Resolution #2 1993-94

TO: President John E. Van de Wetering
FROM: The Faculty Senate  Meeting on  May 9, 1994
(Date)
RE:  
I. Formal Resolution (Act of Determination)
II. Recommendation (Urging the fitness of)
III. Other (Notice, Request, Report, etc.)
for your information
SUBJECT: Resolution concerning Tuberculosis
         Education and Testing Programs

Signed [Signature]  Date Sent  May 11, 1994

TO: The Faculty Senate
FROM: President John E. Van de Wetering
RE:  
I. Decision and Action Taken on Formal Resolution
   a. Accepted. Effective Date, [Immediate]
   b. Deferred for discussion with the Faculty Senate on 
   c. Unacceptable for the reasons contained in the 
      attached explanation

II, III.
   a. Received and acknowledged
   b. Comment:

DISTRIBUTION: [Signature]

Distribution Date  6/8/94  Signed: [Signature]  (President of the College)
Resolution

Whereas there is a rise in the number of cases of tuberculosis in the United States as well as a significant rise in cases worldwide; and

Whereas this has become a national health concern with an 18% increase in actual cases of TB and thousands of unreported and untreated cases occurring yearly in the United States with an increasing concern for this problem because of the development of drug resistant strains of the organism; and

Whereas SUNY Brockport like the general public is at increased risk from this health concern especially since our student population represents an increasing number of high risk students; and

Whereas this represents an increased risk to faculty, staff and students on the SUNY Brockport campus; and

Whereas the Faculty Senate recognizes that the composition of our college population, along with the close proximity experienced during college living situations, classroom attendance, and other general phases of college life, allow for exposure to tuberculosis.

Therefore, be it resolved that the Faculty Senate support the development of a tuberculosis educational and testing program for members of the college community to include students, faculty and staff.

Passed by Faculty Senate 5/9/94
TO: Marion Schrank, Vice President for Student Affairs
Roger Weir, Director of Student Health Services

FROM: Jacqueline J. Christman, M.D., Chief College Physician

DATE: February 7, 1994

RE: Tuberculosis Screening at SUNY Brockport

INTRODUCTION

Tuberculosis is a disease of the lungs and sometimes other organs of the body which is caused by Mycobacterium Tuberculosis, a cousin to other forms of Mycobacterium. It is spread by airborne droplets from the cough of a lung-infected person.

In active lung disease, infected persons are infectious and frequently have a cough—sometimes with blood-streaked sputum, fever, night sweats, appetite loss, weight loss, and fatigue along with a chest x-ray showing signs compatible with tuberculosis. In the absence of these symptoms, a person can still be infected but non-infectious after exposure to a lung-infected, symptomatic person. These infected persons may eventually become symptomatic - that is, they may acquire tuberculosis.

People who are infected but asymptomatic can be detected by a simple skin test called PPD which is administered via a very small needle and "read" two to three days later by a nurse or physician.

THE LOCAL TUBERCULOSIS PROBLEM

Four persons in Hazen Hall converted to positive PPD within one year to two years of having a negative PPD. None had a known symptomatic tuberculosis infected contact in their home or in the close circle of frequently visited relatives or friends. Since the conversion window was relatively brief for these employees and since all work in close contact with students in the Student Health Center or the Counseling Center, the question of undiagnosed student carriers of pulmonary tuberculosis is raised.

Currently, the college, through the Student Health Center,
asks that each new student return a history and physical examination form, on which results of PPD are documented by a physician. Since at this time there are no sanctions for not returning this form, information about PPD, immunizations and treatment for tuberculosis and other chronic diseases is unknown on approximately 40% of our new student population. Obviously, this percent represents the portion of students who elect not to return the history and physical examination form.

**THE GLOBAL TUBERCULOSIS PROBLEM**

---THE CHANGE IN INCIDENCE OVER THE PAST EIGHT YEARS.

Since the 1950’s when a standard regimen for the treatment of tuberculosis was introduced, the incidence of the disease has declined 5-7% per year until 1985 when this trend stopped. The number of cases in the United States had gone from 84,000 to 22,555 in that period. In 1985, the number of cases started to rise for the first time in decades.

Between 1985 and 1991 according to data from the Center for Disease Control (CDC), the number of cases reported increased 16% which represented 19,000 more cases than had been expected based on an extrapolation of the previous downward trend. Cited as factors in the reversal were the AIDS epidemic, increased numbers of cases among the foreign born and deterioration of the health care infrastructure.

During 1992, 22 states reported an increased number of cases over 1991. The largest increase occurred in Virginia (20.6%), with New York State showing the third highest increase (3.3%). The largest increases from 1985 through 1992 occurred in New York (84.4%), California (54.2%) and Texas (32.7%).

From 1985 through 1992, every racial/ethnic group except non-Hispanic Whites and American Indians/Alaskan Natives showed an increase in tuberculosis cases. The reported increase among Hispanics was 74.5%; Asian/Pacific Islanders 46.2%; Non-Hispanic Blacks 26.8%. The decrease among non-Hispanic Whites was 9.9%.

