Citizens League

STATEMENT

Testing Health-Care Workers for the AIDS Virus

Public affairs
research and education
in the Twin Cities
metropolitan area

CITIZENS LEAGUE STATEMENT

Testing Health-Care Workers for the AIDS Virus

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INTRODUCTION

The Citizens League issued a full report on AIDS, *Stopping AIDS: An Individual Responsibility,* in May, 1988. That report did not address the testing of health-care workers for the AIDS virus, an issue that has arisen since 1988. In late 1991, the League's Community Information Committee convened a small subcommittee charged solely with responsibility to address the question of mandatory testing of health-care workers. Members were Jane Vanderpoel, chair; Charles Backstrom, Ellen Brown, Doug Carnival, Jeff Hazen, Deb Osgood, David Piper, John Stone and Tom Swain. The subcommittee produced this statement in early November; it was approved by the Community Information Committee November 22 and the Board of Directors December 11, 1991.

DISCUSSION

Minnesotans have seen a barrage of news reports over the last year implying that AIDS is a danger to people who had not thought themselves at risk -- those receiving medical treatment. Five patients of an HIV-infected dentist in Florida became infected with the virus. In Minneapolis, a doctor who had AIDS continued treating patients with questionable infection control practices. In the reverse situation, Minnesota recently saw its first case of a health-care worker becoming HIV-infected from a patient in an accidental needle stick.

The sight of 23-year-old Kimberly Bergalis, pathetically weakened by AIDS, testifying in Congress before her death, was emotionally compelling; she said she was an innocent victim of her dentist, who gave her AIDS, and demanded protection for all patients by asking Congress to require testing for all health-care workers.

The Hennepin County Board is considering testing all health-care workers in its medical facilities for HIV. The University of Minnesota Hospitals is considering a new proposal to require proof that some health-care workers have been tested every two years. More than one proposal is expected in Minnesota's 1992 legislative session for mandatory HIV testing of health-care workers.

We believe mandatory testing of health-care workers is unnecessary and impractical, whether such testing extends to <u>all</u> workers or only those involved in exposure-prone procedures.

In the decade that AIDS has been recognized as a transmissible and fatal disease, with millions of patients visiting untold thousands of health-care workers for a huge variety of health reasons and medical procedures, the Florida dentist is the single known case of a health-care worker transmitting AIDS; he somehow passed it to five patients before himself dying of AIDS.

The Minnesota Department of Health (MDH) estimates the risk of HIV transmission in the state during surgery (the highest risk type of procedure for HIV transmission due to accidental blood exchanges) to be between one in 2.1 million and one in 21 million procedures. This infinitesimal risk is many times smaller than the odds of dying from anesthesia or penicillin, for example; it does not justify mandatory testing of health-care workers.

Equally important, testing at reasonable frequencies -- annually, or even quarterly -- offers no assurance of safety, since an HIV infection can be acquired within hours after an individual is tested. Further, <u>no</u> amount of testing -- not even daily, which would be inordinately expensive and intrude significantly in the lives of thousands of non-infected health-care workers -- could guarantee total public safety, since persons with HIV do not develop the antibodies that reveal the disease for two months or more after infection.

In the broad challenge of stopping the spread of AIDS, the issue of health-care workers transmitting the disease to patients clearly is a minuscule part of the overall problem. Mandatory testing could even make the situation worse, if it frightens away those who should be tested or gives false security to those who are actually infected but don't know it yet.

Further recommendations and the reasons for them can be found later in this report. Before discussing them, it seems helpful to put the issue of mandatory testing and risk of HIV transmission in perspective. Here are some facts that influenced our conclusions:

• **The virus (HIV) that causes AIDS is extremely difficult to transmit.** Unlike a cold virus, it is not air-borne and can't be transmitted casually. HIV cannot be transmitted just by touching an infected person. It is spread in body fluids, usually blood or semen. The most common way HIV/AIDS is spread (since the donor blood supply is now considered clean) is through either unprotected sex -- especially anal sex, or having multiple sex partners of either gender -- or sharing used (dirty) needles with intravenous drug users.

