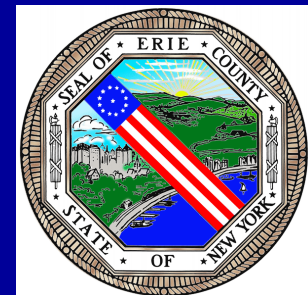




Welcome

Sexually Transmitted Disease Testing, Treatment and Prevention Counseling: a Collaborative Program between a College Health Service, a County Health Department and a nonprofit health education organization



Disclosures

We have no disclosures and have no affiliation with any corporations or pharmaceutical companies that maybe mentioned during this presentation.

- This is a collaborative presentation and the 2 agencies that have collaborated with the University at Buffalo are **not for profit agencies.**

Presenters and their affiliation

Susan C. Mancuso BSN, MSN/FNP

FNP Health Services – [University of Buffalo](#)

Heather A. Lindstrom PhD

[Former Epidemiologist](#)

Erie County Health Department

[Adjunct faculty position at University at Buffalo](#)

[Consultant for statistical results](#)

Jane E. Fischer MA

[Director - Sub-Board I, Inc. \(SBI\) Health Education](#)

This presentation will outline:

- A **collaborative STD screening program** that provides students at the University at Buffalo with STD screening and sexual health education, on campus, for a nominal fee, by merging the services of 3 organizations into 1 location.



The 3 separate organizations and the service that they provide are:

- UB Health Services – medical diagnosis and treatment of sexually transmitted diseases
- Erie County Public Health – provides continuing medical education on communicable diseases for the medical providers, diagnostic Lab services and statistical results (using SPSS version 16)
- Sub Board 1 Health Education Division – provides sexual health risk reduction and prevention counseling to the students

University of Buffalo

- Health Services* is located on the South campus of this 3 campus University

* any registered student can be evaluated, diagnosed and treated at this medical center

