

# RISKY BEHAVIOUR, VIRUSES AND INFECTION

## MICRO-ORGANISMS

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Living organisms, too small to detect with the naked eye, were first discovered by the Dutch scientist, Antoni van Leeuwenhoek (1632-1723). Van Leeuwenhoek dedicated much of his time to the grinding of magnifying lenses. He produced the best lenses available at that time, with a magnification of approximately 300 times. Van Leeuwenhoek's amazement while observing the world of microbes could be sensed from one of his letters to the Royal Society regarding a rotten tooth: 'I removed this stuff from the root cavities, mixed it with clear water and placed it under a microscope. I have to admit that the stuff looks like it is living. But even so, the volume of those tiny creatures was so extraordinarily large that around a billion would be needed to make up a grain of sand.'

## VIRUSES

A virus is a piece of DNA and is much smaller than the smallest known bacterium. Viruses cannot multiply by themselves and do not stay alive outside of the host body. The most important weapon of man against viruses is the immune system. This system functions in two ways: It helps us to recover from a virus disease and protects us from a following infection. Some viruses, like HIV, destroy their host's immune system. Others have learned to 'hide' in cells, specially selected for this purpose and sporadically appear at 'convenient' moments. Herpes Simplex, for example - this virus lives in the nervous system of as many as 90% of all adults. If your resistance gets weaker or you have had too much sun, this virus causes cold sores on the lips. The third virus category has developed a mechanism which treats every contact with the immune system as a new encounter, like the flu virus, for example.

### The virus as secret weapon

**In the history of mankind, virus diseases are important events. It is highly unlikely that in 1520, a small group of Spanish soldiers could have defeated the Indians in Mexico without the smallpox epidemic, which the soldiers unknowingly carried with them into the New World themselves.**

## BACTERIA

Bacteria are single-celled organisms which, in contrast to viruses, can multiply without needing a host. One can differentiate between bacteria by the shape; these include spherical bacterium or coccus, rod-shaped bacterium or bacillus and spiral bacterium or spirillum. Under a microscope, bacteria look rather strange. They form little balls, flakes, or worm-like squiggles. Yet bacteria are a normal phenomena. More than 600 million bacteria live on our skin alone. Under our armpits, 800 bacteria per square millimetre may exist, while drier spots such as the forearm may be occupied by around 20 bacteria per square millimetre.

There are both harmless and harmful bacteria like the streptococci which causes dental caries. Staphylococci types include those that cause conditions as diverse as boils and pneumonia. Also the most common venereal disease - chlamydia - is also caused by a bacterium, and this is also true of gonorrhoea and syphilis. Generally the body reacts in a similar fashion to both a bacterium or a virus: it starts to create antibodies. Bacterial diseases and disorders can usually be treated effectively with antibiotics.



### Penicillin discovered by accident

After a vacation in 1928, the Scottish scientist Alexander Fleming (1888-1955) returned to his London laboratory. On his worktop, he noticed that the lid of a culture dish containing staphylococci had come loose, which resulted in the contamination of the culture with yeast and fungi. Fleming found that all staphylococci on the spot where *Penicillium notatum* (one of the fungi) had developed, were dead. After further investigation, he succeeded in reducing this occurrence to the presence of an active substance in the fungus. In 1929, he gave this substance the name penicillin, which is derived from the name of the fungus.

In 1940, the researchers Howard Florey and E. B. Chain succeeded in isolating penicillin and confirming its bacteria-killing ability: As the cure for several infectious diseases, including syphilis, this magical fungus turned out to be one of the most important discoveries in modern medicine, which - astonishingly - was purely due to chance. Fleming: "There are thousands of different fungi and a thousand types of bacteria, so that the chance of combining these two at just the right moment was just as small as winning the major prize in a lottery."

Infectious diseases are diseases you can catch from other people. These infections may be minor, such as a cold, or more serious infections like AIDS and hepatitis. Fortunately, infection is easy to avoid for most infectious diseases.

Some infectious diseases can be transmitted through normal daily contact. By normal daily contact we mean the usual daily interaction with others, such as talking, eating together, touching people, engaging in sports activities or taking communal showers. Influenza and TB are major infectious diseases that can be transmitted through this sort of daily contact.