For a patient to get HIV from an infected health-care worker, the following must occur, according to the Minnesota Department of Health (MDH): A health-care worker must sustain a blood-producing injury during a procedure inside a patient's body, and the blood-bearing sharp object causing the injury (or blood from the injury) must then recontact the patient's open wound, resulting in exposure of the patient to the health-care workers' blood. Such an exposure is likely to occur **only during certain surgical or dental procedures. Since most health-care workers do NOT perform those procedures, they pose no risk of transmitting the virus.**

There is some concern that some medical procedures not ordinarily considered "exposure prone" could spread the virus. For example, a health-care worker who is infected with AIDS and shows an obvious physical manifestation of the disease, such as oozing sores, might be able to transmit the virus if fluid from those sores contacted an open sore or mucous membrane on a patient.

Defining invasive and exposure-prone procedures is important. All HIV-exposure prone procedures are invasive (entering into a patient's body or body cavity) but not all invasive procedures are prone to exposure. An example of an invasive procedure that is not normally exposure-prone is a gloved pelvic exam of a woman or prostate palpation of a man. An invasive and exposure-prone procedure would be blind suturing (the doctor must find a needle by touch inside a patient's body during a surgical procedure) such as is performed in some hysterectomies.

• **The MDH estimates that the risk of HIV transmission during a surgical procedure in Minnesota is between one in 2.1 million and one in 21 million procedures.**[1] Compare this to other known risks in the health-care field, according to MDH: The risk of anesthesia-associated death, 100 per million, is 210 to 2,100 greater; the risk of death from an immediate unexpected allergic reaction to penicillin is 10 or 20 per million, which is 10 to 20 times greater; a surgical wound infection risk ranges from 10,000 to 147,000 per million. Medical ethics expert Arthur Caplan has noted that it's more risky for patients to drive to an appointment with an AIDS-infected health-care worker than it is to keep the appointment.

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[1] The MDH estimate contains a 10-fold range in risk because it combines the odds of being cared for by an HIV-infected health-care worker with the odds of an infected worker transmitting the virus to a patient during a surgical procedure. The latter estimate carries a 10-fold variation: The odds are between 2.4 and 24 transmissions per one million surgical procedures, according to the U.S. Centers for Disease Control.

• As of September 1991, about 60 HIV infected health-care workers were known in the United States to have performed invasive procedures on patients. Public health experts have conducted investigations similar to the one in Minnesota last year, following up on the health of about 9,000 patients. **Except for the five patients of the Florida dentist, none has contracted HIV from a health-care worker.**

• **A health-care worker is much more likely to get HIV from a patient than vice versa.** Across the country, the Centers for Disease Control (CDC) is aware of 42 health-care workers (including one in Minnesota) who have contracted HIV from their patients, mostly from needle sticks. The chances of a health-care worker getting HIV from an infected patient after an accidental needle stick are about one in 300. (More health-care workers are infected because of personal behavior than from professional or occupational causes).

• Minnesota ranks near the bottom of the country in the rate of AIDS cases per 1,000 citizens. In Minnesota, at the end of last year, 840 people had been diagnosed with AIDS, of whom 590 have already died. MDH estimates that at least 1,500 persons have tested HIV-positive but not yet developed AIDS. Almost 90 percent of Minnesota's AIDS cases are in the Twin Cities; 31 counties still report no cases.

• Minnesota has about 9,000 licensed physicians, of whom an estimated 2,500 are doing invasive or exposure-prone procedures. About 4,000 dentists are licensed in Minnesota, not all actively practicing. MDH is aware of 10 physicians and two dentists in Minnesota with HIV/AIDS. The department estimates, based on epidemiologic data and the laws of probability, that zero to five additional doctors and four to six additional dentists could carry HIV.

RECOMMENDATIONS

Testing Health-Care Workers

All of us as patients want to be certain we can visit our doctors, dentists and other health-care workers without fear of contracting AIDS. We believe that a better solution than mandatory testing of health-care workers is a combination of recommendations from MDH and the Minnesota Board of Medical Practice (BMP), with modifications.

Their recommendations rest on enforcing infection control procedures and restricting the practices of workers who do carry the virus. Both proposals largely agree with recommendations of the national Centers for Disease Control (CDC) and professional organizations such as the American Medical Association and the American Dental Association.