* approximately 27,000 students seen per year



University at Buffalo Enrollment by Ethnicity

Total enrollment as of 10/2/07 ~ **28,054**

White, Non-Hispanic ➡ 16,489

Black Non-Hispanic ➡ 1,609

Hispanic ➡ 869

Asian/ Pacific Islander ➡ 2,210

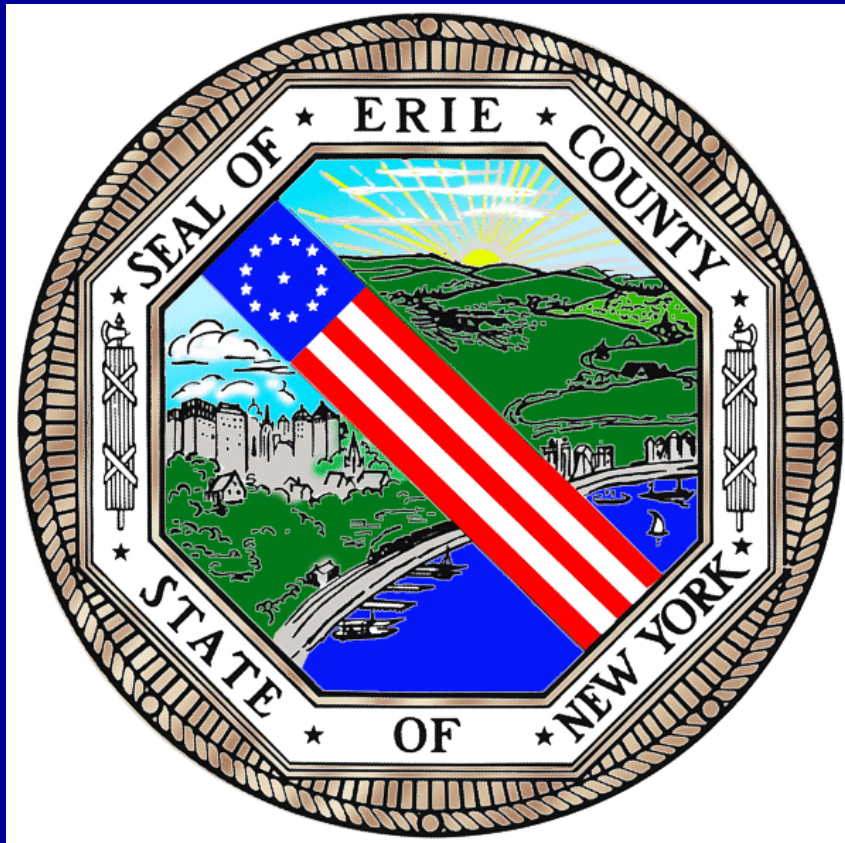
Native American ➡ 117

Non-resident Alien*** ➡ 4051

Unknown/undisclosed ➡ 2709

*** Note: 7 most international countries represented on campus are: India, People's Republic China, Singapore°, Republic of Korea, Canada, Taiwan and Japan

Erie County Health Department



- Part of the Erie County government
- Their mission is to **protect** the public's health, **prevent** disease and **promote** wellness by providing a safety net of services for those with limited access to health care
- **STD clinics*** (2 available) providing free, confidential testing*, diagnosis and treatment.
- Located at ECMC (hospital) and downtown clinic
- * Testing done at **ECPHL** which is a CLIA registered laboratory

Sub-Board One, Inc. (SBI)

- A student owned and operated nonprofit organization serving many needs of registered students
- not part of the State University educational system
- Many organizations under the SBI “umbrella”: an on campus pharmacy, a small laboratory, a health insurance center and a **health education division.**
- Main office : South campus of UB
- Satellite for STD program in Michael Hall South campus UB



Behavioral Objectives and Content:

- 1. **Describe** a collaborative STD program in a college health center.
- 2. **Describe** the prevalence of STDs among college age students in the United States and **at this college health center**.
- 3. **Identify** components **and** benefits **of** educational sessions.

Let's look at this collaborative STD program.....

- **Why** was the program started: provider and student concerns?
- **How** did the collaboration occur between three separate organizations?
- **What students** can participate in the program?
- **What tests** are available to the students?
- **What is the total cost** of the testing?

Why was this collaborative STD testing program started at the UB Student Health Center: provider and student concerns ?





Initiative was started due to Provider and Student Concerns!

Provider Concerns → numerous but **main concerns were:**

- a. Lack of on-campus STD screening
- b. If accredited by ACHA or AAAHC - need to improve/follow **protocols** regarding:
 - CDC recommendations for STD testing in youth
 - ACHA: 2005 Standards of Practice for Health Promotion in Higher Education (SPHPHE)
 - ACHA: Healthy Campus 2010 recommendations

Provider concerns continued:

- c. “**loss of teachable moment** regarding safer sex”
when students came in with risky behaviors.....
 - 1. the 20 minute appointment dilemma!
- d. **locations and hours of service** for ECHD free STD
clinics → * not easily accessible from campus
* first come first service - no appointments
* limited hours of operation?
- e. **Health insurance disparities** → a multifaceted
problem: EPO, HMO, PPO and uninsured/underinsured

CDC Recommendations regarding STD screening in youth/young adults

Overview

Review of medical literature

- 2007 CDC Youth Risk Behavior Study
- This CDC study looks at behaviors in youth. It was done in 39 states in USA in youth in grades 9-12.
 - ⇒ Sexual Health results revealed that **47.8%** had sex at least once, **14.9%** had 4 or more partners and **38.5%** never used condoms.
 - ⇒ 7.1% were younger than 13 at their first sexual experience
- CDC. HIV Prevalence, unrecognized infection and HIV testing among MSM from 6/2004 to 4/2005
- This CDC study looked at HIV Prevalence in MSM ages 18-24 in 5 large, urban cities in USA.
 - ⇒ The study revealed that **14%** were HIV+ and **79%** were unaware of their status.
 - ↓
 - ⇒ 2006 MMWR (55(RR14); 1-17 HIV screening is recommended for all patients in all health care centers with patient notification and opt-out abilities (1x per year in high risk people).