Some risky situations may arise in the course of daily contact, such as sharing toothbrushes, shaving equipment (esp. razors) and trimming scissors. Blood particles can stick to these items, and when shared with others, these blood particles can be transmitted from one person to another.

### **BLOOD-TO-BLOOD CONTACT**

Other viruses may only be transmitted via blood-to-blood contact, by which we mean that the blood particles of one individual enter somebody else's bloodstream. This can happen in various ways:

- Pricking the skin with a needle or syringe with somebody else's blood on it
- Blood can also be transmitted through equipment, such as cotton balls
- Blood entering an open wound or skin with sores and scratches (such as bites)
- Blood entering the eyes, mouth or nose.
- These blood particles may not be visible to the naked eye.

The most common risks stemming from blood-to blood contact concern different ways of using drugs. In order to distribute the small quantities of heroin bought in a fair manner between two or more consumers, two different methods are used. The most dangerous form is needle sharing, i.e. injection equipment (consisting of a syringe and/or a needle) is used by two or more consumers. The heroin powder is dissolved in a spoon, then the whole quantity of liquid heroin is drawn up into a single syringe which is then used by the drug consumers in succession. The contents of the syringe can be divided equally by using the scale lines marked on the syringe (a rarely used technique). This practice is still common among drug users, particularly in prisons.



The other way of sharing drugs is by dividing the heroin between several different syringes. The dissolved powder is divided between different syringes to distribute the quantity in equal amounts. This can be done in either of two ways:

- Front loading
  - The solution is squirted via the tip of the needle into the second syringe in the opening at the front and then it is injected.
- Back loading
  - The plunger of the second syringe is removed and the solution of dissolved heroin is passed to the next syringe via the opening at the back. This technique is mostly applied with insulin syringes where the barrel and the needle form a single unit.

These forms of drugs sharing are only completely safe if all of the equipment used is brand new or has been cleaned and sterilized thoroughly.

### THE PRISON AS BREEDING GROUND FOR INFECTIONS?

AIDS, hepatitis and tuberculosis can be caught anywhere but as various statistics show, this possibility is greater within prison than it is outside. For several reasons, prisons are a high risk environment for infectious diseases:

#### LACK OF HYGIENE

In many European prisons, sanitary conditions are inadequate. This results in an increased risk of hepatitis A, infections, abscesses, and parasite infestations such as lice, fleas and scabies.

#### OVERCROWDING

In a large prison in Eastern Europe, as many as 35 prisoners may share a single cell. However, other European prisons also have problems with overcrowding. Overcrowding creates containment problems and promotes unhygienic conditions and the spread of infectious diseases.

#### VIOLENCE

According to a prisoner of an old prison in Dublin, Ireland: 'There is a lot of tension, we are just waiting for another riot.' Violence creates extra dangers in terms of direct blood contact and therefore is a risk of infections with HIV, or hepatitis B and C.

#### UNSAFE DRUG USE

Injecting drug use is widespread in prison. About half of the inmates who have used injectable drugs outside prison continue with different use patterns when they are incarcerated. Injecting in the prison setting usually means sharing needles and syringes and other injecting equipment. Alternative routes of administration are often much more expensive.

#### UNSAFE SEX

In prison, sex between men is not uncommon. In often overcrowded penal institutions, unprotected sexual contacts between offenders pose a risk for the sexual transmission of HIV, Hepatitis B and other STIs. Sexual contacts occur in different ways, including consensual and forced or coercitive. They are often dealt with as a sort of currency, and sex for money or drugs is a widespread phenomenon (Stöver,



MacDonald, Atherton 2007). Significant stigma is still attached to same-sex sexual activities in many penitentiary systems. Sex in prison usually means anal intercourse. Anal sex without condoms and anal rape create additional infection risks because both semen and blood contact is involved.

The denial among prison authorities of sex occurring in prison poses a great barrier to any intervention to counteract the health problems associated with this risk behaviour. The presence of sexual activities in penal institutions, sexual risk behaviour before and after custodial sentence, the spread of prostitution of offenders is neither properly researched, nor reported by either staff or prisoners. Even rape and other sexual violence are often underreported by prisoners due to fears of violence. The knowledge about character and transmission of STIs and reproductive health is very poor.

