

UFO Presents! A viral hepatitis prevention and education program for young adult IDUs



UFO Presents!

Kimberly Page MPH PhD
Principal Investigator

Paula Lum MD MPH
Peter Davidson PhD(c)
Co-Investigators

Alice Asher RN MSN CNS
Project Director

Clara Brandt
Health Educator

Department of Biostatistics
and Epidemiology
Center for AIDS
Prevention Studies
University of California
San Francisco

Background

Young injection drug users (IDU) are at high risk for viral infections, such as HIV, hepatitis C virus (HCV), and hepatitis B virus (HBV), due to frequent injecting, needle/syringe and other drug preparation equipment sharing, high numbers of sexual partners, and exchange of sex for money or drugs. Street youth who inject have high unemployment, poor education, and mental health issues.

In San Francisco, young IDU are typically homeless runaways who often are involved in an illegal street economy, including prostitution, drug sales, theft, panhandling, pornography and selling stolen property. They experience a large number of negative and traumatic events prior to leaving home. Many fear and mistrust authority and consequently avoid or delay contact with the public health system. The combination of youth, drugs, survival sex and disenfranchisement make this group extremely vulnerable to multiple negative health outcomes.

Why this program?

UFO Presents! is a Center for Disease Control and Prevention (CDC)-funded program providing much needed hepatitis education, prevention and care services for youth and young adults with injection risk in San Francisco, CA. We aim to meet the broader needs of youth and young adults through comprehensive health and psychosocial support. We are the most experienced group in San Francisco in providing hepatitis, HIV and STI prevention services tailored to young adult IDU, a group with few other health-related resources or programs tailored directly to them.

UFO Presents! follows from a series of research studies with young IDU, called the UFO Studies. Since 1997, UFO has served over 1200 young IDU in San Francisco. HCV prevention care education resources have been offered to UFO participants. UFO Presents! allows us to apply our years of experience to ALL young IDU, regardless of participation in the UFO Studies.

Educating young IDU

The UFO research studies of HIV, STIs and viral hepatitis have developed comprehensive

hepatitis B and C testing and counseling. We promote HBV immunizations and risk reduction from bloodborne viral infections, HIV testing and counseling training, and base our work on CDC guidelines with input from community groups.

Our education protocols are drawn from published materials and public sources, but we have modified the delivery to capture the interest of and appeal to our target population. This includes utilizing peer leaders in sessions, one-on-one 'individual' time with the nurse educator and addressing common questions and issues that arise among this community.

UFO has developed important information on prevention among those living with HCV and education regarding HCV treatment for both acute and chronic infection. UFO Presents! uses over 10 years of research on young drug users to inform this program in an established, proven system for success in providing hepatitis information and testing.

UFO Presents! services

Eligible participants

All injection drug users under age 30, regardless of HCV status.

Program sites and hours

We have established regular hours for drop-in and follow

up at community-based sites in neighborhoods frequented by young IDU.

Sites are staffed by nurses, test counselors, outreach workers, a phlebotomist, volunteer clinicians and a field supervisor.

Project sites are open weekly daytime and evening hours 52 weeks a year, including all holidays; no appointments are needed. Participants can reach staff through a 24-hour hotline in addition to visiting during site hours.

Tuesday evenings

5:30 – 8:30pm

Housing and Urban Health Clinic, 234 Eddy St





2nd and 4th Thursday of every month
12:30 – 4:30pm
Homeless Youth Alliance, 1696 Haight Street

Viral hepatitis prevention education

We offer a weekly viral hepatitis prevention education group led by a Clinical Nurse Specialist. Peer educators offer experience and support, while nursing staff provides information and education. Topics covered include Hep C 101, Liver Health for the Active Drug Users, Hepatitis B, Hep C and Mental Health, Treatment Eligibility and Transmission Prevention. Participants are encouraged to meet with nursing staff for individualized care plans and education. Food and snacks are served at the beginning of group.

“UFO made me much more aware of where I took risks and didn’t. Counseling helped me recognize the patterns”

Immunizations

Free HAV and HBV vaccinations are available to all participants. Our electronic database records date of vaccine administration and tracks when the next one is due. E-mails can be generated to remind participants to drop in for next immunization. Street and office-based outreach workers are available to help participants return. We offer referrals to similar programs outside of the Bay Area for youth who are frequent travelers to facilitate vaccine uptake.

“Everything I know about HCV I learned from UFO”

HIV, HBV, HCV and other STD testing

Through partnerships with the Berkeley Free Clinic and SFDPH, we offer on-site counseling and testing for HIV, HCV and STIs. Our experienced HIV-trained counselors perform risk assessments and provide client-centered risk reduction counseling. Testing includes HIV, anti-HCV, LFTs, viral load, as well as HAV and HBV immunological status. We promote and support harm reduction services. Outreach workers are available to remind participants to return for testing results. Referrals for further workups and appropriate medical treatment is available through program staff.

“I got good counseling. Someone sat with me while I cried. There were no judgments about my addiction. The staff consistently shows compassion.”