CDC studies/reports continued.....

- 2006 CDC Surveillance Data for Chlamydia, Gonorrhea and Syphilis
- 19 million new STDs occur each year with 50% in people 15-24 years of age.
- Cost \$14.7 billion in 2006
- ~ 2.8 million cases of Chlamydia are found each year in females between the ages of 15-24
- ✦ CDC recommends annual Chlamydia screening for all sexually active females < 26
- ✦ Gonorrhea: recent emergence of fluoroquinolone resistance
CDC recommends not using fluoroquinolones for GC treatment
- ✦ Syphilis: 1/2° have risen 54% in last 5 years with 64% of cases in MSM
CDC recommends annual RPR for MSM and high risk behaviors

2005 ACHA: Standards of Practice and Health Promotion in Higher education

The mission of the guidelines encourage college health professionals **to promote student health** through risk reduction and assist students in leading healthier lives.

This STD program **not only addresses the mission** of the SPHPHE by promoting sexual health in offering STD screening and sexual health education but.....

- it also is a collaborative effort (Standard 2)
- it has increased professional development through formal training and updates on diagnosis and treatment of sexually transmitted diseases for staff (Standard 6)
- it caused the campus to look at economic disparities in health coverage (Standard 3) resulting in changes in coverage

ACHA Healthy Campus 2010

ACHA: Healthy Campus 2010 establishes national college health objectives and serves as a basis for developing plans **to improve student health.**

- This Healthy Campus 2010 initiative has planning guidelines and over 200 health objectives for the nation's colleges/universities to achieve over the next decade.

This collaborative STD program addresses 2 of the 10 Leading Health Indicators mentioned in the Healthy Campus 2010



5 ➡ Responsible Sexual Behavior

10 ➡ Access to Health Care



Student Concerns★?

Many students came to the Health Center requesting/receiving STD testing/screening and their comments were documented.....

- “ I have a new partner and I want to get tested before we have sex – it’s the right thing to do isn’t it?”
- “ I just had a class and the RN educator said everyone who has ever had unprotected sex should be tested”
- “ I got a call from an old partner and he has Chlamydia, I can get tested here right?”
- “ I saw on Web MD that all men who have sex with other men (MSM) should get shots and get tested can I do that here ?”

Student Concerns continued:

Many students did come in and received testing but they would return stating:

- “I came in and got STD testing and my parents found out!”
⇒ EOB form
- “I was seen in the health center and I got a bill for \$500 from a private lab” ⇒ unaware how/where to use their private insurance plans
- “The health center has free std testing and those shots I need under my combined university fee right?” ⇒ misconception on what the combined university fee covers when using campus health services

Some students came in for testing and they were sent to the Erie County Health department (ECHD)
Free STD clinics

- I started checking to see if the students had arrived and had been seen?



- Most of the students were not seen or never arrived!



- ECHD appointments are on a “first come first service basis” and hours of operation are only early morning and early afternoon !!

How did the collaboration get started?

- **Brought concerns** of providers and students to Medical Director of Health Services ⇒ **with plan** to ask ECHD to collaborate (investigated what tests they did and cost prior to meeting)



After 6 months no meeting with ECHD was arranged
by Medical Director



Sent e mail to Director of ECHD labs as a concerned NP working at a local college with at risk young adults

What next?

I heard from Director of ECHD labs within
5 business days with e mail response



ECHD agreed with importance of offering STD testing
to college students and eager to collaborate
with our University



First meeting setup with UB Medical director, director of ECPHL
and myself

1st meeting

- **Discussed:** Concerns providers/students
- **Discussed the following issues:**
 - ◆ what tests we thought we needed to offer (CDC guidelines/review of medical literature)
 - ◆ why we needed this program ON CAMPUS
 - ◆ how we would save the health department \$
 - ◆ how we could incorporate sexual health education into the screening appointment

1st meeting continued.....