### BLOOD BROTHERHOOD

In spite of the risks from HIV and AIDS, life-threatening rituals surrounding blood brotherhood are still very popular in some prisons.

### TATTOOING AND PIERCING

Tattooing and piercing have become increasingly popular in recent years. In prison especially, tattooing can be a symbol of solidarity and belonging. Both tattooing and piercing involve health risks, including the potential for transmission of infectious diseases. There are many reports on wound infections, as well as on the transmission of hepatitis and HIV. Tattooing is institutionalised in prisons but it is also usually regarded as illegal, and so the likelihood of unsterile equipment being used is very high. Tattooing is a social activity and tends to involve sharing needles and other tattooing equipment. Male prisoners seem more likely than female prisoners to engage in tattooing.

## INFECTIOUS DISEASES

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The following information is about those infectious diseases that form a considerable risk for both inmates and prison staff. For each disease, we will list the symptoms, the ways that they are transmitted and any possible ways to avoid them. We also describe the measures that can be taken by the institution to try and prevent each infectious disease.

### THE FLU

#### What is the flu?

The flu (influenza) is caused by a virus. Every year, new strains of flu are emerging. Common 'flu symptoms include: high fever, aching muscles and headaches. Sometimes people with the 'flu can also have a dry cough or a sore throat.

#### How do people get the flu?

The flu virus is spread through the air. Somebody who becomes ill may have infected others during the period preceding the emergence of symptoms without the person knowing anything about it. Not everybody who is infected gets sick.



### What happens when somebody has the flu?

About 1 out of every 20 Dutch people catch the flu each winter. Most people recover on their own within a week. All they need is rest. Medication can relieve some of the symptoms. The flu can be very serious among people in poor health, such as those with chronic illnesses or the elderly.

### Avoiding infection

Becoming infected with the 'flu virus is hard to prevent, daily contact included. You can, however, help avoid passing on the flu virus. If you put your hand in front of your mouth and turn away from others when coughing or sneezing, you can avoid spreading the virus unnecessarily. Using disposable tissues when suffering from colds or flu is also a good idea. People with poor health can also have themselves vaccinated against the flu for the winter. Doing so will protect them from the types of the flu going around that year.

### In the institution

In some prisons there are flu shots available from the prison medical service for everybody who needs them. Inmates can see the doctor or nurse about getting one.

## TUBERCULOSIS (TB)

### What is TB?

TB is an infectious disease caused by a bacterium. While these bacteria can attack different organs, lung tuberculosis (consumption) is the most common form. TB symptoms include tiredness, lack of appetite and coughing.

### How do people get TB?

The bacteria are released into the air by patients with lung TB. People with lung TB are only capable of infecting others during the contagious stage. These patients cough up bacteria from their lungs which are then transmitted through the air. An individual inhaling the same air may then become infected with TB.

### What happens when somebody has TB?

Not everybody infected with TB gets sick right away. People in poor health are likely to get sick. Others may feel fine for years. Some people never get sick at all, even though they are infected. As soon as somebody is diagnosed with lung TB, everybody with whom he or she has been in touch needs to be contacted and examined for TB. Everybody infected with TB needs to be treated with medication. People who are not ill (but have been infected) are treated as a precaution against becoming ill later on. TB medication needs to be taken for an extended period. People who stop taking the medication before finishing the treatment may go on to develop the disease after all.

Further treatment then becomes far more complicated in such cases. In the early stages of their treatment, people with lung TB must be isolated to avoid infecting others. After a few weeks they are no longer contagious and can interact with others once again.

### Avoiding infection

Because TB is spread by coughing and sneezing, putting your hand in front of your mouth and turning away from others is important. You should also turn the other way when others cough in your direction.



### In the institution

In some prisons, everybody is tested for TB by the medical service upon entering the institution. Any TB infections are identified to avoid spreading them throughout the institution.