Medical care

Our nurses have many years of experience working with young IDU and have a strong understanding of the particular health needs and concerns of this group. Staffed by a nurse practitioner, a clinical nurse specialist, and an RN, our nurses are available for medical consultation, referrals to other medical clinics or mental health care. We also provide acute care such as treatment of infections, including abscess care, common respiratory infections, rashes and other basic acute medical needs.

“I like the interaction with the staff and the family feel.”

Drug treatment referrals

Direct referrals to methadone and buprenorphine programs are available to those interested, as well as access to residential treatment programs or other programs tailored for drug users. We work to find the program best suited to participants’ needs. We provide referrals and advocacy and work closely with participants before program entry, during program participation and after program completion.

“I got a referral to get on suboxone and my HCV results for the first time.”

Housing and social work referrals

We offer referrals and support for access to housing and other social services, including SSI eligibility, educational and vocational programs as well as maternal-child services. We will work with case managers or other providers of care for program participants to optimize their ability to access supportive services.

Syringe exchange

A syringe exchange program operates on site to provide clean needles and other injection equipment such as cookers, sterile water and tourniquets. We train clients how to prevent and manage overdose situations and provide prescriptions for Narcan.

“I learned about injection hygiene. Because of you, I haven’t gotten an abscess.”

Quality of life services

We provide free food, clothes, socks and hygiene supplies (soap, shampoo, razors, etc.) on site, whenever possible. At our sites, young IDUs can access the Internet, use a telephone for free, and receive mail.

Our community partners

We have established linkages with community health-care providers including:

- San Francisco Department of Public Health (SFDPH) Adult Immunization program
- Saint Anthony Free Medical Clinic
- Tenderloin Health

We have a close partnership with

- San Francisco Needle Exchange (SFNE)
- Homeless Youth Alliance (HYA)
- Berkeley Free Clinic
- Housing and Urban Health Clinic
- SFDPH AIDS Office

The UFO Studies

1997-1999: The first “UFO Study” assessed the prevalence of HIV, HBV and HCV infections. We showed high seroprevalence of HCV and reported on HIV and risk factors.

2000-2002: We next began to study young IDU prospectively (UFO-3 Study). We assessed HIV and HCV incidence and HBV immunization feasibility conducted over a 2½ year period.

We showed a high rate of HCV seroconversion (25% per year) and identified important risk factors for HCV seroconversion, including sharing ancillary injecting equipment. We tested adherence to and effectiveness of an accelerated HBV vaccine schedule. We found that HIV infection among young male IDU was highly associated with sex work. We also found high rates and risk factors for overdose and we explored gender-related risks.

2002-2008: In 2002, we began more in-depth studies of HCV infection (UFO Acute HCV Study). Using a novel testing algorithm combining antibody and viral tests, we identify young IDU in the very early or acute phase of HCV infection. This phase is very important for many reasons: antibody to HCV does not develop for up to 2 months following infection but HCV virus levels can be very high and risk for transmission is high. Some people with HCV will clear or get rid of HCV virus and assessing infection early allows us to study factors that are associated with viral clearance. Our group demonstrated the utility of this testing approach for identifying acute and serosilent HCV, and how it can help prevention.



UFO Presents!

Significant findings from the UFO Studies

Who did we reach?

- UFO participants are all recruited by street-based outreach in locales and neighborhood throughout San Francisco where young IDU hang out
- 1,191 young IDU were screened and interviewed between 2000-2007
- Over 500 were hepatitis C negative and invited to participate in follow-up study
- 50% of participants were 22 years old; they ranged from 15 to 29
- The majority (70%) were male
- Only 30% reported stable housing in the prior 3 months

Injection drug use

- 50% of young IDU in UFO had been injecting for 4 years
- More than one-third (36%) reported daily injection drug use in the last 30 days with a median of 3 injections per day
- 78% had ever shared a syringe
- Nearly half (43%) borrowed a used syringe in the prior 3 months
- 76% had shared other injecting equipment, such as cookers or rinse, in the last 3 months
- 88% used at least 1 of several needle exchange venues in the last 30 days

Drug treatment

- Almost two-thirds (63%) had a history of drug treatment
- Only 13% had participated in drug treatment in the prior 3 months

Hepatitis C

- Almost half (45%) of young IDU screened by UFO have antibodies to HCV, indicating previous or current infection
- HCV incidence is very high: 27% per year
- 20% of young IDU who get infected with HCV spontaneously resolve the infection, but many of these get re-infected

HIV

- HIV prevalence is lower than HCV prevalence at 5.3%
- The majority (88%) of HIV infections detected in UFO participants are in males
- HIV prevalence was highest among male IDUs who have sex with men

Hepatitis B

- 21% had been infected with HBV
- HBV immunizations are still needed among young IDU:
 - Only 22% of participants had been previously vaccinated
 - More than half (56%) were susceptible and could benefit from vaccine

