

LAW ENFORCEMENT

IN

THE AIDS ERA

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INTRODUCTION

For the benefit of advancing a compelling perspective, accept that your existence, the fundamental essence of your physical reality, consists of the product of a microscopic assemblage of data in a unique sequence, a formula that when translated into a visible entity is your current form and substance. Invisible to the naked eye, that assemblage of molecules that science knows at one time during the fertilized egg stage of your existence constituted the total sum and substance of your being is called your "genome." The unique sequence of nucleic acids that provide the blue print for nearly every conceivable aspect of your life is the most valuable treasure you possess. That molecular chain has been bending, contorting, twisting, its way through time and space for eons. If it were to be given a physical reality, there would be no better definition for it than your soul. It is all that you are and ultimately responsible for everything that you shall be. To lose it, to damage it, to allow it to be detrimentally altered has to be considered the highest form of failure imaginable. As it was the duty of all that have come before you, it is your duty to insure its survival. Only you have been appointed that responsibility, it cannot be delegated. You, as the guardian of your genome, are responsible for your fate.

Conceptualizing your genome's past, there cannot have been any mistakes by the former "guardians." Everyone that came before you made all the right decisions or you would not be on this planet. All the former creations that emerged from that inconceivably complex, "magical" entity had to have been successful in their negotiations through the environment and time. Your genome's survival and, consequently, for the present if nothing else, your life, still relies on making all the right decisions to insure survival.

Survival's trophies go to the "fittest." As over-used and trite as it may seem, man's quest for survival, like any living organism, incorporates various strategies that ultimately distill into one major premise--Survival of the Fittest. Fitness, however, is a relative term largely defined by the environment in which the competing beings are existent. Its measure is constantly changing and being re-defined by success and failure in an ever-changing environment.

In an arctic environment, for instance, a human with excess fatty tissues will be better suited to sustain long winters and low temperatures. Being able to store fat efficiently or being "over-weight" in that environment constitutes a selection advantage. A corpulent body form can give the bearer an advantage over the other men in an arctic population attempting to survive. However, take that same man and place him in a jungle, his inability to run from predators due to his excess weight in a tropical climate can be seen to give him a higher probability of not surviving than his thinner counterpart. All other considerations being equal, simply a change in environment can turn what was previously a selection advantage into a selection disadvantage.

Fitness is also measured by an almost inconceivable number of behavioral variables that one can exercise in order to adapt to various environments. Any failure to adapt to the new environment can result in a failure to survive. To continue the above analogy, using the powers of reason and intellect, a thin man might eat excessively in advance of the arctic experience to put on the necessary body fat or equip himself with appropriate clothing to offset any disadvantage that a lack of fatty tissue would not provide. However, this sort of adaptation requires a certain degree of intelligence and foresight, attributes which, in and of themselves, can be viewed as selection advantages. If one spends some thought on the subject, it is easy to see how an almost infinite number of permutations in the survival equation can be elaborated for any given environment, such as in this case, the ability to start a fire, forage for food, hunt, build adequate shelter, etc., etc.. It is also easy to imagine how a single failure to perform in the new environment can result in death at the hands of a very unforgiving task master--Nature.

There are certain instances where no amount of planning or preparation can prepare one for every possible change in the environment; however, the ability of a given individual

or group to look into the future and decide where the most probable sources of life threat originate then devote energy to preventing that threat from impacting them gives the highest probability for successful survival.

The society and era in which we now are challenged to function has become increasingly complex. In some ways our society has made the task of survival easier but, in other ways, has made it more difficult. Survival success belongs to him who has mastered adaptation to 20th and 21st century life. Anyone believing themselves exempt from this understanding or feels that mankind has risen technologically or philosophically above these forces that govern survival, that person is invited to pick up a newspaper or watch the evening news. The man who didn't feel the need to put winter clothes on before going for a drive in a snow storm then found frozen to death on the freeway or the "starry-eyed idealist" who never felt the need to learn inner city self-defense tactics found lying on the street corner face down in his own blood pool should convince even the most committed fatalist.

One might ask what any or all of this has to do with the 20/21st Century police officer who has read all the policy manuals, studied the law enforcement books, has the standard armaments, acquired the street relevant emergency skills, keeps him/herself in top physical condition, and can equip him/herself with the latest array of devices designed to protect the officer from any conceivable variable in societal structure. Disappointing as it may seem, a new variable has suddenly entered the environment. It is invisible to the naked eye, its behavior is couched in terms difficult to understand without advanced biological education, and it kills a human equally as dead as any bullet, knife, or high speed patrol car collision. This new entity or variable in the survival equation is called The AIDS virus or The Human Immunodeficiency Virus, (HIV).

Innocuously referred to as a retrovirus, it is better described as a contagious mutation because it reproduces by injecting its genetic material into the cells of humans, parasitizing their biochemical machinery, and integrating its DNA into the chromosomes of man. Once its genetic material is incorporated into the human cellular DNA, it is there for eternity. The infected human's genetic code is, so far as current medical arts are concerned, irreversibly mutated. The HIV is the quintessential physical enemy to the human genome since it denies the human chromosomes their ability to exist on this earth by preventing them from being able to defend their human form with the elaborate immune system that has carefully evolved for millions of years. In the microscopic instant it takes to inject its lethal code, it sets in motion a biochemical process that erases innumerable genetically recorded evolutionary successes for as far back as one can imagine in past time and destroying all future form, promise, potential, hope, and dreams. It obeys only chemical laws and honors only probability, it has no intentions, thoughts, or motives. It simply exists because it exists; and surviving its onslaught requires an entirely novel perspective and degree of sophistication.

Suddenly, the world has become contaminated with a new disease causing competitor; and, now, one cannot divorce from the goal of survival a working knowledge of infectious disease prevention. The previously largely unrelated disciplines of Law Enforcement and Infectious Disease prevention must be merged to coexist in the intellect of the police officer in the AIDS Era for the basic purpose of survival. Those who understand and apply the basics of infectious disease prevention will become more "fit" and have an increased probability of surviving.

Whether or not the individual accepts the risks of AIDS or not, the fact of the matter is that humanity is in the throes of a plague unparalleled in its demonstrated potential for human destruction. It is a plague the dimensions of which are almost inconceivable in terms of the human suffering and death awaiting the unprepared and undefended populations. All the evidence necessary to conclude that an inevitable population and genetic catastrophe

is coming has already been acquired. The only missing piece of information is the rapidity with which this scenario will occur and who will ultimately prevail. It is never too early or too late to develop contingency planning for a rapidly approaching reality. What we are witnessing is a global population correction, a sweeping natural selection event of majestic proportions. It is essential for those capable of comprehending the threat to accept and incorporate this newly recognized eventuality into his or her fund of knowledge and prepare a new armamentarium of behavioral devices and strategies to afford the best opportunity for both short-term individual and long-term genetic survival.

Regardless of all the reassurances being given that the epidemic's threat is confined to certain risk groups and behaviors, there is incontrovertible evidence to conclude that everyone is at risk. Some, more so than others. Those with increased human contact have increased risk. Law Enforcement Officers can be seen to be at significantly higher risk since they are much more likely than the average person to sustain the type of contact known to spread infectious disease.

First of all, the virus is without question, at least, very efficiently spread by sexual contact. Just that piece of information alone indicates that all humans are risk group members since no one on the face of this earth does not owe their existence to the passage of sexual body fluids. Eventually, every person who desires their genetic lineage to continue must have children. When the sexual attempt is made, even if only once, a risk is taken. Irrespective of behavioral and technological variables, the degree of sexual risk is largely dependant upon the percentage of infected persons comprising the pool of potential sexual contacts. If the percentage of infected persons within the population with whom the sexual event will take place is small, the risk is small. If the number is high, the risk is high. For instance, if one were to consider having sex with a U.S. college student in 1989, the chances of being exposed to the AIDS virus would have been 2-3 per 1000. If one were to attempt to have sex with an average American inner city female in 1988 who had greater than 12 sexual partners per year the chances would be about 1 in 7 of contacting an infected person. In 1989, if one were to have sex with a woman who had recently delivered a baby in New York City, the chance would be about 1 in 50. By 1991, even in rural perinatal clinics of Palm Beach County, Florida, 5.1% of pregnant heterosexual women were infected. For disadvantaged teenagers in the same state, nearly one percent (9/1000) are already dying at the hands of this retrovirus repeatedly described as "HARD TO CATCH."

The virus does not limit its infectiousness even when the sexual event is for the purpose of procreation instead of recreation. It does not take a degree in epidemiology to understand that as more and more people become infected, the probability of being exposed to the virus increases with the number of sexual partners and with every sexual interchange. This is essential to understand since statistically, at this juncture in the epidemic's history, a person has the highest chance of acquiring the virus through sexual behaviors and the knight in shining armor rescuing the damsel in distress these days has a high probability of finding a dragon as his reward.

Secondly, AIDS infection can occur by means other than sexual behavior and direct intravenous blood contact. Nearly every body fluid in the human body is capable of transmitting the virus, including saliva, blood, sweat, and tears. People have become infected after simply touching the blood of virus carriers or after having microscopic quantities of infected blood strike their face. Biologically active AIDS virus has been cultured from the air of operating rooms. Infants have given the disease to their mothers through saliva and hand contact. A three year old child has given the disease to his seven year old brother. Elderly impotent men have transmitted the disease to their wives. A lab worker wearing masks, gloves and working behind a hood became infected presumably after an aerosolized (airborne) exposure. There is seemingly no reason to believe that there is a lower limit to the virus's communicability. All that is theoretically required is that a single

virus particle has to come into contact with a susceptible human cell by whatever means or method that event can be accomplished.

If one considers these types of contacts equivalent or greater to those occasioned during the conduct of police work, one must consider the chances of contact with those types of people routinely encountered and interpret this in light of those persons chances of carrying the AIDS Virus. One can easily assume that the majority of people with whom police interface in a manner most likely to result in contact sufficient to allow for transmission of the HIV are the same populations that most likely are representative of the prison population. If one were to have an encounter with the statistically average prison-type in the United States, 1991 data indicates that there would be about a one-in-twenty chance of that encounter being with an HIV carrier because The Centers for Disease Controls in Atlanta found that 5.8 percent of United State's prison population was infected. In New York City inmates, 25.8% of females and 16.1% of males were infected by 1991. For those persons attending sexually transmitted disease clinics in the U.S. in 1991, 6% were infected. The chances of a 21 year old black male from a socially disadvantaged class in the Northeastern cities being infected with the HIV are one-in-forty. Unfortunately, it is impossible to gauge how many California prisoners are infected because it is against the law to test them without their consent and those most likely to be infected refuse to be tested. One can assume that those odds in the very near future (if not already) will approach the one-in-thirty-two probability of winning at a roulette table spin. Roulette is not an unrealistic analogy because the more you play, the more chances you have of at least winning once.

Regardless of whether one holds to the archaic belief that they can only acquire HIV infection from sex, blood injection, or through the mother/baby route; and, therefore, effective contact sufficient to transmit HIV is unlikely in police work, one must understand that people with AIDS and HIV infections do not have competent immune systems capable of ridding their bodies in a timely and efficient manner of nearly every infectious disease known to cause morbidity and mortality in humans. As a result, they retain, are infectious for, and die from a host of Superimposed Secondary Infections (SSI's). They are also much more likely to transmit these communicable diseases to other persons because they remain infectious for longer periods of time, serving as reservoirs and vectors of contagious organisms. A cause/effect association between these Superimposed Secondary infections and the recent increase in other infectious disease epidemics since the onset of the AIDS ERA can be made since the HIV's imposition on individual immunity has ramifications on a population level through a decline in Herd Immunity (a group immunity that confers a resistance or relative resistance to infectious disease because of the immunity of a large proportion of the population.)