The TB examination generally involves a Mantoux test, where a small amount of liquid is injected in the lower arm. After a few days, the skin's reaction to the liquid is checked. Sometimes the TB examination consists of a lung X-ray. If a person is transferred to a different institution, the results might be sent to the medical service at the new institution. Anybody with TB in an institution should be treated immediately. People with lung TB should be isolated for a few weeks during the contagious stage.

### Symptoms of Tuberculosis

The main symptoms of TB are:

- Protracted coughing
- Loss of appetite
- Loss of weight
- Night sweats and fever
- Coughing up blood
- Pain in the chest that lasts longer than three weeks.

If you or a cellmate has similar symptoms, an urgent doctors consultation is necessary. It will usually consist of giving a sputum sample, which is then examined under the microscope. The availability of mycobacteria in the sputum means that the person has an active form of TB, and therefore will need anti-tuberculosis medication for at least six months.

In order to avoid catching TB or infecting others:

- Cough in your hand or a handkerchief.
- Don't spit the sputum everywhere - use a handkerchief or napkin.
- Air your cell regularly - particularly if it is overcrowded.
- Try to eat well, and if possible consume plenty of vitamins, fresh fruit and vegetables to improve your immunity.
- If these symptoms appear, contact a doctor immediately.
- The sooner treatment begins, the better the outcome will be.

For more information on TB in prison, make reference to:

Health in prisons - A WHO guide to the essentials in prison health, WHO 2007 chapter 8. Tuberculosis control in prisons

Further reading:

Santos et al. Manual of Environmental Interventions for Tuberculosis Control in Prisons, Global Fund TB Project Brazil, 2012

[http://www.unodc.org/documents/hiv-aids/Bresil\\_Larouze\\_Final\\_Manual\\_tuberculose\\_ingles\\_site\\_27-7-2012.pdf](http://www.unodc.org/documents/hiv-aids/Bresil_Larouze_Final_Manual_tuberculose_ingles_site_27-7-2012.pdf)



## HEPATITIS A

### What is hepatitis A?

'Hepar' is Greek for liver; 'itis' means inflammation. hepatitis, therefore, is an inflammation of the liver. There are different types of hepatitis. hepatitis A is the most harmless variety but it is also very contagious. Each year, over 10 million people world-wide are infected with the hepatitis A virus.

### How do people get hepatitis A?

People become infected through contaminated food and water. The dazzling blue ocean water near a five-star hotel could be contaminated due to an open sewer nearby. The exquisite dinner in the same hotel could be contaminated because the cook has not washed their hands after visiting the toilet. The virus can also be transmitted through sexual contact, particularly oral-anal sex. When licking the anus, small particles of faeces can get into the mouth.

### Risk factors

- sharing unhygienic sanitary facilities.
- oral-anal sex.

### Does one always get sick when infected with hepatitis A?

No.

### What happens if somebody does get sick from hepatitis A?

The symptoms can vary, but include fatigue, fever, muscle and joint pains to nausea and abdominal pains. The illness can also produce colour changes in eyes, skin, urine, (tea colour) and faeces (pale colour).

### How long is the incubation period?

After the initial infection, it normally takes two to six weeks before one gets sick.

### Is hepatitis A curable?

Yes, but not with medicine. After a few months, hepatitis A eventually disappears by itself. If someone has been sick with hepatitis A once, they are immune to the virus for the rest of their life.

### How can contracting hepatitis A be prevented?

The golden rule is good personal hygiene. Always wash your hands after visits to the toilet, or before eating or preparing food. There are also vaccinations against hepatitis A infection. A safe and effective vaccine against hepatitis A (+B in combination) has now been available for many years.

### In the institution

If an inmate thinks that they might be infected with the hepatitis A virus, they should be able to see the medical service to decide whether they need to be tested. Determining whether one is infected involves taking a blood sample for examination. A positive result indicates either a recent infection or that you have developed an immunity to the virus due to prior infection.



## HEPATITIS B (INCLUDING VACCINATION)

### What is hepatitis B?

Hepatitis B is a virus that affects the liver. It is very infectious, and can result in serious long-term health problems. Hepatitis B can cause different symptoms, including jaundice, tiredness, listlessness, fever, dark urine and pale coloured stools (faeces). However, many people may experience no symptoms at all.