The philosophy of the MDH and BMP can be summarized as: It will be more effective in protecting public safety if health-care workers who do exposure-prone procedures have more at stake (such as losing their practice or jobs) when they don't know their HIV status than when they do know it and report it to the proper authorities. The goal is to remove incentives for HIV-positive workers to avoid testing by giving the licensing boards the power to protect those who self-report and punish those who don't.

A close reading of the MDH/BMP proposals would help in understanding this committee's recommendations. In essence, here is how they propose to protect the public from HIV transmission from health-care workers:

- Health-care workers who do exposure-prone procedures "should know" (would be expected to know) their HIV status.

- Workers who test positive would be required to report their positive status to the appropriate licensing board.

- The licensing board would restrict him/her from doing procedures that might transmit HIV (exposure-prone procedures) unless the board extends them special authorization to perform some of those procedures and the health-care worker notifies patients about his/her HIV status, so that patients can decide for themselves whether to take the small risk of transmission.

This outline obviously leaves out many specifics such as disciplinary measures, review panels, notification procedures and epidemiologic factors. However, if the above scenario becomes law -- *with the modifications that we recommend below* -- we believe the public will be protected from HIV transmission in health-care settings.

Referring to the first point:
We do not recommend testing for all health-care workers who do exposure-prone procedures, as does MDH, but only for workers who are reasonably at risk of carrying the virus. Therefore, we recommend that "should know" (their HIV status) requirements be placed only on workers who might reasonably be considered a concern: Those who have engaged in personal

behavior that could put them at risk for contracting the HIV virus or who have experienced an occupational blood exposure/exchange from a patient since 1980.

We believe testing all health-care workers who do exposure-prone procedures is unnecessary, since so few of them are at risk of having HIV, since the patient's risk of transmission is so infinitesimal, and since even daily testing (an exceedingly expensive process that would not justify its cost) would not totally prevent all risk of infection. Because the "should know" clause implies that all health-care workers doing exposure-prone procedures should be tested, we recommend it be more clearly and narrowly defined.

Cross Notification by Regulatory Bodies

Referring to the second point :
Under current law, anyone who conducts HIV tests must notify MDH about positive test results. That is an important part of the strategy for stopping the spread of AIDS. After talking with people who test positive and educating them about how to stop spreading the virus to others, MDH seeks out and then notifies others who might have been given HIV (by those who are positive) so they, too, can be tested and educated about avoiding transmission. This process also allows people with HIV to get medical treatment that could prolong their lives.

We believe the law should require MDH to notify the medical licensing boards of any HIV-positive health-care worker it identifies, and vice versa. Neither the MDH or BMP recommendations call for this sort of intentional cross-notification.

Individual Regulation of Infected Workers

Referring to the third point :
The BMP proposes that when licensing boards are notified of a positive test, they call in the infected person to review his or her professional/occupational practice and assess the risk of transmission to past and future patients. The board envisions that an infected worker would be routinely prohibited (by law or regulation) from performing exposure-prone procedures unless and until it decides to allow him/her to perform certain procedures with appropriate precautions or restrictions, including prior disclosure of HIV status to each patient.

The difficulties of defining which procedures are prone to exposure is the crux here. The CDC said earlier this year it would publish a list of such procedures by Nov. 15, but abandonded this undertaking after encountering opposition from more than 30 medical, surgical and dental professional groups and civil rights organizations[2] -- evidence to us of the complexity of determining in a fair or comprehensive way who may do what.

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[2] Rather than issue a list of prohibited, exposure-prone procedures for state and local licensing authorities, CDC drew up guidelines for these authorities to use on a case-by-case basis in determining the permitted activities of infected health-care workers. They focus on three factors: the type of procedures the worker performs and the risk of transmission during an invasive procedure; how well the worker complies with standard infection-control procedures; and the medical condition of the worker.

Imagine assigning all medical/dental procedures a spot along a continuum from the very safe to the very risky. Perhaps on one end would be a pediatrician using a tongue depressor to check a child's throat, and at the other end would be a surgeon doing blind suturing inside a woman's body during a vaginal hysterectomy.

Assuming a doctor is HIV positive, the blind suturing procedure is extremely exposure-prone because of the likelihood the doctor could stick his/her finger with the needle and thus transfer infected blood to the patient. But while depressing a child's tongue isn't normally considered an exposure-prone procedure, some experts would put it in that category if it was performed by a doctor with AIDS who had oozing skin lesions.