Our nation is currently experiencing a Tuberculosis (TB) epidemic that is directly related to AIDS. The "Captain of Death" has been re-instated because so many people with AIDS carry Tuberculosis and transmit it to others. From 1953 to 1984, TB had been decreasing steadily by 6% per year until the trend reversed in 1986. In New York City, reported TB cases increased by 36% from 1984 to 1986. Without question, Tuberculosis is easily spread by coughing or handling contaminated articles. AIDS patients carry and produce especially dangerous, drug-resistant strains of tuberculosis. Recently, a guard in the New York prison system died when an HIV-carrier infected him and 12 other prisoners with a lethal, drug-resistant strain of TB. In light of this understanding, it makes excellent sense to maintain HIV carriers in separate and different facilities than those used for persons with other conditions; however, that is not even a current consideration due to the "civil-rights" obsession AIDS advocacy groups have promoted. It is as if the requirement has been codified to insure that everyone must retain an equal right to die of disease.

Up to fifty percent of AIDS patients on autopsy have tuberculosis-like bacteria infections categorized as Mycobacterium Avium Complex. Healthy young people with

normal immune systems can and do acquire this disease, and it has no effective cure. It can be spread by the air-borne route and has been shown to have infected the water supplies of hospitals where AIDS patients are in high prevalence.

Nearly one hundred percent of AIDS patients also carry, actively secrete, and are infectious for Cytomegalovirus (CMV) which can cripple, blind, mentally retard, or kill fetuses and newborn infants. Long ignored, it is the leading cause of virus induced birth defects including mental retardation in the nation. It is highly infectious and can kill newborns after being spread by contaminated objects. For these reasons, AIDS patients should not be allowed to come in contact with pregnant women, newborns, or anyone who is immuno-suppressed (such as transplant recipients, cancer patients, or the elderly).

Salmonella (food-poisoning) is now in epidemic proportions. AIDS patients are twenty times more likely to be carriers for this killer of infants and the elderly. AIDS patients cannot eradicate the bacteria from their bodies and create drug resistant strains when antibiotics are constantly used to try to kill the bacteria. AIDS patients should be routinely monitored by public health departments and removed from food services if found to be infected.

Hepatitis A outbreaks have recently been linked to AIDS risk group members (homosexuals and IV Drug abusers) in the food service industry. The most prolonged outbreak in the history of the Centers for Disease Control occurred as the result of food contaminated by homosexuals who routinely practiced anal intercourse.

Cryptosporidiosis epidemics, too, can be seen as a consequence of the AIDS epidemic. Prior to the advent of the AIDS epidemic, when it was identified as one of the common causes of intractable diarrhea in AIDS victims, it was previously unheard of in our society except as a disease of animals. Now, it is attacking daycare centers and has infected nearly 13,000 people in Western Georgia after it contaminated a water supply. There is no effective treatment for the disease, it kills children, and it can be transmitted when the spores dry out and are carried through the air.

Novel in and coincident with the AIDS Era, the period 1983 through the present has seen an overall increase in Measles incidence continuing with substantial increases being seen in 1989.

In 1988, 68.9% of reported cases occurred among school-aged children who had been previously vaccinated and most vaccine failures occurred in persons 12-19 years of age who earlier were believed to be sufficiently protected. So, the larger part of this epidemic occurrence cannot be explained on the basis of an increasing failure to have children immunized.

Influenza provides another model supporting that the HIV afflicted are more likely to serve as sources of infectious epidemics because their bodies do not respond like a normally immuno-competent person's with regard to protection by individually acquired immunity and vaccinations. This belief also serves to explain the currently and continuously increasing influenza activity and morbidity seen since the advent of AIDS since, not unlike the above mechanism for measles, as the herd becomes increasingly peopled with immunocompetent individuals disease can play a game of "chutes and ladders" through any population.

Centers for Disease Control data have shown that during the 1980's the number and percentage of deaths attributable to pneumonia and Influenza among persons age 25-44 more than doubled in cities with high AIDS incidence. The mortality from pneumonia and Influenza reported by vital records offices in 121 U.S. cities recorded from 1979 through 1989 have shown a progressive increase from approximately 3.5% to 5.5%. Nationally, the number of deaths from Influenza and pneumonia during 1988 was higher than the preceding four and in 1991-92 season, 60,000 additional deaths over the previous year were seen.

Cholera has now reached the America's for the first time in a century and has caused

342,000 people to be infected.

The increased incidence of these and countless other communicable diseases is the predictable ramification of an increase in the carrier state of those diseases. Simply put, the longer a person carries any given disease (especially HIV) in a population, the greater chance the disease will be spread to others. It is also an epidemiological constant that as the number of persons with disease in a given population increases, the greater chance they will have of infecting other uninfected people. Therefore, the probability that they will spread the disease increases even for diseases with less efficient modes of transmission.

In short, not only do those infected by the AIDS virus carry the risk of transmitting the AIDS virus, but since their immune systems are faulty, they are more apt to carry and transmit every infectious disease known to cause disease in humans. This fact alone promises to usher in a predictable secondary wave of infectious diseases that could transform even the most developed country into the equivalent of a third world disease pit.

PUBLIC HEALTH MEASURES

The principle reason why America has not had the magnitude of problem with infectious diseases prevalent in the Third World is due to the past application of public health measures. Diseased persons have been actively prevented from performing behaviors that could spread their diseases to other persons. In essence, our society has consistently and effectively differentiated or "discriminated" between the diseased and the undiseased. Americans in the past have required by law that the diseased be treated differently even to the extent of segregating them through quarantine and isolation from the uninfected. This policy has been arbitrarily and completely abandoned by the majority of County, State as well as Federal health departments during the AIDS epidemic by a failure to employ any disease containment procedures or apply public health measures to the AIDS virus carriers.

Currently, most statistics acknowledge that the population impacted by HIV is mostly comprised of inner-city minorities. These are the people who depend most upon the Public Health Departments (PHD) for protection from disease. If fear of contributing to potential discrimination against one segment of society constitutes the PHD's justification for refusing to advocate or invoke nonconsensual (mandatory) testing, HIV-carrier reportability, contact tracing, and isolation, then those failing in the application of public health measures, are (in essence) discriminating against inner-city minorities in a larger way by not applying the same protective mechanism as would have been applied under similar circumstances in the past to all other populations. Thereby, they are predisposing this select population to the most severe form of discrimination--death.

It is often argued that "coercive measures" such as the threat of quarantine or incarceration would prevent HIV-positives from seeking treatment for HIV disease, superimposed diseases, and will drive AIDS "underground." The proponents of this argument fail to realize that the disease is already "underground" and persons with HIV and superimposed diseases will, out of medical necessity, be forced to access a health care facility. To not do so will result in rapidly advancing illness with the accompanying unavoidable pain and suffering. What is rarely discussed in these debates is the beneficial deterrent consequence of a widespread understanding that those HIV-carriers who continue to commit behaviors that spread HIV will be isolated from the remainder of society.

A review of Public Health law reveals that the PHD's have a statutory responsibility to limit the freedom of movement of persons who knowingly continue to spread disease. Citing California law as it relates to tuberculosis but could easily be applied in principle to the more lethal HIV:

A person having tuberculosis in a communicable stage, who refuses to observe the instructions of the local health officer and thereby needlessly

exposes others to infection, shall be placed in strict isolation at home until such time as the local health officer feels that such isolation is no longer necessary for the protection of the public: and, in the event that such household isolation proves inadequate for the protection of members of the household or community, the patient shall be placed in isolation in quarters designated by the local health officer, until such time as such isolation is no longer necessary for the protection of the public. (Calif. Admin. Code, Section 2624)

Individual rights in a society must be interpreted in the context of an individual's responsibilities to that society. Just as this society would incarcerate anyone caught pulling the trigger of a revolver loaded in a Russian-roulette style while aiming it into a crowd, the public health officials have a duty to isolate the HIV-carrier from the society towards whom he knowingly directs a deadly infectious intent. At the very least, any previously identified and counseled seropositive individuals returning to PHD's with a subsequently acquired Sexually Transmitted Disease (STD) have consciously violated a societal responsibility by continuing to engage in sexual behaviors to the extent sufficient to acquire a Sexually Transmitted Disease. Therefore, they should be prepared to forfeit their right to free movement in society if the proof of such behavior is demonstrated by objective blood tests.

It is high time to stop casting the sexually promiscuous HIV-carriers as victims of a system that inadequately counseled them and direct our concern towards the true victims of their infectious sexual activity. This failure to consider the rights of the overwhelming majority of HIV-uninfected to be protected by the Public Health mechanism from the HIV-infected has already resulted in millions of preventable infections. American society will continue to suffer so long as it allows such an undemocratic bias to persist.

Unfortunately, legislative changes are slow and, often, too late in coming. Police officers who are caused by their occupation to sustain the type of close contact known to transmit infectious diseases and interface with those members of society who have the highest probability of being HIV carriers do not have the luxury of ignoring the danger. Uninfected law enforcement officers must act to protect themselves as effectively as they can until the government is directed by a moribund public to do so. There are means by which individuals can protect themselves against this disease and the multitude of other infectious diseases that they carry.

EXPOSURE PREVENTION

Most young Americans have the perception that they have inherently strong immune systems that, with the aid of antibiotics, can successfully beat the majority of infections that they acquire. For those young, hearty people the risk of death is so seemingly remote and the potential inconvenience so high that to bother with changes in their lifestyles to prevent the acquisition of disease is apparently not worth the effort. However, as a Law Enforcement Officer considers to what length s/he will alter their individual behavior to better adapt to survival in the AIDS ERA, they should consider carefully that the future holds no guarantee that the social systems will be there to rescue those who can't afford medicines when they are sick. Everyone has heard the phrase: "I can't afford to get sick." Disease is a very costly proposition. Those people who acquire infectious diseases from the HIV carriers with faulty immune systems will suddenly realize the true meaning of the term "cost of living" --if money is capable of buying a cure. The average person might not be able to sustain the economic burden of illness without losing all that they have worked for their entire lives, or that there may not be an adequate supply of competent future healthcare workers available at any price.

All of these issues have profound implications when one considers the necessary

behavior changes that bear a relationship to one's ability to survive as a law enforcement officer in the coming decades. Quite logically, the more physical contact an uninfected person has with the carriers of any disease, the greater chance they have of acquiring it. This understanding applies to every infectious disease from the common cold to AIDS. It is simply a measure of how many times one physically comes in contact with the infectious viruses, bacteria, fungi, or parasites. If one is never exposed, one will never get infected. If one is repeatedly exposed, the probability that one will become infected commensurately increases. As the number of exposures increases, it becomes increasingly difficult to avoid the probability of a successful infection resulting. Even if the disease is difficult to acquire, the more exposures that occur, the less likely it becomes for a person to avoid becoming a victim.

As infectious diseases increase in our society, it becomes imperative for the individual Law Enforcement Officer to acquire for him or herself the necessary skills, techniques, and self-defense measures to survive in this new AIDS environment and made all the more dangerous by the superimposed infectious diseases. We have entered, without protest, a new era in humanity's existence, the ERA of AIDS. It is a new era in that there are more infectious diseases in circulation. The environment has changed and calls for new survival strategies that seek to protect persons from infectious disease transmission. Man has acquired the intellect to prevent the acquisition of disease. Practicing behaviors that exercise that intellect are of survival value and impart to the practitioner a selection advantage. Above all, never assume, fatalistically, that it is too late to take precautions, since acquiring any viral disease is a function of the number of times one is exposed. If one does anything that decreases the likelihood of being exposed to disease, one's chances of becoming infected will be likewise reduced.

As time goes on without public health measures being employed and the prevalence of HIV carriers increases, it will become increasingly dangerous to come in contact with the public because the probability of exposure may eventually become too great to avoid. In order to survive, a Law Enforcement Officer must dedicate part of the brain to AIDS defense by creating an internal alarm system that will sound when consciously or unconsciously a pattern consistent with infectious disease danger begins to materialize. One must pre-program one's brain to be ever aware, without fear and anxiety, and on guard without obsessing on danger. One must register images and thoughts so that a heightened awareness automatically surfaces when the situation becomes an AIDS risk situation. Without a cumbersome memory re-call process, your response must become defensive in the same way in which a karate expert programs his reflexes to prevent injury, by practicing what is termed "reverse isolation" at all times. It does not have to become a burden that forces one to have to constantly worry about when and where to practice the technique. It must become a habitual behavior so that you needn't think about it. Effective job performance and infectious disease defensive mechanism can be made to run as parallel programs in the mind like any other automatic behaviors. Strike a reasoned and rehearsed balance between fear and the ability to act. Microbes may be equally deadly as bullets; but one can't throw away a career just because the danger has increased.