### How is the virus transmitted?

- Sexual contact
- Blood to blood contact, i.e. sharing of injecting equipment, sharing razors, needle stick injuries, contaminated blood products
- Mother to baby (vertical transmission)
- The virus can be found in all body fluids, but is much more concentrated in blood, semen and vaginal secretions.

### What happens if somebody has hepatitis B?

In 90-95% of cases, the infection will resolve spontaneously and the person infected will be left with a “natural immunity” to further Hep. B infection.

In 5 to 10 percent of all cases, the virus remains active. This is known as “chronic carrier status”, and this group may develop long-term health problems. They also remain infectious to others via the routes already described.

### Long-term health risks

- Liver cirrhosis
- Liver cancer
- Liver failure

In recent years some people with chronic hepatitis B have been receiving a new medication. Although the treatment can cause side effects, it does cure some patients of the disease. A specialist can decide whether a course of medical treatment is likely to help.

### How can you avoid infection?

- Safer injecting techniques
- Practising “safer sex”
- Use of “universal precautions” when handling body fluids
- Vaccination against hepatitis B

Vaccination against hepatitis B (and A) is offered in many prisons. It makes a great difference whether the service promotes take-up of the vaccine in a proactive way, or if the service is only available ‘on demand’. Sometimes, prisoners are not informed about the availability of the Hep. B. (or the Hep. A+B combination) vaccination. People in certain professions, such as prison officers, can have their employer pay for the vaccination. Daily social contact presents no risk of infection.

### In the institution

If an inmate thinks that they might be infected with the hepatitis B virus, they should be able to see the medical service to decide whether they need to be tested. Determining whether one is infected involves taking a blood sample for analysis. The prison medical service should also provide condoms or should inform the inmates where they can get them inside the institution.



## HEPATITIS C

### What is hepatitis C?

Hepatitis C is a virus that affects the liver. The long-term health risks can be very serious, due to the prospect of liver damage. Symptoms, when present, are similar to those of hepatitis B infection, but in many cases, the person will be unaware they are infected.

### How is hepatitis C transmitted?

- Blood-to-blood contact, i.e. sharing of contaminated drug injecting equipment
- Contaminated blood products

### What happens if somebody has hepatitis C?

Eighty percent of people with this liver disease will develop chronic hepatitis C. They carry the virus and can infect others. After 15 to 20 years, people with chronic hepatitis C can develop liver cirrhosis. Liver cirrhosis involves damage to the liver caused by scar tissue which prevents the liver from functioning. In extreme cases, people may die. Hepatitis C carriers also run a higher risk of developing liver cancer.

People infected with hepatitis C can take medication. Some can never be fully cured and the treatment can cause serious side effects. A specialist usually decides whether such medication will be helpful.

### How can you avoid infection?

- Safer injecting techniques
- Use of “universal precautions” when handling body fluids
- There is currently no vaccine available to prevent hep. C

You cannot become infected with hepatitis C through normal daily social contact.

### In the institution

If an inmate thinks that they might be infected with hepatitis C, they should have the opportunity to see the prison medical service to find out whether they have been at risk. Counselling on the advantages and disadvantages of getting tested for hepatitis C should also be offered. The hepatitis C test involves taking a blood sample for analysis. Testing should only be done on a voluntary basis, and after an inmate has been made aware of the hepatitis C test’s advantages and disadvantages. Consequently, an individual should have the opportunity to think about the test for a few days before taking it. Any positive test result should be delivered within the framework of post-test counselling.

## THE TOP 12 QUESTIONS ABOUT HEPATITIS C

(based on Mainline Magazine, 1997)

### 1. How likely is it that I have hepatitis C?

In blood-to-blood transmission, the hepatitis C virus (HCV) is three times as infectious as HIV. Seventy to eighty percent of injecting users have it. Anyone who has ever had an unsafe injection has run the risk of infection, and someone who has become infected with HIV through a dirty needle is highly likely to have HCV as well.

### 2. Could I have hepatitis C even if there doesn't appear to be anything wrong with me?

Yes, it's possible. Many people are HCV+ without being aware of it. Most of them start suffering from vague symptoms such as tiredness and listlessness only many years later.