Discussed how this collaborative program ⇒

- (1) would allow the health department to actually **reach more people**, in one given day, thus allowing for more diagnosis & treatment of STD's (outreach?)
- (2) would **decrease spread of STD's** in State/USA and World (International students) !
- (3) would **increase sexual health education** on campus by assisting students with safer sex decisions

2nd meeting: same attendees

- ECPHL director returns 2 weeks later **agreeing** to the collaboration and presents **what tests** they are willing to offer



- By venipuncture:
 - HIV 1 antibody, RPR, Hepatitis C antibody, Hepatitis B surface antigen and hepatitis A IgM
- By Culture: cervical, anal and throat for gonorrhea
- By Urine (NAAT) – gonorrhea and Chlamydia
- **Do not offer**: cervical HPV digene, HSV 1/2, trich screening

Cost!

\$10

Note: \$10 billed to student account – no cash needed,
anonymity maintained

- Turnaround 10-14 days for results
- Results received through campus mail (no fee for US mailing)
- What tests are done is the decision of the provider following approved ECHD guidelines for STD testing by “risk”

What students can participate in the program?

- **Any registered student** can participate with the discretion of the provider!
- Students, who have insurance, that covers yearly STD screening, **are encouraged to use their insurance.**
- NOTE: Students with University Aetna Chickering insurance are able to get screening **one time per year** (only since this program was started).

What was the outcome of testing?

- ★ Looking at one year of specimen collection
- ★ Using SPSS version 16

ECPHL ERIE COUNTY PUBLIC HEALTH LABORATORY

CLINICAL CENTER, BLDG AA 462 GRIDER STREET, BUFFALO, NY 14215 (716) 898-6100: FAX (716) 898-6110

STD LABORATORY REQUISITION

PATIENT CONTACT INFO.

(print clearly)

NAME _____

UB PERSON NUMBER _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

COUNTY _____

DATE OF BIRTH _____

PATIENT SEX _____

**University at Buffalo
Student Health Services
Michael Hall, 3435 Main St.
Buffalo, New York 14214**

PATIENT INFO.

International Student?

No

Yes, specify Country of Birth: _____

SEX PARTNER(S) GENDER:

male

female

both male and female

PATIENT RACE (Please circle)

1-White

2-Black

3-Native American

4-Asian

5-Other

6-Hispanic

9 Unknown

PROVIDER INFO.

PROVIDER NAME _____

LICENSE NUMBER _____

NPI NUMBER _____

REASON FOR VISIT (check all that apply):

Routine physical

Women's Health Clinic visit

STD Symptoms

Contact with a STD patient

Asymptomatic STD screening

Other

(specify: _____)

DIAGNOSIS (ICD9 DIAGNOSIS CODE)
(Must be provided)

SPECIMEN/SOURCE (Check all that apply)

DATE & TIME COLLECTED _____

STAFF CODE _____

Screening Demographics: June 4, 2007 to May 29, 2008

- 667 students presented for STD screening
 - Median age = 21 years (range 18-37)
 - Slightly more females (57%) than males
 - Most reported Erie County address (90%)

Screening Demographics: Racial and Ethnic Diversity

- Self-reported racial/ethnic identification
 - 59% White
 - 15% Black
 - 11% Asian
 - 6% Hispanic
 - 3% Other
 - < 1% Native American
 - 6% Not Reported

Who came in for testing:
Screening Demographics
versus
Campus Demographics

| Race/Ethnicity | in program % in STD program | on campus % of total UB population |
|--|--|---|
| White, non-Hispanic | 59 % | 58.7 % |
| Black, non-Hispanic | 15 % | 5.7 % |
| Asian | 11 % | ~ 8 % |
| Native American | < 1% | < 1 % |
| Not reported or undisclosed | 8 % | ~ 10 % |

Screening Demographics: International Students

- 74 international students presented for screening
 - Median age = 22 years (range 18-37)
 - 55% were females
 - 32 countries represented including Canada, China, India, Japan, South Korea and Taiwan
 - 11% of all screening visits were among international students

Screening Demographics: Sexual Orientation

- 59 students with same-sex partners presented for screening
 - 31 males with male partners
 - (11% of all males)
 - 17 females with female partners
 - (5% of all females)
 - 7 males and 4 females who reported both male and female partners

Screening Reasons: Why did students come?