RISK RECOGNITION

Acts of disease prevention have few rewards that one can document. One seldom can prove whether a particular defensive behavior actually prevented injury. Rarely does anyone relate how they narrowly escaped death by rapid hand washing. Those "close call" stories are usually reserved for bullets whizzing by the head. Only when the disease occurs do you know when you have made an error. AIDS errors, however, are unforgiving and irrevocable. Once infected, your genome's mutation is permanent. The fate of your genetic

material, your entire future on this planet for as far into time and space that your genetic material can be envisioned to travel, may be riding on a simple failure to recognize a dangerous situation and react with a proper response.

In order for a police officer in the AIDS Era to prevent acquiring disease in the line of duty, s/he must be able to first avoid the exposure that allows for the transmission of disease. That is accomplished by first recognizing a risk and then altering patterns of behavior to prevent the contact that allows transmission.

One of the most widely used methods by the public health and medical professions of identifying risk as it relates to AIDS is by recognizing and behaviorly categorizing certain persons most likely to be HIV-infected as high risk group members. In essence, it amounts to discriminating between one individual and the next in the context of that person's behavioral or social characteristics as they relate to a probability of carrying the AIDS Virus.

Legal traditions since the beginnings of recorded time have upheld the necessity to treat differently; and, therefore, by definition, "discriminate" against those with infectious diseases. The processes of "segregation" and "discrimination" against the carriers of infectious diseases are essential components of any effective disease prevention and containment strategy. Although, in the public health sector, different terms are used such as "restriction," "concurrent disinfection," and "isolation." The very creation, maintenance, and enforcement of communicable disease control statutes in every State of the United States of America demonstrates that American society, regardless of its highly held concept of individual rights, has not only sanctioned "discrimination" against persons infected with contagious diseases but have for a long time legally demanded it. This "discrimination" incorporates, at the extreme, an allowance for denying even the right of free movement within society. These laws were framed and known to be necessary in an era when infectious diseases were observed to be incurably omnipotent. One cannot lose sight of the wisdom that created those statutes when facing the AIDS Epidemic and the Human Immunodeficiency Virus since it appears to have humbled our seemingly invincible infectious disease technology and returned us to an era of common death at the hands of microbes that some prematurely saw this country advanced beyond.

Those public health measures and disease prevention behaviors that have characterized society's and the individual citizen's means of protecting themselves from the spread of disease cannot be prevented from being employed under the guise of personal, individual, civil, or privacy rights. Nor can the application of demonstrably effective disease prevention strategies such as separation of the infectious from the uninfected or any other valid physical separation measure be abandoned because they are misinterpreted as being contrary to individual rights guarantees. Individual rights definitions of "discrimination" cannot be equated with, nor be applied to, infectious disease definitions of "discrimination."

Drawing advance distinctions in the police officer's handling of those most likely to be infected with the AIDS virus is not only imperative but essential in preventing transmission of the Human Immunodeficiency Virus and the multiple AIDS-Related Superimposed Secondary Infections that are carried and spread by the afflicted. Regardless of whether some bureaucrats, officials, or "experts" choose to believe or decree that persons with infectious diseases do not pose a direct threat to others, by the logical parameters of scientific argument--they do. All persons infected with human pathogens pose a health and safety threat to humans. Either a person has the presence of infectious organisms in their body or they do not. If they do, then they pose a risk to anyone they directly contact or anyone that could possibly come in contact with the organisms that they are producing. They can only be assumed to be not infectious when it can be scientifically demonstrated with laboratory tests that the microbes no longer exist in that person's body, an event that is

realistically impossible with respect to the Human Immunodeficiency Virus and most (if not all) of the AIDS-Related Superimposed Secondary Infections in the Law Enforcement workplace. People infected with the HIV virus do not carry signs, documents or advertisements indicating that they are infected nor is it possible to test a person on the spot as in breath tests or field sobriety tests. That is not to say that certain characteristics or profiles cannot be conceptualized so as to allow for the categorization of those persons as "HIGH RISK."

The use of physical characteristics to "discriminate" between individuals is not alien to police work. The term "Profile" applies to those characteristics which statistically can help define attributes that differentiate a suspect from the remainder of society. Just as one should be able to profile a drug trafficker, the state of the art law enforcement officer for his/her own protection should also be able to identify any one who is at high risk for HIV carriage or AIDS. Even a person with no medical training can, to some degree, identify those people at high risk.

One should suspect any young person who has unexplainably lost a great deal of weight in the recent past. Weight loss, absence of body fat, presence of hollow eye sockets, thinned cheeks, skeletal body habitus, profuse sweating for no otherwise apparent reason, a grayish pale complexion, or extreme fatigue can signify AIDS. A person wearing relatively new clothing that is a couple sizes too large can indicate recent weight loss. A person that uses restrooms excessively or has evidence of bowel-movement stained trowsers, can be suffering from intractable diarrhea. Persistent coughing from "colds" that never seem to go away can indicate lung disease. Particularly foul smelling breath or body odors, numerous sores on the skin that don't heal, or repetitive prolonged absences from work can indicate chronic disease.

Those infected by the AIDS virus also be seen to have fine, downy, thin hair. It is not the characteristic pattern type baldness and thinning that is seen in most men; but the hair seems to be uniformly less dense throughout its entire distribution on the scalp and the hairs themselves seem to be thinner and more fragile. Often, it is cut extremely short to disguise this finding.

Be concerned if a person has blue finger nails. Interestingly, many persons, especially blacks, taking AZT (the most commonly prescribed AIDS drug) develop a distinct blue discoloration of the nail beds.

Too, there is another finding called "hairy leukoplakia," which is a hair-like white/grey growth on the tongues of those whose immune systems have been damaged by the virus. This is believed to be caused by other viruses in concert with yeast, making anyone who is taking medicine for a yeast infection of the mouth suspect.

Also, there is a condition called "generalized lymphadenopathy" when the lymph nodes (infection fighting glands of the body) become swollen. The lymph nodes that are usually not seen enlarged in healthy persons can be easily felt in persons with ARC or AIDS beneath the skin at the point where the neck meets the chest, in the hollow area above the collar bone, under the arm pits, or in the groin area. Often, upon close observation, one can notice that there are smooth surfaced, lumps of tissue just under the skin behind the ears or midway down the sides of the back of the neck. When these are seen or felt, that person can be suspected of having a chronic disease -- or in this day and age, infection with the AIDS virus.

Intravenous drug abusers are at high risk of being carriers and can often be identified by linear, rough-surfaced scars over the veins on the front of the arms or large elaborate tattoos over the crease where the forearm and upper arm meet.

Certainly, don't overtly or mentally accuse someone of having AIDS or a chronic infectious disease without some sort of rational proof. Don't be afraid to ask someone questions about their health. Should they respond with spontaneous answers such as "I

don't have AIDS." or "I've been tested and I don't have AIDS." That should raise your index of suspicion that they may actually carry the virus. If their answers are inconsistent, then continue your assessment (holding your suspicions privately yet acting defensively) until you are convinced that your fears are unwarranted. Until then, maintain only degrees of contact with them that pose the least risk.

It is often stated that there is no method of determining whether a person is a homosexual. That is probably to some degree of accuracy true; however, when a person has a post in the ear, an effeminate lisp, a walk that incorporates buttocks rigidity (due often due to a compensation for decreased rectal tone secondary to traumatic rectal sex practices), and the exaggerated body movements that are more characteristic of women, one can reasonably make the preliminary assumption of High Risk status, since 60-70% of AIDS cases in the U.S. are currently homosexually acquired.

Be especially careful about allowing "bums," "panhandlers," and "street people" to come within striking distance of you. In a New York City shelter for homeless men, a study found that 66% tested positive for the AIDS virus and 87% of those with active tuberculosis also tested positive for the AIDS virus. In a study of Miami, Florida's homeless, 11% were found to be infected, 9.8% of them had no reported risk behavior.

Any person exhibiting signs of drunkenness without evidence of alcohol or drugs can be demonstrating the physical signs of neurological impairment dementia. It is not widely known, but studies show more than 30-50% of persons simply testing positive for the AIDS virus (with no observable physical disease signs) have identifiable neuro-psychological impairments. Quoting University of California, San Francisco neurosurgeon Dr. Robert Levy:

"Estimates of the rate of clinical dementia range from a few cases to 90 percent of AIDS patients, depending on dementia definitions and populations looked at."

It is the peak of absurdity to assume an AIDS afflicted, demented person can be depended upon to act rationally in situations demanding it. Anyone with prolonged contact with AIDS afflicted persons should be cognizant of the potential for dementia characterized by poor judgement, inappropriate affect, language disturbances, memory loss, and abnormal or unpredictable behavior. Understand that a person with AIDS knows that they have a death sentence hanging over their heads. This can instill a profound hopelessness or depression that allows them to have little or no fear of punitive consequences for crime. An HIV infected criminal with a preconceived understanding that several years in prison for assault is meaningless compared to the statistical certainty of death that awaits him, can be as desperate and disdainful of the law as an escaped death-row convict. They have nothing to lose. If anything, an entry into prison guarantees them food, shelter and medical attention which most probably they have already lost access to by virtue of their disease.

Many HIV carriers are bitter towards society, believing that the government and "the establishment" is not spending enough money for a cure, care, or treatment. This attitude prompted some homosexual literature in the early 1980's to call for all homosexuals to give blood so as to insure that the average American would become infected--thus forcing the government to spend money. Not only was this called for, but it was apparently practiced. A study in New Orleans found that of those persons who had been previously informed that they had ARC (AIDS Related Complex) and had read a statement telling them not to donate blood, still, 50% of the infected blood donations that they identified came from homosexuals who were told not to donate yet went to other blood centers to donate. They none the less allowed their blood to be drawn in full knowledge of the fact that it would likely infect someone else. The same motivation that caused those people to undergo the pain of a blood donation can be assumed to be equivalent to the motivation that drives a disgruntled, disenfranchised, and bitter dying person to want to take anyone who stands in their way

with them--especially someone who represents "the establishment." This attitude can sometimes represent the anger phase of the death and dying process. When superimposed on dementia, it cannot be expected to be rational, and an attentive police officer cannot afford to assume that this attitude is rare. S/He should be wary of anyone exhibiting bizarre or irrational behavior. Keep a safe distance from and avoid physical confrontations with persons who stare intensely as though they are angry with you for no apparent or rational reason until they are placed in a position that cannot cause injury.

There is a certain type of intense stare that has been characterized as the "paranoid stare"; and it is seen in demented or psychotic persons often accompanied by flaring nostrils and narrowing of the eyebrows. If you stare back, they can begin to be convinced that you are indeed their "enemy," and they, then, can begin to incorporate you into their delusional paranoid fantasy or hallucinations. Demented people cannot be relied upon to behave like normal persons who fear confrontations with the police. Do not assume that they will be the one to "back down" and retreat their glance. Be prepared to put distance between such persons and yourself or defend yourself. They can attack without provocation or reason. Winning a bloody fight with such a person, even if justified by that person's illegal or instigative activity, will be an empty victory in which you both may end up sharing a common Hell.

An AIDS Era law enforcement officer should also carefully observe the environment and consider it in terms of its likelihood to present an HIV or infectious disease risk. In such environments a mental form of pre-programming should be done to restrain the impulse to take actions that could result in body fluid contact, abrasions, scratches or cuts. If it is even remotely possible that such dangers exist, then put on defensive clothing and carry equipment capable of restraining at a distance.

Certainly, any protest demonstration related to AIDS, homosexual rights, demands for health care changes, or ACT-UP activity should be considered a very high risk situation. It is not unusual for participants to throw blood or body fluids. Anyone carrying liquid in containers or what appear to be sharp implements (even if they are metal studs on clothing) should be treated as lethal weapon bearers until proven otherwise.