### 3. Can I die from hepatitis C?

Sometimes hepatitis C gets better of its own accord, and many people who have it live to a ripe old age. No-one dies of the virus itself, but a small proportion of infected people develop cirrhosis of the liver some fifteen to twenty years after infection. In these cases, more and more liver functions begin to fail until ultimately the patient starts getting serious haemorrhages and infections, then goes into a coma and dies. Cirrhosis can also turn into liver cancer.

### 4. Is there more risk of getting hepatitis C if I have already had another type of hepatitis?

The seven kinds of viral hepatitis now known are all distinct liver diseases. One type does not change into another. Having once been infected with one of the other six types does not increase your chance of getting hepatitis C, but it does not afford you any protection against it either. Thus if you do get hepatitis B through an unsafe injection, there is a real chance you could become infected with HCV at the same time.

### 5. Is there a link between HCV and HIV?

Both viruses can be transmitted by dirty needles. That is why many HIV+ drug users are also HCV+. A double infection of this kind can also cause earlier and more severe liver disease. The chances of curing it with interferon are relatively small and a liver transplant is not possible. There is also greater risk of crossinfection from mother to baby.

### 6. What can I do to look after myself if I believe or know I have hepatitis C?

Be kind to your liver. Giving up alcohol is a major step in the right direction. Take care with medicines and other drugs too. Eat a healthy diet, get plenty of sleep, avoid stress and try to lead a stable, regular life.

### 7. Am I eligible for treatment with interferon?

Your GP can refer you to a specialist for interferon treatment. National health insurance might pay for it. The fact that you are a drug user is not supposed to debar you from treatment.

### 8. How can I avoid a hepatitis C infection?

Avoid any contact in which blood could be exchanged. Inject safely: never share needles, barrels, filters, rinsing water or spoons. Any used injecting equipment could carry traces of blood. Always make sure you have your own equipment with you.

### 9. If I am already HCV+, can I get infected again?

Even if you are HCV+ you can still get infected by another variant of hepatitis C. This will cause a resurgence of the hepatitis and your health will deteriorate more rapidly. So do be sure to avoid new infections.

### 10. Can I get hepatitis C by kissing?

No, touching or kissing a HCV+ person is perfectly safe. It's also safe to share anything other than razors, toothbrushes or anything else which could become contaminated with blood.

### 11. Can I get hepatitis C through unsafe sex?

Research shows that Hep C is not currently believed to be sexually transmitted.

### 12. If I am pregnant and have hepatitis C, am I likely to infect the baby?

The chance of transmitting HCV to your baby is probably very low. But if you have both HCV and HIV, the chance of your baby becoming infected with hepatitis C is greater.



## FOR MORE INFORMATION ON HEPATITIS C IN PRISON, MAKE REFERENCE TO:

Elger et al., Emerging Issues in Prison Health, Hepatitis C Viral Infection in Prisons Geert Robaey, Amber Arain, Heino Stöver, 2013

## HIV/AIDS

HIV stands for “Human Immunodeficiency Virus”. It is the presence of this virus that can eventually develop into AIDS, or HIV related illness, as a result of damage to the immune system. AIDS stands for “Acquired Immune Deficiency Syndrome”, and is defined as an illness characterised by one or more particular diseases. HIV attacks the immune system. Our immune system protects our body from illnesses. The symptoms may not appear for many years. The first signs may be one or more of the following symptoms: severe tiredness, night sweats, fever, weight loss, swollen lymph glands, persistent diarrhoea.

How is HIV transmitted?

- Blood to blood contact i.e. sharing of contaminated injecting equipment
- Sexual contact
- Mother to baby (vertical transmission)

HIV can be found in all body fluids, but is much more concentrated in:

- Blood
- Semen
- Vaginal fluid

The only way of knowing if you have HIV is to have a blood test. Without visible symptoms, nobody can see that these people are HIV positive. They can infect others through unsafe sexual contact and blood-to-blood contact. Mothers with HIV can also pass the virus on to their babies while pregnant, during the delivery and by nursing.

What happens if somebody has HIV?

