the mean number of sexual partners during the prior 12 months was 3 (median 3; range 1, 30). None were tested for an STD during the prior 12 months. Four individuals had no previous HIV antibody tests performed; one had one prior test. None of the individuals sought testing because they had been contacted about possible HIV exposure, but two had symptoms of AIDS or had been denied life insurance without a test.

### Discussion

The findings of this study indicate that HIV infection exists among selective Vietnamese residents of southern California. The small number of individuals tested decreased the probability of detecting infection. All seropositives were drawn from sites capturing traditionally high risk exposures. The seroprevalence rate (7/824) exceeded that which was anticipated (1 per 1000) from previously reported data. Vietnamese seroprevalence among HIV/STD clinic attendees in Orange County was comparable to the overall infection rate observed at this test site during the same period. Vietnamese practicing high risk behaviors are likely to acquire infection at a rate comparable to other individuals in US society engaged in similar high risk practices. The extent and nature of high risk practices and their relation to HIV infection in this community requires further assessment.

Five of the seven seropositive individuals detected in this study were men who have sex with men, and were self-selected attendees at HIV/STD clinics. Although limited by small test numbers, the absence of seropositives in the moderate risk groups may suggest that high risk behaviors or contacts are quite focused and delimited among southern California Vietnamese. These findings contrast with earlier assumptions of low seroprevalence in the Vietnamese. A protective behavioral effect is not evident. High risk behavioral practices appear to be sustaining a worrisome rate of infection which is probably

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**Graph**:
- **Transfusion (5)**
- **High risk sexual contact (38)**
- **IDU (4)**
- **Men who have sex with men (18)**
- **Other risk (2)**
- **No known or admitted risk (82)**

**Total tests N = 223**

*Public Health HIV/STD Clinic Testing: total tests by exposure category, Vietnamese HIV seroprevalence study, Orange County, Ca.*
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Underreported. The unexpected seroprevalence resulted partly from improved detection and a targeted sampling strategy. HIV/AIDS preventive education needs to be explicitly focused on the Vietnamese community, but should be accompanied by behavioral research on the expression of high risk practices and suitable interventions. Strategies should be employed to reduce the spread of the virus through improved preventive education that are linguistically, culturally, and age appropriate.

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