

Risky Behavior: Perceived Risk of Infectious Disease in Youth Entering Alcohol/Drug Treatment

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Background

- YES house (Youth Entering Sobriety) is an inpatient drug/alcohol rehab facility for adolescents
- Residential treatment and licensed alternative school
- Serves youth from all of Oregon as well as SW Washington
- Patients complete a health risk assessment form on entering the facility
- YES house contacted the department of Public Health in 2011 and asked for help analyzing the health risk data

Participants

- N=1,402 patients entering YES house between 1999 and 2011 completed risk assessment forms
- Age range: 9-19 years of age
 - Mean age: 16.4 years of age
- 36% female
- 96% born in the US
- 37.1% told or thought they have alcohol problem
- 33.9% currently use stimulants

Methods

- Variables
 - Age, sex, and place of birth
 - Acute physical health
 - Chronic disease (patient and parent)
 - Sexual behaviors
 - Drug and alcohol use
 - Other risk factors (e.g., travel overseas)
 - Perceived risk for Hep C & HIV
- Data cleaned and analyzed using SPSS Version 21.0.1
- Descriptive statistics calculated for all variables
- Ordinal logistic regression used to assess degree to which youth's self-reported behaviors affected their perceived risk of HIV and hepatitis C

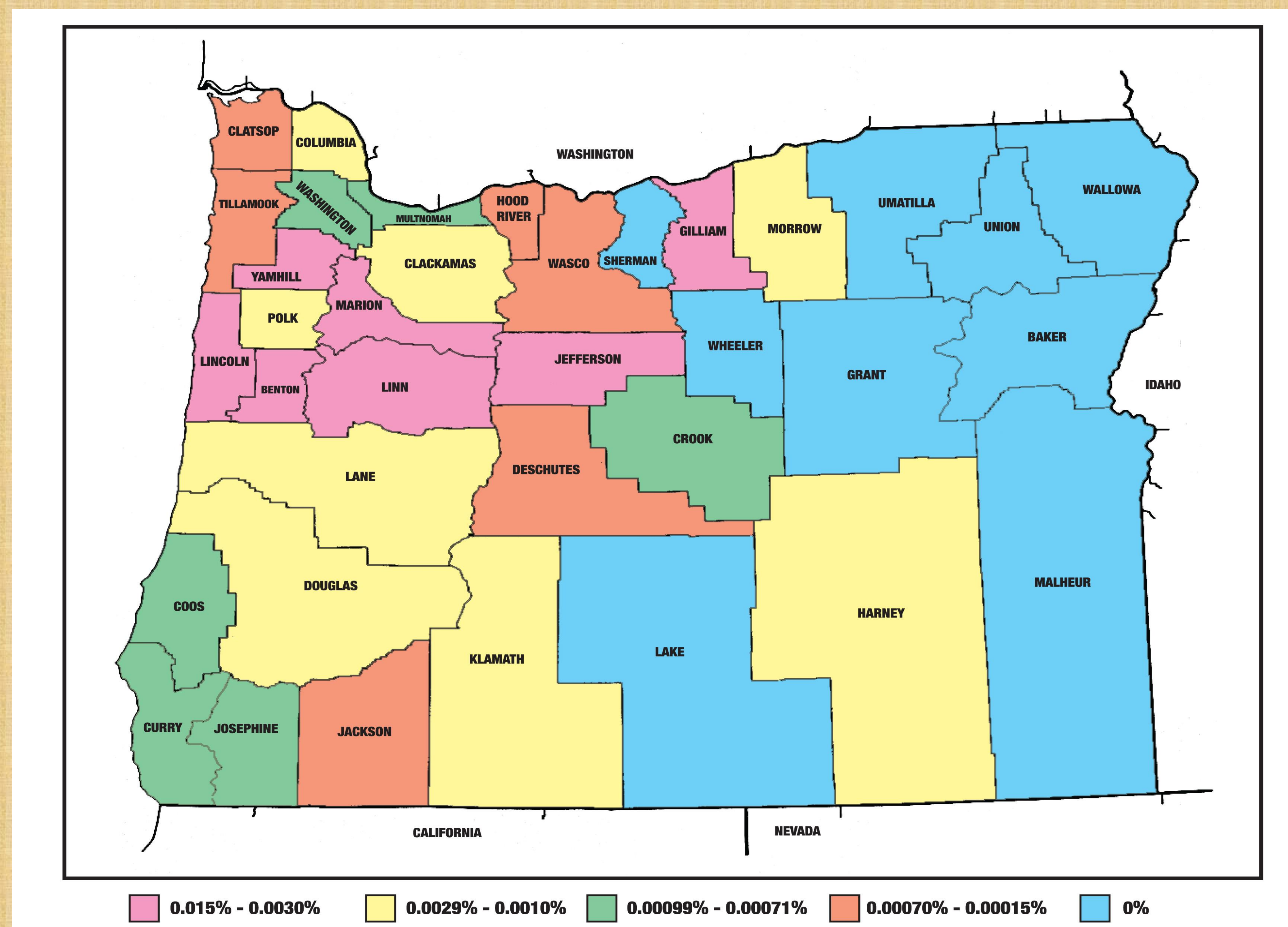
Results—frequencies

- 22.3% have ever been homeless
- 55.1% have ever been in jail
- 40.0% have a recent tattoo or piercing
- 1.6% have a job with potential body fluid contact
- 9.2% have ever injected drugs
- 3.6% have ever shared needles
- 38.5% have either had sex with more than 1 person in the last 6 months or have not used condoms
- 3.7% have had sex with a high-risk partner
- 26.1% report ever being tested for HIV (63% of these within 6 mos)
- 20.4% report ever being tested for hepatitis C

Results—regression

- 4 predictor indices: circumstantial, drugs, sex, other
- Perceived risk of HIV: 63.3% 'no risk', 20.0% 'low risk', 16.7% higher risk
 - For each additional point on the sex risk index, participants were 1.8 times *more likely* to perceive themselves to be in a higher risk category (95% CI: 1.3 - 2.3)
 - Drug risk index: 0.29 times *more likely* (5% less likely – 0.76 times more likely)
 - Other covariables not important predictors of perceived HIV risk
- Perceived risk of hepatitis C: 65.2% 'no risk', 17.6% 'low risk', 17.2% higher risk
 - Sex risk index: 1.4 times *more likely* (1.0 – 1.8)
 - Drug risk index: 0.33 times *more likely* (2% less likely – 0.82 times more likely)
 - Other risk index: 0.24 times *more likely* (0.01 – 0.5)

Results—geographic distribution



Conclusions

- Less populated counties (the Eastern 1/3 of the state) did not have youth who were patients at YES house during the study period (1999-2011)
- This could be a function of fewer youth at risk OR addicted youth from these counties could be seeking services in Idaho or another neighboring state
- Both circumstantial and behavioral risk factors for body fluid-borne infectious diseases are highly prevalent in this population
- Nearly two-thirds of youth perceive that they are at no risk of contracting HIV or hepatitis C
- An additional one-fifth of youth perceive that their overall absolute risk of contracting HIV is low
 - This may be the correct perception, as absolute risk of sero-conversion is in fact low even after sexual contact with a known HIV-positive individual
- Youth also tend to correctly classify their personal relative risk as higher if they have more risk factors

Reference

U.S. Department of Commerce, United States Census Bureau, April 22, 2013
<http://quickfacts.census.gov/qfd/index.html>

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