We believe it is impossible to prepare a fair, comprehensive list of "exposure prone" procedures unless one considers both the type of procedures being performed by the HIV-positive health-care worker and the physical manifestations of his/her disease. The list of allowable procedures for each health-care worker would have to be flexible, allowing for changes in both medical technology and the progression of a health-care worker's disease.

We don't envision that the list of exposure-prone procedures will look like a continuum with an arrow defining where to draw the line between safe and risky procedures. Instead, **we recommend that the BMP create for each HIV-positive health-care worker a specific and unique list of safe procedures (which they would be permitted to perform) or unsafe procedures (which they would be forbidden to perform), based on careful considerations of both the risk to patients from the type of procedure performed and the manifestation of the health-care worker's disease.**

Representatives of the medical licensing boards have pointed out that they already have in force certain protocols (suggestions) for patient care, including the use of infection control procedures. Until those guidelines have the force of law so there is some reasonable guarantee that they are followed, this worker-by-worker review and counseling procedure is a prudent precaution.

We recommend that the licensing boards err on the side of patient safety when determining which procedures HIV-positive health-care workers may perform. That is why **we support a requirement that HIV-positive health-care workers inform patients of their positive status before performing exposure-prone procedures,** since there is no way to guarantee an accidental needle stick or other accidental blood exposure won't occur during a procedure.

Our recommendation further is that the licensing boards assume responsibility for closely and frequently monitoring any health-care workers they have allowed to perform exposure-prone procedures, to be certain the restrictions placed on their practices or occupations are being followed, to observe the manifestation of AIDS symptoms, and to be certain appropriate infection control practices are routine. Restricting procedures that an infected worker may perform with the goal of protecting patients is pointless unless the health-care worker actually stops performing the restricted procedures.

Many of the above recommendations have been endorsed by the Minnesota Board of Medical Practice, which regulates, licenses and disciplines doctors. We recommend that the state's other medical licensing boards (nurses, dentists, etc.) follow the same rules.

Infection Control

Most public health experts have rejected mandatory testing as a way to protect the public from HIV transmission. Instead, they emphasize that strengthening infection control procedures will decrease the chance of a blood exposure/exchange. We see several benefits to this.

First, it seems logical that everyone will be more protected from transmission of any disease if health-care workers always assume they could get HIV from any patient, and they take appropriate precautions.

Second, testing (whether mandatory or voluntary) does not provide complete protection. One assumes the reason for testing is to assure patients that their doctors or dentists have a clean bill of health. But it is impossible to guarantee that a patient couldn't get HIV from a health-care worker, even if every health-care worker in the state were tested daily. The best tests now available don't pick up HIV antibodies for up to three months after infection, and for much longer in some cases. In that period of time, health-care workers who have tested negative might be falsely confident about their status and if sloppy about infection control procedures, they could still pass along the virus to their patients.

Educating Health-Care Workers

That is why **we strongly endorse MDH proposals for much greater efforts to educate health-care workers about infection control practices, such as requiring annual continuing education courses as a condition for renewing licenses.** MDH also requests increased funding and staff levels to do more inspections of health-care sites to be sure appropriate infection control procedures are being followed, and is asking for authority to punish violators.

Universal infection control procedures, according to MDH, include: Routine handwashing, using protective barriers such as gloves, gowns, and eyewear; and using caution when using or disposing of needles and other sharp instruments. Health-care workers should assume blood and other specified body fluids of all patients could contain the HIV, or others that threaten health, and should be handled accordingly. Medical devices and equipment that are used in a normally sterile part of a patient's body or that touch intact mucous membranes should be appropriately sterilized or undergo a high level disinfection.

It is important to note that even if all of the above recommendations become common practice, **it is not possible to guarantee the public that no one will get HIV from a health-care worker.** A problem with voluntary testing is that some health-care workers should be tested who won't know it -- the unknowing wife or husband of a promiscuous or bisexual spouse who gets HIV from a sex partner is an example. Another is that HIV-infected health-care workers (like anyone else) could find ways to escape or manipulate the tests.