Shooting Galleries where discarded needles are routinely left or sharp implements are discarded are the last place a police officer should consider tackling a suspect. Homosexual bars (especially the restrooms), bath houses, sexual theaters, or domestic environments that contain evidence of sexual toys & paraphernalia, female clothing in male dwellings, numerous medical devices, intravenous apparatus, or prescriptions (especially the AIDS drugs: RETROVIR, {Zidovudine}, DDI, DDC, or the drugs for Pneumocystis Carinii: PENTAM, {Pentamidine}, or those for TB: INH {Isoniazid}; Rifampin, Streptomycin), or places of prostitution are all areas where a police officer should be on guard against anything or action that could result in injury involving breaks in the skin or body fluid contact.

DEVICES AND TACTICS

There currently exists a need for new devices and tactics to accommodate the new risks AIDS imposes upon police work. Defense at a distance must be practiced. One must be flexible and clever enough to modify the behaviors of yourself and others so as to limit risk without abandoning the responsibility of enforcing the law. A police officer can no longer safely allow a potential assailant within arms length without risking a body fluid contaminated sharp implement injury. Spitting in the face no longer carries the singular weight of an insult, it can mean exposure to pathogens. "Pat searches" in which the hands of a police officer are used to determine if a suspect is carrying weapons or illegal paraphernalia should be avoided. More reliance upon metal detectors or the use of objects (such as a baton) that will communicate the presence of hard objects when struck by another

hard object. This is not a theoretical concern since a Sheriff's Deputy in Sonoma, California claims to have been infected when his finger was pierced by an IV Drug Abuser's needle during a search of the suspect's pocket.

The medical concept of Universal body fluid precautions pertains not only to health care workers but police officers as well for the obvious reason that one can never tell which body fluids are infected at the instant of contact. That reality doesn't justify the fatalistic resignation that "if its going to get you, its going to get you." It only reaffirms the necessity to constantly practice infectious disease defensive behaviors. It also doesn't give someone a license to criticize discretionary protective discriminatory techniques such as those mentioned above with the platitude: "police should always be on their guard and treat everyone the same." The healthcare profession to their dismay silently regret the manipulations that led them to the inability to protect themselves selectively by abandoning the prior practice of identifying AIDS patients with special signs posted at the bedside. For the High Risk individuals and situations, a heightened awareness and protective reflex should be triggered in the presence of "high risk profiles" so as to be prepared in advance not to place oneself in danger.

The principle understanding inherent in universal precautions is that all body fluids have a potential for carrying infectious organisms, and any form of contact with them should be prevented. The most prevalent type of contact is hand contact and it should be avoided.

For centuries, the Orientals have not touched strangers when greeting. Instead, they politely bow or place their hands in a prayer-like gesture demonstrating a recognition of the other person's presence. Military tradition, for as far back in time as one cares to go, dictated a non-touching hand salute. It could very well be that in cultures where touching was a routine gesture of stranger greeting and recognition, the hand-shakers and the "touchy-feely" peoples died off from infectious diseases that were easily spread by hand contact, leaving behind those cultures that didn't touch to survive and re-populate.

If you can avoid touching others, you will avoid those diseases that are routinely transmitted by hand contact. If you are caused by unavoidable circumstance to touch others, avoid touching your mucous membranes (eyes, nose, mouth, or genitals) until your are able to wash your hands or use a disposable hand cleaning towelette. Carrying a number of these in your patrol car is not too burdensome. No one can realistically wear rubber gloves all the time because they will trap moisture and probably result in a rash that may actually increase the probability of acquiring disease.

This may seem like paranoia, however, consider what actually occurs when you so much as shake hands with someone. They may have only moments ago used the restroom, picked an acne lesion, scratched a scab, or rubbed "sleep" (= pus) out of their eyes. Those white blood cells and body fluids are on their hands, protected from drying out by being imbedded in a microscopic layer of finger print oil. You then contact them and mix your body oil with theirs. A few minutes later, long before the organisms die from environmental stresses, when you touch your eyes, pick your nose, use your finger nails to pry a bit of food from between your teeth or scratch a itching pimple on your body, you may have just inoculated yourself with what ever micro-organisms are on your hands or under your fingernails at the time. If you cause your own blood to flow, it is the equivalent to a microscopic injection of the offending organisms.

If one stops to think where their last cold or flu came from, science tells us that unequivocally it was because a virus was in some way transported from one individual to the next and gained access to the body. Some people attribute their illnesses to changes in the weather or getting "run down." These events may contribute in some obscure way, but viruses are the ultimate cause. If microorganisms were not transmitted, there would be no infectious disease. Nearly half of people studied in experiments with the viruses that cause

colds, contracted the disease by touching contaminated objects (coffee cups & cards) passed to them by people who had colds. They prevented all other contact including air by controlling the ventilation such that they breathed different air. The finger prints left on the coffee cups constituted sufficient volumes of body fluids, that when transferred to another's hands, then to a mucous membrane, were enough to exchange genetic material in the form of viruses.

The more physical contact any uninfected person has with the carriers of a disease, the greater chance they have of acquiring it. One must understand that the acquisition of infectious microbes is not based upon whether or not one is kind, religious, compassionate, or how many good deeds a person has done in the past. It is simply a measure of how many times one physically comes in contact with the infectious viruses, bacteria, fungi, or parasites. If one is never exposed, one will never get infected. If one is repeatedly exposed, the probability that one will become infected commensurately increases. As the number of exposures increases, it becomes increasingly difficult to avoid the probability of a successful infection resulting. Even if the disease is difficult to acquire, the more exposures that occur, the less likely it becomes for a person to avoid becoming a victim.

When a person touches another, quantities of the infectious genetic material being produced by that person have a probability of being transferred and infecting others. That probability is altered by factors such as the concentration of the infectious organism, the volume of exchanged body fluids, the type of contact, the success of the organism in broaching the defenses, and finally in the affinity that the organism has for co-existing with human tissue. Some of those variables can be altered by behavioral change. If you prevent an infectious event variable from acting you reduce your chances of future illness.

As time goes on and infectious diseases become more prevalent in our society due to the ever increasing numbers and percentages of people without immunity, information like this will become increasingly relevant. Of course, one could adopt the attitude that you can't be an effective law enforcement officer going around fearing every little scratch or drop of blood. This is probably true, but the more a person is able to incorporate good infectious disease prevention behaviors into their armamentarium of defense techniques, the less likely they are to sustain a lethal injury from that one in a thousand chance. Even if its something as simple as when surprising a suspected drug dealer sequestering what appears to be evidence in his pocket you instantly (by prior conscious conditioning and training) examine him for an AIDS risk profile and make the determination that needle tracks on his arm constitute sufficient cause for you to not instantly grab for the evidence but rather substitute that response for one in which you reach instantly for your baton to first make certain that he is kept at a distance by force if necessary, you still are able to do your job but with substantially less risk.

Universal precautions work both ways. Be certain that anyone using instruments or implements on your body such as dentists, hair dressers, manicurists, barbers, or doctors sterilize their equipment adequately before re-use. Watch to see if the equipment used on you comes from a sterile package or tray that has been "autoclaved" (which means it has been treated with high temperatures and pressures) or soaked in an adequate disinfectant. If it appears to not have been, ask them if it has been sterilized. If they say no, then just refuse to allow the instrument to contact your body.

When ever a person draws your blood for a laboratory test or blood donation observe their technique. They should wear a new set of gloves for each person served. Watch to see if they place the cotton ball or gauze pad on the table where other arms have rested or blood could have dripped. Before they apply that "contaminated" article to the wound they made in your body with the needle, stop them and make them get a clean, sterile, pad. Make sure that any part of the needle or instrument they use that will cut you or enter your flesh doesn't touch their hands, brush against clothing, or the table where they have their

equipment. If it touches anything that isn't sterile, stop them, and tell them they have "broken sterile technique" and to get another instrument or sterilize the one they contaminated before they touch you: with it. Don't settle for mediocrity--its your body they may be infecting.

If persons like dentists or doctors are going to put their hands into the wet parts of your body or open wound, or if they have lesions on their hands; and they are going to touch you, they should wear gloves. Every dentist in this country should be using gloves when working on their patient's mouths. Certain suction apparatuses do not prevent the previously suctioned secretions, blood, saliva, etc. from re-flowing up the sides of the suction tube and back into the patient's mouth (similar to what happens to liquids when suctioned by a vacuum cleaner--the fluid drips out the end of the hose). Be certain that the suction device used on your mouth is fitted with a valve that prevents this from occurring.

In light of how difficult it is to maintain absolute sterile technique, the most careful consumer in the medical or dental market would take into consideration whether a health care provider or dentist is a high risk group member or has a high percentage of persons who are knowingly infected by the AIDS virus in his/her practice. There are subtle ways, through conversation with the provider or the staff, to determine what philosophy the clinic or office has with regard to this concern. If your conclusion is that there is a high probability that persons with diseases you do not wish to acquire perform or obtain services at that particular establishment or their adherence to sterile technique doesn't meet your standards--then you can exercise the option of taking your body elsewhere. Do not rely upon healthcare professionals to police themselves. Their organizational rejection of measures to identify infected workers and stop their performance of invasive procedures demonstrates their disregard for the prevention of disease.

For the future, it might be a good policy individually or organizationally to establish a trusting or contractual relationship with health care providers that recognize your concerns and you theirs. Let those health care providers know that you are a low-risk person, intend to stay that way, and willing to be tested any time they feel necessary. Those doctors or dentists might be much more willing to risk the possibility of sticking themselves with a needle contaminated with your blood in an emergency. From all indications, it may become very difficult in the not too remote future to locate doctors who are willing to take risks with their lives by accepting every patient who walks through their doors. If laws persist that do not allow health care professionals to know who is infected or laws are made that penalize healthcare providers who refuse to perform services on the HIV infected, it may be very difficult to attract competent professionals willing work in blood contact occupations. Understand that every time they handle a needle they are courting the potential death of themselves, their immediate families, and their future genetic lineage.

When job requirements make the use of public restrooms unavoidable, practice infection control techniques that assume the objects are contaminated with infectious organisms--because they are! Scientific studies have shown that simply flushing toilets and urinals cause the infectious organisms they contain to become airborne in a fine mist. When touching restroom doors, sink fixtures, flush handles, toilet seats, door handles, or other objects, be extremely careful and cognizant that they are more likely than any other surfaces to contain infectious organisms that are found in high concentrations on the genitals, in the urine, or feces. Whenever possible use your feet to open doors (most doors can be opened at least one way with a kick) or manipulate objects such as toilet lids or handles. Carry your own toilet paper reserve for those instances when the facility is particularly seedy or the paper has visible evidence of water marks or has been resting on a filthy surface. Remember, you will be applying that paper directly to your rectal mucous membranes which often are prone to bleed due to abrasions, fissures, or hemorrhoids that allow direct access to your blood stream.

When making bowel movements into water filled toilets, even if the water looks clean, flush before you use it and prevent the refluxing splash caused by pieces of fecal material hitting the water from contacting you. Consider that the water hitting your rectum contains microscopic quantities of the contents of the bowl from the bowels of persons that used the toilet before you. These germs are applied directly to the inside of your body with every splash that hits your rectum.

Anyone who has ever had diarrhea knows that when they flush, sometimes the large visible floating particles do not go down. The same effect is occurring with respect to unseen microscopic organisms. Flushing before using the toilet will reduce this effect by dilution but is incomplete, this problem can be more adequately approached by extending a length of toilet paper across the seat in a sling-like manner so that the falling momentum and the impact of the bowel movement hitting the water is reduced by the fecal material hitting the paper. Also, one can adjust one's position to deposit the bowel movement to a portion of the bowl that causes it to hit the bowl rather than the deep water portion; however, be also careful not to allow portions of your anatomy to touch the filthy areas of the toilet. Often men's penis' (if sufficiently endowed) touch the most forward portion of the toilet bowl where drippings from prior use collect. When the genitals touch this area they become contaminated with the previous users' body fluids.