Provider-reported reasons for screening
(providers could pick more than one answer)

- 58% Asymptomatic screening
- 16% Women's Health visit
- 8% Routine visit

total asymptomatic screening = 80%

- 14% STD symptoms*
- 6% Contact to a partner diagnosed with STD*
- 5% Other* (e.g. past STD history, sexual assault victim, workplace exposure)

*insurance issue

Screening Results

| | # Tested | # Positive (%) |
|-------------|----------|----------------|
| Chlamydia | 646 | 25 (3.9) |
| Gonorrhea | 646 | 2 (0.3) |
| HIV | 490 | 0 |
| Syphilis | 365 | 2 (0.5) |
| Hepatitis C | 191 | 1 (0.5) |
| Hepatitis B | 123 | 0 |
| Hepatitis A | 74 | 0 |

Patient Characteristics: Positive Chlamydia

- **21 patients total**
 - Median age 21 years (range 18 – 28 years)
 - 55% Male
 - 41% White, 41% Black, 5% Asian, 10% Not reported, 5% Other
 - 18% International students
 - None reported same sex partners

Provider reported reason for visit:

- **46% Asymptomatic screening + 9% Women's health visit = 54%**
 - 27% Contacts to other patients with an STD
 - 27% Symptoms of an STD

Other positive findings:

★ 2 positive and confirmed for Syphilis

- a. both MSM
- b. ages/ethnicity

19 years of age (Hispanic) ⇒ ? Late/latent stage

26 years of age (White, non-Hispanic) ⇒ Secondary stage

★ 1 Hepatitis C Antibody positive/confirmed

- a. 19 year of age, heterosexual male from Dominican Republic living in NYC for approximately 10 years
- b. denied past/present drug use/abuse, surgery or transfusion
- c. No follow-up at the SHC - patient had to be transferred to a off campus primary care clinic for further evaluation (insurance issue).

Patient Characteristics: Positive Gonorrhea

- 2 patients total
 - Ages 21 and 23 years old
 - Both male
 - One white, one black
 - Neither was an international student
 - One reported male partners
 - Both sought treatment for STD symptoms

What does the medical literature show about STD's in college age students?

Review of literature from last 10 years only!

Chlamydia Prevalence in College Students

1999--University health center screening study

- 1,149 women tested
- 2.3% positive for Chlamydia
- Women who tested positive were more likely to be:
 - ≤ 20 years of age
 - Symptomatic
 - Report prior Chlamydia or gonorrhea infection
 - Report exposure to an STD
 - Have cervical signs during examination
 - African-American

RL Cook et al, 1999. Clinical Infectious Diseases 28(5): 1002-1007.

Chlamydia and Gonorrhea Prevalence in College Students

2004--University freshman at 10 colleges in
Alabama, Georgia and Mississippi

- 789 students screened for Chlamydia and gonorrhea
- 9.7% positive for Chlamydia
- 1.5% positive for gonorrhea
- Students who tested positive were more likely to be:
 - ≤ 20 years of age
 - African-American

AB James et al, 2008. Sexually Transmitted Diseases 35(6): 529-532.

Sexually Transmitted Disease Services at US Colleges and Universities

- Stratified random sample (n=910) of 2755 US schools with enrollment over 500
- Mailed questionnaire in October 2001
- 81% responded
- 474 (60%) - had a health center
- 52% of schools made condoms available and most provided some sort of prevention counseling
- 60% could test for Chlamydia and GC but only 67% screened females?

Counseling and Education

What's the Benefit?

“An advantage of behavioral interventions is that they are capable of preventing all STDs, while biomedical interventions are specific only for certain STDs. If behavioral interventions could be widely implemented along with biomedical approaches, they are likely to have a substantial effect on the prevention of STDs.”