Public Education

Clearly, the chances of Minnesotans contracting HIV from a health-care worker are almost nil: Even for surgery, the riskiest set of procedures, the estimated odds are between one in 2.1 million and one in 21 million. The risk is non-existent for people who see health-care workers for procedures that aren't exposure-prone, according to MDH.

It is understandable that the public panics about contracting HIV from health-care workers when it is generally uninformed about the true risks, particularly since AIDS is fatal. **We believe the health-care industry (insurance companies, hospitals, physicians, dentists and other health-care workers) should take responsibility for educating its consumers (patients) about HIV/AIDS disease, its prevention, and the benefit of infection control procedures in preventing the spread of AIDS and other diseases.**

In addition, we hope physicians and other health-care workers will use patient appointments as an opportunity for educating and counseling patients about HIV/AIDS, how its spread can be stopped, the risks of its transmission, and mandatory testing. This should be a two-way communication, and health-care providers should welcome, not fear, questions from patients. If never before, certainly this is an opportunity for patients to play a more active role in their own health care by asking their providers about infection control procedures.

Many persons could argue that these recommendations and strategies aren't enough. They might point to the case of a Minneapolis family practice doctor with AIDS who continued to see patients and perform routine medical procedures, such as delivering babies, with open sores on his arms. During the last year, 325 of that doctor's patients were judged by MDH to be potentially at risk for getting the virus from the doctor, and were tested for HIV. All were negative. To our committee, that is evidence that HIV is very difficult to transmit from a health-care worker to patients, even absent good infection control procedures.

Reasons to Avoid Mandatory Testing

In 1987-88, the Citizens League report, *Stopping AIDS: An Individual Responsibility,* concluded that there was no way to protect society from AIDS by punishing, testing, or even isolating people who have it. The League concluded that in a society where personal behavior is unregulated and includes the freedom to choose sexual partners and use illegal drugs, containing the spread of a disease caused by citizens' behavior would be extremely difficult; the disease is spread through private acts in intimate settings. The only way people could prevent getting the virus was to proactively protect themselves and avoid the known high-risk behaviors that can result in getting AIDS: unprotected sex, multiple sex partners, or sharing IV needles for drug use.

We believe the primary reasons to oppose mandatory testing for health-care workers are that testing affords little protection unless performed with unreasonable frequency at a cost unjustified by the minuscule patient risk; that even daily testing would not eliminate all risk; that mandatory testing will imply to the public a false guarantee of safety if sanctioned by government; and that a better way to protect the public from contracting HIV is universal infection control procedures.

Other reasons why testing of health-care workers should not be required:

- Testing would be expensive, particularly if it is done frequently enough to afford any promise that HIV-infected workers would be found. Estimates of cost are $22 for each test, including laboratory work, and an additional $23 for record-keeping and counseling. If all of Minnesota's approximately 119,000 health-care workers were tested only once a year, the annual price tag would range from $2.6 million (for testing only) to $5.3 million (including counseling and record-keeping). If annual testing were confined to the estimated 7,400 to 9,900 Minnesota health-care workers doing

exposure-prone procedures, that cost would range from $162,800 to $445,500 each year. But annual testing would provide no assurance of any decreased risk; more frequent testing obviously would be more expensive and, as expressed above, would not guarantee safety. These costs inevitably would be passed along to patients either through higher taxes or higher health-care costs. The public might choose to give that money instead to much more cost-effective measures: Providing care and treatment for those who are infected, or using the funding for research or education/prevention programs are examples.

- Government-imposed testing would inflame the already inaccurate public perception of the risk of getting HIV from health-care workers by confirming the appearance of risk.

- If mandatory testing is imposed on health-care workers, it seems only fair also to mandate testing for all patients, since the danger for workers of contracting HIV from patients is so much greater than the reverse.

- Benefits of mandatory testing are not significantly better than what can be accomplished with a voluntary testing/infection control strategy, according to the MDH.

We believe patients should not have to fear contracting AIDS from health-care workers. But we believe that passing a law requiring the testing of all health-care workers, or of those who do exposure-prone procedures, would be ineffective and a mistake. Testing health-care workers for HIV/AIDS should be viewed as a public health question, not a political one. We urge the Legislature to form responsible public policy based on medical and scientific facts.