Whenever possible use a disposable paper seat liner or disinfectant and carry a spare in your automobile while travelling or to work if you feel the probability is likely that such precautions are necessary.

If objects are touched in situations such as this or other situations in which there is a high probability that human body fluids have been in contact, be very careful not to touch any part of your body especially the mucous membranes of the eyes, nose, mouth, or genitals until thoroughly washing your hands. After washing your hands in a public restroom, use the paper that you dried your hands with to turn faucets, flush handles, or open doors.

When using a locker room, public pool, or shower facility be very careful not to allow your wet feet that have been walking where other people walk in bare feet to touch your clothing that will eventually touch your body. Of most common concern are your socks, the lining of your underwear (quite often people catch their feet on the inside lining of their underwear when putting them on), bathing suit, or pants. This is an excellent way of depositing the fungi (athlete's foot and "crotch rot") and viruses (warts) onto the genital area. It is best to wear your own pair of high rubber sandals that can be placed in the sun to bake and sterilize. A highly probable source of the wart virus that invades the feet (plantar warts) is walking where people who have walked with other infectious warts on their feet. Wearing sandals on the beach also reduces the possibility of having them pierced by medical wastes such as have washed up on the beaches on the East coast.

Do not allow your clothing to touch the floor when dressing in a locker room or sitting on a toilet. If you do, you are in essence painting parts of your body with whatever slimy secretions that were deposited there by the numerous persons who's "aim" was poor.

Do not have prolonged contact with stranger's beds or wear other people's clothing without proper washing in hot, bleached, soapy water because that is how human insect parasites are passed. Scabies epidemics in hospitals have been linked to AIDS patients whose body's defense systems were so depleted that they couldn't fight off the tiny burrowing mite-like insects, and they were transmitted from the AIDS patient to many other patients on the same ward. The AIDS virus can remain viable on bed bugs' mouth parts for at least one hour and in mosquitoes for 48 hours.

BARRIER TECHNIQUES

The manner in which medical professionals have long protected themselves from

infectious disease is through the judicious use of Barrier Techniques. One should wear tough plastic or thick latex rubber gloves anytime one anticipates contacting any blood, secretions, body fluids, or any surface or article that has been soiled by them. Case reports have been documented by the Centers for Disease Controls where two health care workers have become infected simply by blood contacting their skin (presumably they subsequently touched an open lesion or mucous membrane on themselves) and a dentist has acquired the disease in the absence of any risk group behavior. The The Journal of the American Medical Association documented a man becoming infected after being bled on in an African bus accident.

The wearing of a mask in certain situations makes good sense. Consider that in a closed, not well ventilated environment such as a patrol car or interrogation room in which a person with an infectious disease is coughing, spitting, or sneezing, the air of that space contains the spores of molds, bacteria, and airborne viruses present in that person's lungs. If you breathe that air you are allowing the possibility of those organisms to take up residence in you airways and lungs. This may be of remote concern to a young healthy athlete; but it is of pressing significance for a smoker with chronic bronchitis or emphysema whose defense systems are compromised. In any situation in which body fluids are aerosolized, a barrier must be placed between your body's susceptible tissues and the contaminated air. Consider obtaining a flexible, surgical mask that can easily conform to the contours of the face for use in such situations and keep the mask readily available. The rigid, "monkey face" type masks are inadequate if air is breathed around the edges. The mask should be tight fitting so as to force the air you breathe to be filtered through the material. If in a emergency situation, a mask cannot be instantly had, using any porous material such as a shirt sleeve, a handkerchief or your undershirt pulled up through your collar can suffice for the short time it takes to extricate your self from the contaminated area until a mask can be obtained. So long as you breathe air through some kind of filter it is better than unfiltered air. Your chances of inhaling the largest particulate matter is reduced and who can say that you didn't stop a single white blood cell containing thousands of infectious viral particles from entering your lungs.

A mask should be worn if an officer is present in any confined space where a shooting has occurred which resulted in an exit wound or body fluid spray. In the process of an explosive force such as occurs when a bullet is striking or leaving the body, microscopic quantities of blood and body fluids are aerosolized. They can be expected to remain in suspension in that room for about as long a time as it would take for smoke to clear a similar room where a small brief fire had occurred. Breathing as little of the air as possible, extricating oneself from the environment until a mask can be obtained, and exchanging the room's air with ventilation all can help to reduce the possibility of airborne infectious disease transmission. Viable HIV virus has been isolated from the air of operating rooms where bone saws aerosolize blood, prompting surgeons to begin using "moon suits" in hospitals where high numbers of AIDS patients are treated. The same logic applies at a crime scene; but it is exceptionally difficult to justify that type of equipment to be readily available to police on duty. However, being knowledgeable of the possibility of aerosolized blood spreading disease and acting to reduce that chance with what means are easily available makes rational sense.

If you are near anyone who is coughing and not wearing a mask or cannot be compelled to wear a mask, then you should wear a mask when you are in close proximity to them. For instance, locking a person into a patrol car who is coughing or spitting holds the risk of that closed environment becoming contaminated with aerosolized bronchial secretions. TB bacteria is known to be spread in this manner, and there are any number of viruses that are spread by the aerosol route. Opening the windows in the back to allow air to circulate or using the cars air ventilation system to constantly blow fresh outside air

into the front compartment can force a flow of air in a favorable direction.

An officer's clothing should reflect a consideration for the environments into which s/he will enter. For riot control or anytime the splatter of body fluids can reasonably be expected, goggles or a full face plexiglass shield should be worn. Water proof clothing is far superior to absorbent material if blood were to contact it. Tough material that will not allow scratches in the skin or abrasions is superior to any light alternative.

One should reconsider the necessity or advisability of hitting others with one's own body in places (like the teeth) that have high probabilities of inflicting open wounds. When a person hits another in the mouth and the skin is broken by the other's teeth, that is equivalent to being bitten. A human bite is one of the most dangerous bites known because of the high likelihood that disease will be transmitted. Re-educating one's self in self-defense techniques that avoid the necessity of actual physical contact, insuring that offensive maneuvers do not result in the splattering of body fluids, and employing the use of objects rather than bare skin when contacting assailants is highly advisable for the AIDS Era.

A report in the medical literature documents a "gay-basher" who presumably became infected as a result of punching an infected homosexual. Therefore, tough leather or rubber gloves should be kept at the ready for any situation in which they are needed. They should be worn whenever it is anticipated that a potentially infectious suspect needs to be touched or handled. Just the standard latex gloves are adequate for handling of infectious material such as evidence or motionless body parts. However, they are easily damaged with only minor force and probably inadequate for any violent or forceful activity. Using a large size that fits over leather gloves provides the necessary fluid barrier as well as allows for the additional protection afforded by the difficult to penetrate leather in the event of bites, punching, or sharp implement contact. They can be easily replaced if compromised. Alternatively, thick rubber gloves are also acceptable; however, they make it difficult to manipulate the fingers and can interfere with the fine motor control necessary to use a firearm.

If gloves do become contaminated with body fluids, taking them off must be done with great care not to get body fluids on the hands during the process. One hand's index finger and thumb should be used to pinch the portion of the glove over the wrist at about an inch away from the end of the glove. This part of the glove is then pulled downwards and away from the arm in a plane running close to and parallel to the plane of the hand slowly with care not to allow the rubber to snap. This action turns the glove inside out, trapping the body fluid inside a rubber "bag." While continuing to hold the removed glove with the other gloved hand, the ungloved hand's index finger is then placed through the opening in the end of the remaining glove at the wrist between the skin and the glove. The finger is used as a hook to pull downward and peel that glove down over the glove that was first removed. This wraps the first glove in the second glove as it is turned inside out during the action of peeling. These gloves are then treated with due care not to allow them to contact other surfaces or your body until they are adequately disposed of in an appropriate receptacle.

CROSS CONTAMINATION

Effort must be made to prevent cross-contamination with any objects that have come in contact with body fluids. Take for instance shoes that have walked in blood or had it splattered on them are contaminated. If care is not taken to manage that contamination properly, anyone touching the shoes when they are taken off at the end of the day (such as your wife or husband) is experiencing an exposure nearly equivalent to touching the original source of blood with bare hands. If blood or body fluids contact non-disposable surfaces, they should be cleaned with an effective disinfectant. The shoes will have to be de-

contaminated before they can be safely touched with bare hands or the blood will be contacting the wearer's hands. Also, anywhere that footprints would be left, contaminated shoes can leave behind infectious organisms.

Naked HIV virus can survive dried out on room temperature surfaces for at least three days (maybe as much as seven days), organisms like tuberculosis bacteria can remain viable for months to even years depending on the environment due to a protective waxy coat. If the AIDS virus is enveloped in a matrix of mucous, blood serum, or body tissue, it probably will remain infectious for longer periods than naked virus. This reality has to be reckoned with when handling a baton that has hit an assailant, a gun with blood on it from a struggle, clothing, equipment, evidence, or any inanimate objects that could have become contaminated by body fluids. Before re-contact with these objects occurs, treat them as infectious until they can be disinfected with a solvent or solution consistent with their composition. That is, you wouldn't want to clean a gun with chlorine bleach, rather, a good organic solvent like gun oil or kerosene would be more appropriate. Lysol, Chlorine Bleach, Hydrogen Peroxide, Gasoline, Alcohol, Hot Soapy water, etc are to be considered depending on their appropriateness.

Constantly be aware of cross contamination. Any object that has been in contact with the body fluid should also be considered to be contaminated. If the body fluid splatters on clothing, before it can soak through carefully remove the clothing in such a manner to reduce contact with additional unexposed skin. Do not continue to wear contaminated clothing. Remove it immediately and wash or disinfect that area of skin that was wetted by the fluid without delay. A one-to-ten dilution of household bleach to water is sufficient. Any strong soap with water is better than allowing it to remain in contact with even intact skin. If it appears necessary to pull a piece of clothing that has been contaminated with someone else's body fluids over an open wound, make sure that the open wound is covered, cut the contaminated clothing off, or saturate it with a disinfectant. Do not touch it to your open wound. Clothing that has been contaminated need not be destroyed, carefully handling it in a manner to prevent cross contamination until it can be washed in hot, soapy, bleached water or dry cleaned is sufficient to kill most microbes including the HIV.

Do not use or reuse any sharp instruments, needles, or syringes that have come in contact with another person. If you are required to handle such instruments, be extremely cautious not to cut your skin or puncture yourself with them. It has been shown that superficial scratches with non-blood, body fluid contaminated needles are sufficient to transmit the AIDS virus.

If someone loans you a needle or tweezers to remove a sliver or piece of glass from the skin, sterilize them by passing them through a flame or soaking for at least 15 minutes in a strong disinfectant

It is probably inevitable that after a law enforcement officer works with the public long enough without being cognizant of and practicing infectious disease prevention techniques an exposure will occur. There is a precept in epidemiology that holds for diseases like AIDS with long carrier states. Even if an organism is difficult to transmit, the exceptionally long period without obvious signs of sickness (ten years on the average from testing positive to the actual symptoms of end stage AIDS in which the person is overtly ill) in which the virus is capable of being spread, offsets its relatively reduced communicability to allow it to be never the less spread by infrequent contacts and inefficient means.

For example, a disease like influenza is highly contagious so even minor contacts are enough to allow for its transmission. Still, not everyone gets infected because the period of communicability is only a couple of weeks. With HIV infections, the infectivity is not nearly as high as influenza; however, since the period of communicability is excessively prolonged and during that period a carrier goes through phases when they are making large amounts of virus and therefore more likely to spread it, the AIDS virus can be seen as capable of

infecting the majority of susceptible hosts in exposed populations. It may just take longer to accomplish that end.

If you feel biologically arrogant, you can convince yourself that the virus is not that infectious to worry about. You can take the word of those "scientists and experts" who would have you believe that the virus is not very infectious and "hard to catch," letting your denial rule your fate. Yet, understand that most of the people making those statements have a bias towards the risk group members because if you were to accept that HIV carriers were dangerous, you would treat them differently, ergo--discriminate against them. You might even want to ostracize them or quarantine them as a solution. Leading you to believe that you have nothing to fear from HIV carriers suits their goals, so they promote beliefs that are not substantiated by existing medical evidence. Too, the majority of those statements were made in the absence of high percentages of infected people in the population and on the basis of very small study samples. As more and more people become infected, the chances of contacting a carrier increases proportionally.