He or she will not have any symptoms in the beginning. Over time, the virus attacks the immune system, which becomes less effective at fighting infection. Diseases of the immune system occur, defined as HIV-related illness, or AIDS. Left untreated, these illnesses will ultimately cause death. However, while there is no vaccine or cure for HIV infection, symptoms can be successfully treated in many cases with the right combination of medication. Drugs are also available to suppress the activity of HIV on the immune system, known as “combination therapy”.

How can you avoid infection?

- Practice “safer sex”
- Safer injecting techniques
- Use of universal precautions (when handling body fluids, avoiding needle stick injuries by wearing gloves, using sharp save boxes)

In the institution

If an inmate thinks that they might be infected, they should have the opportunity to see the medical service to find out whether they have been at risk. Counselling about the advantages and disadvantages of getting tested for HIV should be offered. The HIV test involves taking blood for



examination. Testing should only be done on a voluntary basis. Once an inmate is aware of the HIV test's advantages and disadvantages, the inmate should have the opportunity to think about the test for a few days before taking it. A positive test result should be delivered within the framework of post-test counselling.

### Infecting your baby

While pregnant, a mother can pass infectious diseases on to her unborn child. Women who want to become pregnant and may be infected can have themselves tested for HIV. Use of combination therapy during pregnancy greatly reduces the risk of passing on the virus to the baby. Checking for other infectious diseases, such as STI's (Sexually Transmitted Infections) and hepatitis is also a good idea.

## HIV AND HEPATITIS TESTING

Getting an HIV or hepatitis test can be an important service for inmates who want to know if they are infected or not. Furthermore, getting tested is the basis for receiving timely, adequate treatment. In many prisons HIV and hepatitis testing is offered at the first medical check on a voluntary basis, acknowledging confidentiality and informed consent. However, in some countries forced, mass testing of those groups considered to be at higher risk of HIV is still considered an appropriate tool for controlling the epidemic. This is especially true for countries where HIV is a relative new phenomenon and fears of a spread of the disease leads to compulsory mass testing and segregation of infected prisoners in single cells.

A mandatory HIV test for all inmates in such cases is perceived as both a prevention and a security measure. Knowing who is infected in prison is believed to have a preventive effect for the infected person, and also for staff and other inmates. But simply knowing about one's serostatus does not necessarily result in behavioural change, nor does it prevent transmission - either sexual, drug-related, or perinatal.

Segregation of HIV positive inmates may also be seen as an adequate prevention and security measure. It is believed to protect the HIV-positive inmate from attacks from fellow inmates and to protect others from the possible transmission of HIV.

However, there are good arguments against mandatory testing and segregation:

- Mandatory testing and segregation create a false sense of safety for those not separated, possibly leading to higher risk behaviour. One should keep in mind that a negative test is no guarantee of negative serostatus. With an HIV test there is always the risk of false negative test results, particularly during the 'window' period. The term refers to the period of 3 months after the actual infection, where a test result might be negative but a person is actually infected.
- Segregation also contributes to discrimination of the HIV infected, possibly resulting in psychological stress, possible alienation from family and friends, etc.
- Segregation can be perceived as a form of additional punishment and might lead to a negative attitude by prison staff (due to fear and prejudice).



- Mandatory testing generally leaves the person unprepared for dealing with a positive test result, possibly leading to emotional and psychological problems. Even, if pre-test counselling (see below) were to be offered, it is questionable how useful it would be in such circumstances. Mandatory testing conflicts with the atmosphere of trust necessary for effective counselling.
- Mandatory testing and segregation conflict with accepted ethics defined in the internationally accepted human rights code. Mandatory testing violates the integrity of the body as guaranteed by the human rights code, which states that any invasive action needs informed consent.

The safest and most realistic prevention approach for both staff and inmates is for everybody to act as if everybody is infected.

Thus it is everybody's personal responsibility to protect themselves from being infected. It is the responsibility of the prison administration to create the conditions that allow safe behaviour for staff and inmates, i.e. providing information about and the means to facilitate safe behaviour.