All age groups except for the over 65 year old group also showed increased numbers of tuberculosis cases since 1985; with the 25-44 year age group having the greatest increase at 54.5%. A higher proportion of cases among unspecified younger age groups was noted over the same period.

In the same seven-year period, the non-urban dwellers case rate decreased from 6.7 to 6.5 (3.0%) per 100,000, while the urban dwellers case rate rose from 17.1 to 22.0 (28.6%) per 100,000.
THE CHANGE IN TREATMENT REQUIREMENTS AND MORTALITY.

During the same period that incidence rates have been ascending, the form of TB has been changing. The changes jeopardize the medical effort to control TB.

In ordinary times in the past, five drugs: Isoniazid, Rifampin, Pyrazinamide, Streptomycin and Ethambutol have been used in various combinations to control pulmonary TB. Although treatment duration has been determined by the drugs used, drug susceptibility test results and the patient response to therapy, the common first line regimen has been one of six months duration. Commonly, the first two months consist of daily Isoniazid (INH), Rifampin (RIF), and Pyrazinamide (PZA). If drug resistance or life-threatening disease is present, supplementation with either Ethambutol or Streptomycin is required. During the last four months, only Isoniazid and Rifampin are given daily.

Clearly, the potential for development of drug-resistant strains of TB has been known for some time. It is only in the nineteen nineties, however, that multi-drug resistant-TB (MDR-TB) has become known. In New York City, for instance, 33% of cases in 1991 were resistant to one drug and 19% of cases were resistant to both INH and RIF, the two most effective drugs. Cases of resistance to all five first-line drugs have been reported.

In institutional outbreaks of multi-drug resistant TB, several characteristics have been noted. There is a high mortality rate — from 72%–80%. There is transmission of MDR-TB to the attending health-care workers and correctional facility workers with many of them developing MDR-TB. There is a short median interval between diagnosis and death — 4-16 weeks.

Obviously the necessity of finding and aggressively treating persons with TB is clear. The wisdom of prophylactically treating asymptomatic carriers -- who are discovered by PPD screening -- is equally clear.

THE TOXICITY OF TUBERCULAR TREATMENT AND PROPHYLAXIS

Although rare, certain drug toxicities do occur. These are listed below:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>INH, PZA, RIF</td>
<td>Drug induced hepatitis</td>
</tr>
<tr>
<td>RIF</td>
<td>Bleeding tendency</td>
</tr>
<tr>
<td>Streptomycin</td>
<td>Deafness</td>
</tr>
<tr>
<td>Ethambutol</td>
<td>Decreased visual acuity</td>
</tr>
<tr>
<td>PZA</td>
<td>Gout</td>
</tr>
</tbody>
</table>
INH Peripheral neuropathy

In addition, alcohol use can promote toxicity and Rifampin can interfere with other commonly used drugs such as oral contraceptives, anticonvulsants, coumadin and digitalis.

POPULATIONS AT HIGH RISK FOR TUBERCULOSIS

- Persons with HIV infection
- Close contacts of infectious tuberculosis cases
- Persons with medical conditions as follows:
  - HIV infection
  - Silicosis
  - Diabetes Mellitus
  - Abnormal chest x-ray showing fibrotic lesions
  - Prolonged corticosteroid therapy
  - End-stage renal disease
- Weight
- Foreign born persons from high prevalence countries (Asia, Africa, Latin America)
- Medically underserved low-income populations including high-risk minorities, especially blacks, Hispanics and Native Americans
- Alcoholics and IV drug users
- Residents of long-term care facilities, such as correctional institutions and nursing homes
- Other populations identified locally -- health care workers

SELECTED SUNY BROCKPORT DEMOGRAPHICS

While the SUNY Campus at Brockport is not a proxy for New York City, the following data are helpful in demonstrating the need for PPD screening.

According to the Official 1993 Enrollment Reports the total number of full-time students is 5,758 undergraduates and 292 graduates. There are 1,363 part-time undergraduates and 1,593 graduate students.

Of these, there are a total of 150 full-time undergraduate students from the Bronx, New York, Queens, Kings. There are four undergraduates from California and Florida. And there are a total of 8 from South Africa, Japan, China, and Hawaii.

Of the graduate population, eight are from Bronx, Kings, Queens, and New York while six are from California. A total of nine are from South American and Asian countries.

Black students on campus total 408. Hispanics total 178. Asian/Pacific Islanders total 90. Non-resident aliens,
country of origin unknown, total 43 and Native American/Alaskans total 19.

A PROPOSAL FOR A COLLEGE TO MEET THE CHALLENGE OF TUBERCULOSIS

1. All registrants - transfers or freshmen should be required to supply proof of negative FPD or proof of treatment or prophylaxis.

2. The students should supply this information by the first day of classes.

3. Since the documentation required is part of the Student Health History and Physical, this form should be required before classes start.

4. Yearly PPD on high-risk staff and Center employees.

5. Those positive refer to MCOH for Rx for prophylaxis