Also, what they didn't take into consideration was the progressively increasing ability the HIV virus is developing over time to infect human cells. The HIV virus is mutating its surface coat five times faster than the influenza virus. With each mutation, strains are created which have an increased ability to bind to human cell receptors and a greater probability of evading the immune system. As these strains are created, they are more apt than their predecessors to be spread and more likely to elude the defense systems of human populations. These more "fit" variants are better able to survive and proliferate in their ecosystem which happens to be human tissues. The same processes of natural selection that govern all living things are applied here, as well, only this time to our detriment.

For those who need further convincing, recall the case of Kimberly Bergalis, the virgin who was infected by her AIDS afflicted dentist. She and four other unfortunates got infected by a form of contact that had been defined as largely "impossible" before it happened. Investigation of that incident reveals that the dentist was wearing gloves, mask, and glasses at the time. He probably simply contaminated his tools with his finger prints and put an infinitesimally small quantity of virus (maybe as little as a single particle) into her open wound.

EXPOSURE MANAGEMENT

Unfortunately and undeniably, police officers are subject to the modes of transmission that have already been documented as highly efficient. For that reason, every exposure with body fluids must be taken seriously and managed properly in both a medical and legal sense.

Of foremost concern is the medical management. It must be immediate and effective. There is no guarantee that you will be able to prevent infection, but like all aspects of life--you do the best you can and then pray you didn't get infected. "Pray" is used here intentionally because if you do get infected, don't look to modern medicine for a cure. None is visible on the medical horizon. Don't rely upon being able to take a preventive drug like AZT immediately after an exposure, either, because studies thus far have shown this to be ineffective. Being able to test your assailant after an exposure is only a palliative legal concession and has no influence on whether a particular exposure results in an infection at or before the incident. Afterwards it may alter anxiety levels; but that is a small consolation. Only when the day comes that testing people is used to prevent contact will testing be of true service; since, once you are exposed, nothing can change the reality that your destiny is cast the instant the virus enters your body. Testing afterwards provides information, it cannot prevent infection. Only the application of public health measures can do that.

The first action to be taken when an exposure occurs is to extricate oneself from the

exposure source to prevent the source from re-exposing you. The more times you are exposed, the more probability you have of being successfully inoculated. Do not ever adopt the attitude when a body fluid has contacted your body that "well, if he's got AIDS, I'm going to get it or not so I might as well just go on with my work." Clearly, stabilize the situation with standard police tactics to prevent immediate harm to yourself or others from the source of the exposure. Prevent any further exposures to yourself or others by whatever means necessary especially if the source of exposure is an assailant. The use of deadly force to prevent a potentially fatal exposure to yourself or others should be carefully considered in light of the circumstances and the degree of demonstrable exposure probability. It has been common knowledge since the advent of the AIDS Era that body fluids are to be considered lethal substances.

The response one generates to exposures must, understandably, vary depending upon the type of fluid and the severity of the exposure. For pus, serum from lesions, blood or body tissue, the maximum amount of de-contamination is warranted because they most likely have the highest concentration of virus. Feces, saliva, vomit, tears, sweat probably require, in a decreasing order, a less meticulous response.

The minute an exposure to body fluids occurs on intact skin, your primary duty to yourself is to de-contaminate the exposure site. Removing as much volume of the contaminated fluid with as little additional trauma as possible as fast as possible is the top priority. With an object that can be discarded or disinfected, carefully remove the bulk of the material. Do not use your uncontaminated other hand. Then with an absorbent material soak up fluid with a dabbing motion. Reduce as much as you can the area of exposure, by carefully wiping fluid from the edges towards the center of the exposed area so as not to push the fluid onto areas that have not already been exposed. Do not, however, wipe fluid towards or into an open wound or skin lesion. If the exposure is to the face, keep the mouth closed and (if possible) your eyes closed until the fluid can be absorbed or material removed. Remove any involved clothing to reduce or eliminate ongoing exposure. Flushing with water is probably the most readily available cleaning agent. Adding soap is better, but don't do anything that will cause an abrasion. Copious amounts of water and soap, following with a disinfectant such as Hydrogen peroxide or betadine (Iodine) liquid is indicated. After scrubbing a couple of times with disinfectant, the disinfectant dry on the exposed area then wash it off later. Carefully avoid splattering the contaminated fluid into eyes, open wounds, or onto uninvolved skin.

Should one be scratched, punctured, cut, or wounded wherein the probability is reasonable that the injuring object was contaminated with blood or body fluids or the injury site was concurrently or subsequently contacted by body fluids, a more rigorous response is necessary. Every conceivable effort must be made to minimize the chances that the virus will contact a white blood cell or go into the circulation.

The best perspective to adopt is to treat it as if it were a snake bite. The principles involved in the management are quite similar. One must make an attempt to stop the circulation from carrying the virus deeper into the body. A tourniquet or immediate circumferential pressure to an extremity is indicated to force blood to flow out of the wound so as to flush the contaminated fluid out of the opening in the skin. Try to absorb as much of the contaminated fluid as possible and clean out the wound by irrigating it with what ever non-toxic liquid is available. Running to a sink, a garden hose, any soft drink, beer, or alcohol product is a good choice. Carbonated liquids can be shook and sprayed like a fire extinguisher into the wound to forcefully irrigate out debris. If nothing else, your own urine can be used as an irrigation solution and can be considered sterile and non toxic.

The next effort on a biochemical level is to reverse the direction of tissue fluid flow and destroy the fragile proteins of biological tissues in the immediate area. Just as in a bee sting or snake bite, the application of highly osmotic crystals such as salt, baking soda, or

meat tenderizer can be placed directly on the wound if it is small to disrupt the proteins that make up the virus and to get extracellular fluid to be moved away from your tissue into the salt.

Any available disinfectant should be applied repeatedly and vigorously scrubbed into the wound to increase its chances of contacting any microbes; however, most people don't carry it around with them.

Lastly, if the lesion is shallow or not extensive, consider cauterizing the edges of the wound with heat or a moderately caustic substance. The theory here is that viable virus may not necessarily have immediately bound to a susceptible cell. The defensive cells that are present in the skin may take several hours or days to get through the matrix of clot and damaged tissue in which the virus particles are embedded. Or, if the white blood cells have reached the virus, they may still be in the area of the wound margins processing the antigens of the virus. If all the tissue in the immediate area is coagulated with heat or an astringent chemical (such as acid {Vinegar, Formula 409, Oven Cleaner, Hydrogen Peroxide, or even Battery Acid if worse came to worse} or a strong base {Drano, Ammonia, baking soda, Tilex}), then the virus and the white blood cells in the proximity of the lesion will be destroyed. A consideration of the pain, damage done to tissue, and the potential toxicity by the astringent or cauterium must be taken into account and weighed against the risk of not doing so. In the case of an event where there is a high probability of infection, the more drastic degree of disinfection is warranted. Certainly, if a sickly assailant spits in your face, blow-torching the area is not indicated; but to not wash it off immediately would be considered foolish. However, if superficially scratched by a junkie's needle, instantly squeezing the tissue to force out fluid then igniting a match and touching it to the spot would probably kill any infectious organism or virus before they had a chance to contact a white blood cell or travel into the circulation--especially if done before bleeding occurs. Of course, one must always weigh the excess damage done to the skin, toxicity of the chemical if it is absorbed internally, and the potential scarring against the possibility of inoculation with a uniformly fatal virus.

(Using cautery or acid is an individual decision that depends upon the severity of the injury, the depth of the wound, and warrants advance consideration. The reader cannot take this as an absolute recommendation nor can it be given as such, but I believe you have a right to know all the options available and the scientific basis for such options. I personally would have no hesitation dipping a rolled up piece of cloth in an auto battery {if that were the only chemical cauterizing agent available} and carefully applying the acid to the surface of a wound until all open tissue turned white if it were bled on by a transvestite or junkie. I would worry about the lead toxicity later. In my own experience on two occasions after sustaining a medical sharp injury I have cauterized the edges of the site and deep into the depth of the wound. I have scars, but I am still seronegative. I hold that even the remote probability of getting infected's consequence is great enough to tolerate a few minutes of pain and a larger scar. Your decision has to be your own and you must take responsibility for the outcome.)

If the situation results in the injury of another wherein blood is caused to flow, splatter, or be aerosolized (such as in a shooting) and contacts you, don't re-contact the blood or body fluids. As soon as possible, shower off any material. If it lands in your mouth, avoid swallowing, get some liquid, carbonated beverage, alcohol, or Hydrogen Peroxide and repeatedly rinse and gargle with the liquid.

If contaminated body fluids get into your eyes, irrigate with water by putting your face close to a stream of fast flowing water such as in a shower and letting the direct stream hit the back of your hand so that a non forceful spray enters your eyes. Pull open the lids, roll your eyes around, and let the fluid circulate.

If in a contained space and the exposure is aerosolized, try not to directly breathe the air, put some filter as previously described in front of your mouth and breathe through it.

Remove yourself from the environment immediately until it can be ventilated or the aerosolized particles have time to settle.

Discard appropriately or temporarily abandon any objects contaminated with blood or body fluids. Do not touch them with bare hands. Avoid any behavior that would turn a non exposure into an exposure, a minor exposure to a major exposure, or a single exposure to a multiple exposure. When the situation has stabilized, properly handling the contaminated objects with gloves and placing them in plastic bags for proper cleaning or disposal is appropriate. Any bedding, towels, or clothing used or touched by the infected should be washed in hot, bleached, soapy water before being used by anyone else. If disposable, it should be disposed of properly. Every hospital should have procedures and receptacles for the proper disposal of contaminated articles, if not available, incineration is indicated.

Any environmental surface contaminated by body fluids, blood, vomit, saliva, bowel movements, or bodily secretions should be cleaned up immediately or marked as hazardous and avoided. If in an area where other people may come in contact with it, it should then be cleaned with a disinfectant. At least one part household bleach to ten parts water should be sufficient.

MEDICAL DOCUMENTATION

If you are exposed to body fluids and you feel in light of the forgoing that an AIDS risk is possible, you should seek medical attention, be examined by a physician for the state-of-the-art post-exposure treatment, and be tested immediately for the medical documentation of your pre-event status. The assailant or the source of the body fluid should be tested immediately as well. If they are negative that can reduce your concern; however, if unknown or positive, you must act to protect your sexual partner or those who may contact your body fluids in the future. Being tested again at two months, six months, and yearly thereafter is probably reasonable. Until a good length of time passes (maybe greater than three years if the exposure was significant) be wary of any flu-like illnesses, night-sweats, lymphnode swelling, fatigue, unexplained fevers, etc. that you may experience and discontinue any body-fluid passing behaviors (such as sex, blood donation, or kissing) until the disease declares itself (for instance as a cold or strep throat) or a diagnoses is made by a competent medical doctor and/or serial testing not to be HIV related.

POST EXPOSURE--LEGAL

The next most important consideration of an AIDS exposure or potentially infectious contact should focus on the legal aspects of the post-exposure period. Documentation of the events is essential to any future workman's compensation, life or disability insurance claim, or legal process. Major social, legal, and monetary ramifications (for yourself and your beneficiaries) will pertain to whether or not the exposure was occasioned "in the line of duty." The manner in which the scientific denial process has created the myth that only certain behaviors like multiple sexual events, IV Drug use, or blood transfusion can reasonably result in an infection puts the burden of proof on the victim to prove that the duty-related exposure was the source. If you can't demonstrate that you were infected on the job, there will probably be many people who are convinced (by prior media propaganda and programming) that you probably were a closeted homosexual. In the aforementioned event involving the Sonoma Sheriff's Deputy, he was denied a worker's compensation claim because he couldn't prove the exposure was the source of his infection.