Gender differences

- Female IDUs were significantly younger than males
- Females were more likely to engage in needle borrowing, sharing cookers or rinse, and being injected by someone else
- Females were more likely than males to report recent sexual intercourse and to have IDU sex partners

Incarceration

- Most (85%) young IDU had a history of incarceration (jail or prison)
- More than half (56%) had been incarcerated in the prior year
- HBV and HCV infections were significantly higher among those with any history of incarceration (29% and 42% respectively) compared with those with no incarceration history

Overdose

- 22% reported a heroin overdose in the last year
- Three-fourths (73%) had ever witnessed a heroin-related overdose, and half (50%) had witnessed an overdose in the last 12 months
- 14% of those who had witnessed an overdose in the past year reported that the outcome of the overdose was death

We have followed 368 young IDU at risk of HCV and detected 135 new infections, which shows that HCV incidence is still high (27% per year). Overall, 21% of participants with new HCV cleared virus spontaneously, but women were three times more likely to clear than men; 35% compared to 12%. This is an important new area to study in order to understand more about this infection. We also found that a high proportion of young IDU who clear the virus, get reinfected and many re-clear again.

We continue to study immune factors in early infection, transmission factors between injecting partners and feasibility of treatment for young IDU with acute HCV. We have assessed other important disease and drug related issues: HBV infection and immunization rates; methamphetamine use; risk behaviors among traveling young IDU and factors associated with stopping injecting and relapsing.

UFO Presents! staff

Kimberly Page PhD MPH; Principal Investigator

Dr. Page is Associate Adjunct Professor of Medicine in the UCSF Department of Epidemiology and Biostatistics, Center for AIDS Prevention Studies. She is an epidemiologist and is the PI of various studies investigating transmission and acquisition of bloodborne and sexually transmitted infections in high risk populations

Paula Lum MD MPH; Co-Investigator

Dr. Lum is Assistant Professor in Residence at the UCSF Positive Health Program at San Francisco General Hospital and the Department of Medicine at UCSF. She conducts clinical research on the epidemiology, prevention and treatment of HIV and hepatitis IDU. She is a Co-Investigator and medical director for UFO Presents!, as well as PI of several studies on medical treatment of IDU.

Peter Davidson PhD(c); Co-Investigator

Peter Davidson has been conducting research and harm-reduction based intervention development regarding heroin-related overdose, hepatitis C transmission and sexually transmitted infections among drug users in Australia and the US since 1997. From 2002-2008 he was the project director for the UFO Study. He is currently a PhD candidate in the medical sociology program in the School of Social and Behavioral Sciences at UCSF.

Alice Asher, RN MSN,CNS; Project Director

Alice K. Asher is a Masters-prepared nurse with a clinical focus in community health and HIV/AIDS. Alice currently serves as the co-investigator of the "Pain and Substance Use Syndromes in an Outpatient Public Health HIV Clinic" study and is a research associate, doing curriculum development and facilitation for nurse capacity-building projects in HIV/AIDS in sub-Saharan Africa.

Clara Brandt; Health Educator

Clara Brandt has been doing direct service work in research and harm reduction contexts since 2004. She worked as an interviewer, counselor, and phlebotomist on the Sex Worker Environmental Access Team from 2006-7, and has worked for the UFO Study since 2005. In addition to her work with UFO Presents!, Clara is currently the phlebotomist at the UFO Study, and also works as an outreach counselor at Homeless Youth Alliance and San Francisco Needle Exchange



UFO Presents!

Selected References

1. Hahn JA, Page-Shafer K, Lum PJ, et al. Hepatitis C virus seroconversion among young injection drug users: relationships and risks. *J Infect Dis* 2002;186:1558-64.
2. Lum PJ, Ochoa KC, Hahn JA, et al. Hepatitis B virus immunization among young injection drug users in San Francisco, Calif: the UFO Study. *Am J Public Health* 2003;93:919-23.
3. Bourgois P, Prince B, Moss A. The everyday violence of hepatitis C among young women who inject drugs in San Francisco. *Hum Organ* 2004;63:253-64.
4. Page-Shafer K, Pappalardo BL, Tobler LH, et al. Testing strategy to identify cases of acute hepatitis C virus (HCV) infection and to project HCV incidence rates. *J Clin Microbiol* 2008;46:499-506.
5. Page-Shafer K, Hahn JA, Lum PJ. Preventing hepatitis C virus infection in injection drug users: risk reduction is not enough. *AIDS* 2007;21:1967-9.
6. Page K, Hahn J, Evans J, et al. Acute hepatitis C virus infection in young adult injection drug users: a prospective study of incident infection, resolution and reinfection. *J Infect Dis* in press.
7. Lum PJ, Hahn JA, Page-Shafer K, et al. Hepatitis B virus infection and immunization status in a new generation of injection drug users in San Francisco. *J Viral Hepat* 2008;15:229-36.

UFO Presents! contact:

Alice Asher, Project Director
alice.asher@ucsf.edu
1 800 UC YOUTH
www.ufostudy.com