Source: CDC Program Operations Guidelines for STD Prevention, 2008

Counselors

- Peer Educators from SBI Health Education
- Trained in sexual health, counseling, and sexual assault
- 2008: Bacchus Gamma CPEs
- Available various times throughout the week

Prevention, Education, and Testing

- STI Counseling is encouraged during Women's Health Sessions and Pregnancy Intakes
- STI information and barrier demos are provided as part of Women's Health Sessions
- Workshops promoting safer sex practices, STI information, and communication skills are offered

Benefits of Peer Educators

- Time
- Identify with client
- Personalize experience
- Familiar with issues facing college population
- Jargon
- Inspire students to further their involvement or knowledge

Challenges with Peer Educators

- Training time
- Confidentiality concerns
- Age – especially if client is graduate student or adult learner

Procedures

Counselors take information separate from providers

Counselors ask about behaviors in order to discuss appropriate risk reduction, regardless of what STI tests were ordered

Counselors do not know what tests were ordered, including HIV

Additional education and counseling are offered

Counselors are trained in NYS HIV Pre- and Post-Testing procedures

Counseling Outline

available upon request

Health Belief Model

- Perceived susceptibility:
- Perceived benefits:
- Perceived severity:
- Perceived barriers:
- Cues to action
- Self-efficacy

Sexual Assault

- **Some reports of clients seeking testing as a result of a sexual assault**
- **Separate counseling outline in this case**
- **Professional staff is available if needed**

NCHA Spring 2007

similar to NCHA results

- condom use
- sexual activity
- partners
- drug & alcohol use

Who are we seeing?

Always use condoms: 28%

35% of men

24% of women

Never use condoms: 11%

13% of men

9% of women

Sometimes use condoms: 60%

61% of men

59% of women

Undisclosed: 1%

According to NCHA data, students believe that their peers mostly use condoms (about 50%), very few never do, and very few always do.

Self-reports say that about 20% never do, 20% always do, and 8% mostly do.....

who's right????

Who are we seeing?

Never tested before: 44%

65% of men

29% of women

Tested before: 53%

30% of men

68% of women

Undisclosed: 4%

What made them call or ask....

“Symptoms”: 18%

Proactive: 18%

Unprotected sex: 16%

Unfaithful partner: 11%

New partner: 11%

Annual exam: 7%

Partner or ex-partner
with STI: 5%

Provider request: 5%

Partner’s request: 4%

Sexual assault: <1%

What We're Finding....

Most recognize condoms as an effective means of risk reduction

Other identified methods:

- Mutual monogamy
- Abstinence
- Knowing a partner's status before sexual activity
- Knowing one's own status
- Limit partners
- Communicate with partners

Some identified potential barriers as:

- Alcohol and/or drug use
- Communicating with partner
- Cultural issues

Common Theme

- Behavior varies with the type of relationship.
- What this means: Many clients say they don't use a condom when they're "in a relationship."
- Relationships are defined anywhere from 1 week to several years....
- **As length of time with a partner increases, condom use decreases (Reisen & Poppen, 1999).**

Challenges

- Location
- Participation of providers
- Willingness of students
- Confusion of students
- Time constraints
- Room availability
- Counselor availability
- Males
- Diversity
- Single visit opportunity

What's Next.....

Provide additional opportunities and messages

Increase opportunities for cultural competency

Consider options for follow-up or results based counseling

Couple these efforts with increased social marketing campaign

References

**American College Health Association. American College Health Association - National College Health Assessment (ACHA-NCHA) Web Summary. Updated August 2007.
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C.A. Reisen and P.J. Poppen (1999). Partner-Specific Risk Perception: A New Conceptualization of Perceived Vulnerability to STDs. *Journal of Applied Social Psychology*, 29(4), 667-684.

**CDC Program Operations Guidelines for STD Prevention, 2008
(available at <http://www.cdc.gov/std/program/#>)**

Questions?

Contact us:

Susan C. Mancuso BSN, MSN/FNP
FNP Health Services – University of Buffalo
mancuso@buffalo.edu

Jane Fischer, MA
Director, SBI Health Education
Sub-Board I, Inc.
jef3@buffalo.edu

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