Documentation becomes your responsibility because no one else has as much an investment in yourself as you do. Do not let a fatalistic attitude, your denial of risk, the

reassurances of others, or your strong desire not to be infected influence your decision to appropriately document an exposure, however minor it may seem to others (including medical personnel.) Also, careful documentation may be necessary to justify the statutory testing of an assailant, demonstrate negligence, or defend the use of lethal force.

As intricately as possible, in writing, audio, or video tape and in the company of witnesses who will support your future testimony, let the following serve as a guide to document:

- 1) The physical condition of the source in terms of their association with risk group status such as presence of skin lesions, signs of disease, weight loss, etc. and any associated paraphernalia (gay advocacy buttons, IV Drug apparatus, medications, homosexual erotica, etc.)
- 2) The perceived risk group status of the source of the injury or contamination. Specifically describe any actions or statements made by the assailant or suspect that would indicate that he was a high risk group member or knew he was infected. Note any actions that speak to the intent of his actions, such as: "I know I don't have long to live so I might as well take you with me," or "I've got AIDS, if you want it, just come on."
- 3) The Method and Circumstances of the exposure in terms of volume of fluid (tiny specks, large clot, etc), type of fluid (blood, tissue, saliva, feces), site of contact (eyes, mouth, face, arms), if you had any open lesions or wounds at the time or prior, association with sharp objects, injuries sustained to yourself and by what object (punched in mouth, hit with blood covered baton, etc.)
- 4) Specific site of contact. (mucous membranes, mouth, eyes, open wound, abrasions)
- 5) Any efforts you made to mitigate the exposure, how you cleaned or disinfected the wound, medical examination findings.
- 6) The particular environment of the exposure and its relationship to risk group activity. (i.e. shooting gallery, homosexual bar, homeless shelter)
- 7) The names, telephone numbers, and addresses of any and all witnesses who will corroborate your exposure or actions.
- 8) A medical report certifying any injuries sustained by yourself. Photographs are usually available in any Emergency Room.

Collect any physical evidence that may support your allegations of exposure or aid in your defense it becomes necessary to prove you acted in self-defense. Collect the evidence as though you were investigating a crime. Carefully, in such a manner as not to sustain further injury or cross contamination, retain any sharp objects that may have pierced your skin, any biological material that may later be used to identify the source or prove the presence of infection. An injury that 10 years ago may have been insignificant may take on profound significance in the AIDS Era. For instance, say you fell in a homeless shelter and cut your arm on a piece of glass--not enough to require stitches but enough to put a band aid on. Then 3 months later a sore develops at the site that resists medical treatment, the lesion advances and cultures demonstrate a drug resistant Tuberculosis and your arm has to be amputated. If you had the piece of glass in your possession with accompanying

documentation, you probably could prove that the injury was sustained in the line of duty.

Techniques available today (DNA finger printing with restriction enzymes or Polymerase Chain Reaction) can determine with only microscopic quantities of body fluids or tissues the presence of the HIV, infectious organisms, or the origin of the source. Used needles with small amounts of blood can be still tested for the HIV years after an exposure so long as they are properly refrigerated and stored. Placing them in double plastic bags and inside a clean impervious container would make them safe enough to store even in your own freezer provided that they are properly identified as hazardous. Taking them to a taxidermist for freeze-drying may also preserve them if they cannot be frozen for a prolonged period. Mark every container of evidence with a description of the contents, the date, time, place of acquisition, and having a disinterested party sign a tape seal should be sufficient to convince a court of its legal credibility.

If the suspect who was the source of the exposure is apprehended, you should consider getting a sample of his blood and your blood then retaining them for future use in a laboratory freezer for a few years. Often an entire laboratory sample is exhausted during testing and routinely clinical laboratories discard specimens after two years. Should you need to test the sample again at some later date, retaining your own sample you may be the only means you have of preserving vital evidence. If it turns out that you did get infected, there is a laboratory analysis called Comparative DNA Sequence Analysis done at Los Alamos National Laboratory. This compares the slight differences between one virus strain and another. If the sequences vary by only small percentages, then it can be assumed that they are epidemiologically related because most people are infected by different strains that vary by larger percentages. This is the most accurate way of demonstrating that one person gave it to another. This was the testing used to prove that the Florida dentist gave it his patients.

If the other person's test is positive, he reveals to you that he is infected, or information available to you indicates he is infected, then you should see a doctor immediately and be placed upon the best available drug that can prevent the AIDS virus's reproduction (or the growth of the disease) then continue the drug for the period of time that shows most optimal benefit.

You must also document your current HIV status at the time of the incident and subsequently if only for your piece of mind and to protect your loved ones. Having yourself tested at the same time of the incident provides evidence that you were probably not infected before the incident; therefore, you can have a claim against the person if the event could have been reasonably prevented by exercise of non-negligent behavior.

From a legal perspective, it can (and most probably will) always be alleged by your legal adversary that you were already infected at the time. Your only proof will be an objective blood test showing that at that time you were not infected. HIV tests should be a part of any medical examination or treatment for injury that you sustain where the potential for significant body fluid contamination took place. Depending upon the type and magnitude of the exposure (that is, if someone drools spit on your intact arm and you clean and disinfect it immediately you probably needn't bother; but if there is an abrasion present, that's a different story), you should continue to have serial testing at two months, six months, and yearly afterwards or following the onset of any illness that could be HIV related as described above. If you test negative at the time of the exposure then several months later you test positive, this can be used to reasonably conclude that the exposure in question caused you to be killed.

There are several available tests that have relevance in this scenario. First, the cheapest, most common test used to identify the presence of infection is the HIV-I ELISA Antibody test. The test is an excellent indicator of infection and infectiousness if it is POSITIVE since it indicates a 99.8% proof of infection. When the test is confirmed with other tests like the "Western Blot" then the proof is almost 100%.

However, relying upon the ELISA Test or AIDS Antibody test to determine the absence of infection is fraught with some degree of error. If the test is NEGATIVE the person can still be infected. Unfortunately, there is the time "window" situation wherein if a person has been infected but has not yet developed a reactive blood test for the antibodies (usually four to seven weeks but as long as 34 months has been documented) the test could be falsely negative; but the person could still be infectious. This situation can be approached by waiting for a prolonged period of time to be tested again, then, if negative, one can be reassured to some degree that infection has not occurred.

Another problem is that the virus can be inside a person's body yet not produce sufficient numbers of virus particles to trigger an immune response. It can lay dormant in a latent phase inside the white blood cells for years or change its surface coat so as to cause an antibody to be created by the infected person that is not picked up on the standard antibody test. Theoretically, some people can be infected by strains of the virus that may never cause the most commonly used antibody tests to show positive or the virus can mutate to the point where the original antibody response has disappeared. There are also cases in which a person's immune system is so damaged that they can no longer produce the antibodies, but this is uncommon. The person in this instance is usually so ill that it is an obvious terminal failure of the immune system.

For these situations a PCR test is more able to determine the presence of infection by examining the white blood cells for the virus' DNA. This test, if negative, is considered the best test to determine the absence of infection. There is another test that can be used called an HIV-I ANTIGEN test. This can be used in the period immediately following the infection to identify the actual virus particles. This test would be the best if you were to become symptomatic a few weeks or so after an exposure. Several of these tests at weekly intervals while you are sick, or in the immediate post exposure period may pick up the presence of infection. There are other tests not in wide use or availability, but depending upon how concerned you are about your infection or infectiousness, can be used to demonstrate to the best extent of medical science the presence or absence of infection. These can be had at the University level, and it would be necessary to seek the consultation of an AIDS specialist or researcher who accepts your concern as legitimate.

In the future (and perhaps even now), it will be necessary to be tested for all the known AIDS viruses. HIV-II has arrived in this country. This virus already has been identified in New York, Los Angeles, Massachusetts, Connecticut, Rhode Island, Florida, and New Jersey. Nothing is being done to isolate these people, so one can probably count on the same thing happening as did with the first AIDS virus, HIV-I. A third AIDS virus has also been identified in West Africans living in Sweden. The currently used antibody tests do not test for these viruses.

Retain your own copies of records and any of the evidence you need to obtain. Do not rely on others. If you receive a medical examination (and you should in the presence of any significant injury) secure a copy of the encounter before you leave the Emergency Room or Doctor's office. Keep your own copies of the HIV results and don't rely upon numbered testing. Insure that your name is entered in some medical record that can be linked to the test result or on the actual lab slip. Most public health departments do the HIV ELISA testing for free, do not be tested anonymously since the result will not stand up in court.

If for some reason you are rendered unconscious or incapacitated, be certain to assign the task of evidence accumulation in advance to a person you can trust such as your duty partner, wife, or significant other.

OCCUPATIONAL STRATEGIES

Dragged as we have been into the AIDS Era, little is to be gained by denying risk.

The sooner Law Enforcement Departments accept the dangerousness of the situation and direct their attention to protecting officers and the public from the Human Immunodeficiency Virus, the sooner lives will stop being wasted by denial motivated complacency. There are multiple policy related measures that need to be enacted; yet the individual officer cannot depend upon institutional policy makers to act rapidly enough or in their best interests any more than the public can expect politicians to do the same. However, that doesn't justify ignoring the immediate need for procedural or policy changes to prevent infectious disease transmission in the workplace and continuing to be ever alert for new applications for state of the art police protection as events dictate.

By now, enough justification exists for a demand to know your workmates' AIDS status. There are not infrequent times when one officer is called upon to render emergency medical aid to a workmate or render assistance in body fluid contamination situation. Undeniably, the act of applying pressure to a bleeding wound or Cardio-Pulmonary Resuscitation (CPR) can result in the acquisition of HIV. The person with whom it is reasonable to assume the potential for that type of contact should be willing to reveal his/her HIV blood test results. If your particular work mate refuses to do so, is a high risk group member, or you have reason to believe he may be suffering from an infectious disease, an advance risk/benefit analysis must be undertaken. If you are uncomfortable with your particular partner for infectious disease reasons, clarify the situation by discussion with supervisors and rely upon a medical examination in which a physician certifies that the person is absent of infectious or communicable diseases which could reasonably be transmitted during the act of CPR or in an unprotected body fluid (bloody) encounter. You are probably not going to be able to run to the car to get your gloves or a resuscitation apparatus. Carrying around a mouth shield is an option, but the more items a police officer is encumbered by reduces the chances of operating defensively in emergencies.

Be very certain that any blood product infusions, injections or transfusions you or a loved one gets are absolutely lifesaving. Try to have your family or close friends "direct donate" blood for you or store your own blood for future use. These methods are infinitely more preferable to random acceptance. According to the estimates of infected blood escaping detection by the antibody tests, chances of a person requiring a major transfusion in the U.S. becoming infected by the AIDS virus are as high as one in 5,000. In New York City and San Francisco the estimates are as high as one in 500. These risk values probably pertain to any area where many new infections are occurring or with high concentrations of HIV carriers. As time goes on without definitive containment efforts or more accurate blood tests being utilized, the risk can be expected to escalate.

In addition, there are two other types of AIDS viruses that have been identified and the blood screening tests currently being used do not detect these viruses nor can the tests be expected to keep pace with the countless other strains (immune escape variants) that will continue to be created as the virus mutates further. Also, recent evidence suggests that antibody testing of the blood supply is insufficient protection due to the long time period between infection and blood test positivity.

In light of this deficiency, police, who have high probabilities of being injured and requiring blood transfusions, would be well advised to establish a network of individuals with similar blood types, low risk group status, and a commitment to remaining free of blood borne diseases such as AIDS or Hepatitis so that if you or your family needs blood they will provide it, if they need blood you will provide it.

Pyramid call structures can be developed by fraternal organizations of people who can be trusted to provide blood on a reciprocal basis and even maintain a ready supply of dedicated blood held in storage for specific directed donations to other participants. Efforts should be made with local blood banks to negotiate such arrangements so as to limit the number of random blood products transfused. Even if one or two units have to be

transfused immediately, the remainder can be from known sources who will go through the same laboratory screening as any other.

The design and physical layout of police stations need to be re-evaluated in light of the new risks. Re-structuring of procedures for handling of detainees so as to prevent effective contact with Law Enforcement personnel should be adopted with infectious disease considerations as tantamount to any other precautions. Since we are now living in a society in which a paper-clip can be turned into a lethal weapon by an embittered, demented, HIV infected sociopath, it is time to stop denying this reality and begin acting on it.

Patrol cars should be designed or retrofitted in such a way as to prevent body fluids or aerosolized contaminants from reaching the officers. They should undergo routine disinfectant procedures and not used after transporting persons whose body fluids soiled the surfaces until they are properly cleaned.

In San Francisco, a legal hearing was held to determine if the Sheriff's department could require a criminal who bit a bailiff to be tested for HIV. The decision was that she should be tested; however, rather than a test of the law, this case should have served as an example of how inadequate courtroom procedure is if it allows bailiff's to be bitten by defendants. It is a small concession to HIV transmission dynamics to learn whether a person is infected or not. It is a triumph for law enforcement when courtroom procedure and design accommodates to the reality of AIDS.

Law Enforcement personnel are frequently caused to work in an incarceration facility. Do not share eating utensils with a person whom you suspect to be a carrier nor allow them access to your food whereby their secretions, open sores, or blood could contaminate your food. Until researchers have more experience with the limits of the virus's communicability and the consequences of the other infectious agents AIDS patients carry, avoid any food handling institutions where AIDS carriers are employed. Until proven otherwise, it is a potentially dangerous situation in which a food handler has AIDS since these person's secretions and the infectious agents they carry have a real chance of coming in contact with your mucous membranes (mouth, nasal passages, and gastrointestinal tract lining). A Florida prison employee sued for workman's compensation because he alleged that an inmate had infected his coffee with the AIDS virus.

Be very discriminating in where you eat. Observe the employees in the eating establishments you frequent. If they appear to be unhealthy, consider an alternative eating establishment.

If you are eating in a strange place, insure that the food is steaming when it is served to you. Dining out in restaurants is not without risk especially where persons who are infected with Human Immunodeficiency Virus and other food borne infectious diseases are routinely employed. Make certain that the utensils are clean, the food has been prepared recently, and is still fresh. Cold salads, peeled fruit dishes, cream dishes, open public access salad bars, cold food counters, and buffets have always been dangerous propositions in foreign countries, and as the infectious disease rates increase in this country similar considerations will apply depending upon the locale and the prevalence of infectious persons.

Most credible diarrheal disease experts recommend that one not eat food unless it is steaming when it arrives at the table. This will insure that the food was raised once to the boiling point. This amount of heat will destroy many protozoans, bacteria, and viruses; but it is not to be considered a sterilization process, for some organisms will only be killed by prolonged high temperatures. It has been said that frying a food thoroughly adequately sterilizes it.

Avoid uncooked meat, seafoods, or sauces prepared with raw eggs (mayonnaise, hollandaise, etc.). Food that has remained at room temperature for a prolonged period of time, even though re-refrigerated is a good candidate for contamination. The common

practice whereby a person licks a spoon and then uses it to take contents out of a food container contaminates the food in the container with the micro-organisms from his/her mouth. Avoid condiments (Catsup, mustard, hot sauces, etc.) that allow for communal table use in restaurants that you do not trust because one never knows with whom one is communing when a tortilla chip cuts the roof of your mouth. Dishes which predispose a number of persons to dip into with crackers, chips, or bread can become contaminated when people take additional dips with the same piece of food that has touched their mouth.

If food is catered, evaluate the hygiene and risk group status of persons who prepared the food. It is not unreasonable to refuse a plate that has thumb prints on the eating surface or that has visible evidence of finger traffic. If the need arises, a pressure cooker provides sufficient sterilizing capacity for any food, utensil, or dressing.

Thus far, it can be said that no study has demonstrated that a person with AIDS can easily, unintentionally, transmit HIV in such a way; however, there have been no studies thus far published that can disprove this as a means of transmission, only time and further study will tell. Such a study would have to intentionally attempt to introduce a known number of virus particles into a group of people by deliberately contaminating their food. Such a study would be unethical and therefore impossible. If a person were to acquire HIV from a food source, it would be nearly impossible to prove. However, presumably uninfected babies have acquired infection through breast milk. Breast milk is a food, and if anything the antibodies within it should have neutralized the viral particles; yet it serves as a stark argument against those who would argue that the virus could not survive the rigors of the gastrointestinal tract.

Police officers can be expected to attend autopsy examinations. Physical contact with any human body part can be dangerous. Simply because the human is dead does not mean that the microbes in the body are dead. Cold temperatures that prevent body decomposition do so by arresting the activity of the microbes; but, in so doing, they too are preserved. Once they again reach the temperature of the human body, they are capable of causing infections. Always wear protective barrier devices and clothing upon entering the autopsy rooms. Be careful not to be exposed to splashes, blood, or tissue. If barrier protection is not provided, do not participate in the autopsy until it is made available.

Individual officers and supervisors should always be conceptualizing procedural changes to prevent contamination. An effort should be made to draft policy that requires all police, firemen, EMT's, and emergency workers regularly submit to a blood test for HIV. The military justifies routine testing of all of their members for that reasoning and the reasoning still applies even if no policy exists. If no policy can be enacted at a governing level, then it is incumbent upon the individuals at highest risk of being harmed by no policy to enact their own. Any person who will not participate in such a policy can be assumed to have a desire to withhold that information and thereby be considered a risk group member or at least someone who must be prepared to relinquish the expectation of emergency aid by co-workers.

If you, a workmate, or a loved-one is placed in a hospital or recuperative care facility that services AIDS patients, insist upon being situated in a different room. By proper disease control requirements, patients with infectious diseases should be isolated; and, if one's hospital does not isolate those patients, then it is one's duty to insist upon one's own reverse isolation by being moved. It is probably not in one's best interests to frequent or be admitted to hospitals that admit high numbers of AIDS patients since water sources and ice machines in hospitals with high AIDS populations have become contaminated with non-tuberculous mycobacteria including *Mycobacterium Avium Intracellulare*. It has also been shown that in hospitals with increasing AIDS patient populations that the transmission of a disease (*Pneumocystis Carinii*) considered to be a hallmark of AIDS also increased amongst the other patients in the hospital. When the AIDS patients decreased, the disease incidence in the

other patients declined as well.

Consider carefully the risk group status of the doctors, nurses, or ancillary personnel who come in contact with your body while you are in a hospital. If they appear ill, are coughing, or appear to be at high risk for AIDS or the carriage of infectious diseases, consult with your doctor. Insure that when people touch your mucous membranes, open wounds, or objects that will contact your body that they are wearing clean rubber or plastic gloves and observe sterile technique.

EPITAPH

The preceding information and precautions may be interpreted by some persons with opposing agendas to be hysteria generating, bigoted, mean-spirited as well as over and beyond the reasonable means necessary to prevent infection. However, as AIDS persists in destroying the immunity of our population and the secondary wave of infectious disease epidemics continue to take their toll on our society, it will be increasingly impossible to avoid contact with the body fluids of the persons who can transmit these diseases. Perhaps it is time to stop withholding this type of information for fear that it will result in an emotional overreaction; and, instead, trust that Law Enforcement Officers can act rationally, defensively, and responsibly armed with knowledge and the truth. Certainly, a self-defensive response is justified when the death of 120 million people in Africa alone is already predictable by the year 2015. Just as a human body with some defect in the cellular units that confer protection against disease suffers by becoming diseased, so, too, when a society's individual units have immune defects, the entire society can be seen to suffer a morbid consequence. When just the estimated 2.7 million Americans who are infected today die over the next 10-20 years, they will have taken with them between \$85,000-\$140,000 per person in unrecoverable medical costs before they die. That translates to \$229-\$378 billion provided that no more people get infected as of 1992. If one considers that the infection rate is probably doubling every 28 months, in two years, 5 million will have been infected. Adding these medical costs to an already overwhelmed healthcare system can only result in a profound crisis in our society's ability to provide medical care. A predictable consequence is that masses of people will be literally dying on the streets. When people die in the streets, one can count on them creating social unrest as conditions deteriorate and the social programs that have kept them from bitter discontent and crime run out of funding. The very social fabric of our society could unravel. A model for this AIDS induced occurrence can be seen in Haiti and Zaire where economic collapse and political chaos is now reigning. Anyone who thinks that a similar fate could not await America, especially the cities, hasn't read history to learn what humans are capable of during social stress.

If the American political system continues to practice passive genocide and does not recognize that the Cuban response to AIDS (total population testing and a modified quarantine for the infected) is the only solution likely to impact the astronomical costs in monetary and human suffering, then the uninfected will, out of necessity, be forced to reverse isolate themselves on a societal or individual level. Regardless of how anyone chooses to look at it, some form of isolation is inevitable. Either technological or physical, isolation of the infected from the uninfected is the only means of preventing infection of the remainder of the population. One third of American physicians surveyed in 1990 understand this and support a general quarantine. Greater than 60% believed a specific category of socio-pathic risk group members should be quarantined as well. The sooner all persons at occupational risk incorporate that understanding into their political activity, the better chance we all have at survival.

If actions to date are any measure of future response, it appears that our legislature will refuse to act upon the obvious, and we are probably committed to participate in a

rapidly decaying social system terminating in a genetic catastrophe. As the AIDS Epidemic continues to flourish unabated by public health measures, one can expect an increase in violent, desperate, irrational, even bizarre crime. Law enforcement officers who can be seen as guardians of social order will be called upon to intercede between the forces of chaos and order. Police cannot avoid contact with the purveyors of this disorder if they intend to continue their careers in relative safety. In order to avoid disease, they must institutionalize infectious disease protocols. Law enforcement institutions adopting disease defensive measures may prove to function successfully as a model for combatting this epidemic with the intensity it deserves. Perhaps the ability to evoke an effective institutional defensive response within the segment of society that is charged with the responsibility of protecting and defending the population from itself can be viewed as a societal selection advantage essential to a society's survival. Allowing Law Enforcement institutions to function defensively, unhindered by misconceived and improperly applied "civil rights" attitudes, may be obligatory for our surviving such a profoundly threatening menace. No social system can survive by shackling its champions of social order in the presence of profound danger. We are in the midst of a species/species conflict. The rules for this epic contest are simple. Those persons and institutions that protect their genetic heritage by preventing infection will survive. The overwhelming majority of those who do not will become extinct. One cannot act upon the assumption that a cure or vaccine will be developed. One must act to prevent the disease's acquisition and spread by whatever means one has at their disposal, hoping all the while that our technology will provide salvation before the population damage becomes too severe, the economy necessary to sustain successful research falters, or the biological momentum becomes too immense to thwart by any public health measure.

Since AIDS has become a political disease, one must protect oneself by whatever means possible because disease prevention has been wrested out of the hands of physicians, health care workers, and conscientious Public Health Departments by media manipulating risk group activists, lawyers, and a very few (but importantly positioned) legislators and public health officials as if it were fitting and proper for those skilled in managing Natural Law to be subjugated by those defending their misinterpretation of Constitutional Law. Unfortunately, governments are not providing adequate protection and will only do so when they are given the mandate that their citizens will not tolerate anything less than logical and scientifically demonstrable disease containment strategies such as public health surveillance of carriers, non-consensual testing, mandatory contact tracing, and even restricting the freedom of movement of those who intentionally commit behaviors that can transmit the HIV.

If the political/public health system had functioned as it was designed, few of these recommendations would have to be observed in America now or increasingly necessary in the future. Clearly, a person should not become obsessed with the necessity of eliminating every possible risk; however, survival has always been the product of successful risk management. Good common sense must be balanced with the understanding that the more risks you avoid, the less chance you have of acquiring disease. Although this information controversial, all of the statements in this writing are either documentable, justifiably substantiated facts or defensible with logical argumentation by accepted parameters of scientific discourse. It is unfortunate that we do not live in a perfect Utopia wherein we need not be concerned about being infected by microbes capable of destroying ourselves and permanently mutating our genome's DNA. Yet, as in all processes of natural selection, those who adapt to changes in their environment will survive, those who do not will perish.

--William T. O'Connor, M.D.