However, testing - on a voluntary basis - is a valuable contribution to any prison health service. The Committee of Ministers to Member States of Europe state that "emphasis should be put on explaining the advantages of voluntary and anonymous screening for transmissible diseases and the possible negative consequences of hepatitis, sexually transmitted diseases, tuberculosis or infection with HIV. Those who undergo a test must benefit from follow-up medical consultation...". (Council Of Europe, Committee Of Ministers, Recommendation No. R (98) 71 Of The Committee Of Ministers To Member States Concerning The Ethical And Organisational Aspects Of Health Care In Prison).

The WHO guidelines on HIV and AIDS in prison (1993) state: "...Since segregation, isolation and restrictions on occupational activities, sports and recreation are not considered useful or relevant in the case of HIV infected people in the community, the same attitude should be adopted towards HIV infected prisoners. Decisions regarding isolation for health conditions should be taken by medical staff only, on the same grounds as are used for the general public, in accordance with public health standards and regulations. Prisoners' rights should not be restricted further than is absolutely necessary on medical grounds, and as provided for by public health standards and regulations. HIV infected prisoners should have equal access to workshops and to work in kitchens, farms and other work areas, and to all programs available to the general prison population..."

### PRE- AND POST-TEST COUNSELLING

When it comes to HIV or hepatitis testing, pre and post-test counselling are of vital importance. The focus of pre-test counselling is to weigh the advantages and disadvantages of getting tested to allow a properly considered decision. Post-test counselling will concentrate on dealing with emotional problems in the case of a positive test result, and reinforcing messages about safer sex and injecting in the case of a negative result.

These are the requirements for HIV test counselling:

- Having trained counsellors available who are trusted by the inmates.
- Having available counselling facilities, a room where people can talk in private with a counsellor and feel at ease.



- Having guaranteed confidentiality by the medical service carrying out the HIV test counselling and the actual test, e.g. allowing anonymous testing.
- Being able to provide inmates with the necessary services, care and treatment.

### Pre-test counselling

These are the important elements of pre-test counselling:

- Determining the level to which an inmate is aware and informed (or in denial) of their risk of HIV infection and facilitating an accurate self-perception of risk;
- Ensuring the individual understands the nature of HIV infection;
- Providing information about HIV transmission and risk reduction;
- Discussing risk activities the individual may have been involved in with respect to HIV infection, including the date of the last risk activity engaged in, and the perception of a need for a test.
- Exploring the reasons why an inmate wants a test;
- Discussing whether the test is the way to get what the inmate wants;
- Discussing the benefits and difficulties a test brings to the individual, their family and associates, and knowing the result whether positive or negative
- Discussing whether a person thinks they will be able to cope with a possible positive test result;
- Providing details of the test and how the result will be provided, including information about post-test counselling.
- Making a plan for when the actual test will be done;
- Explaining the issue of the 'window period' (the period of time following infection before any antibodies can be reliably examined);
- Obtaining an informed decision about whether or not to proceed with the test.

An additional element can be to negotiate and reinforce a plan to reduce or eliminate risk behaviour.

To help inmates considering whether to get tested, the following information could be passed to them. This can be done orally - in a group information session or in an individual counselling session, or in writing via a leaflet.

Different people will be thinking about having the test for different reasons. It is impossible to give hard-and-fast rules. Here are some points to consider (based on a leaflet published and distributed by the Scottish Prison Service):

- If you are ill and a doctor feels that this could be due to HIV, being tested will be an important part of finding out what's going wrong.
- Do not use the test simply to try and find out whether you should have safer sex. Safer sex is important for everyone, to ensure that if you are uninfected you stay uninfected, and if you are positive you avoid infecting other people.
- If you are in a relationship, discuss with your partner how getting tested might affect you both. In the past, some relationships have been destroyed by the knowledge that one person is positive and the other negative.
- Being tested may help if worries about being infected are affecting the quality of your life. But think carefully about whether you would be able to cope with a positive result, and would a negative result really stop you worrying?
- It may make sense to be tested if you are or intend to become pregnant. If you wish to become pregnant, or are in the early stages of pregnancy, there may be considerable pressure for you



to have an HIV antibody test. Careful pre-test counselling is essential so that you understand all the advantages and disadvantages of knowing if you have HIV, and can make your own informed decisions about whether you should continue with your pregnancy.

- There is still ignorant and cruel prejudice against people with HIV, and against people who are misguidedly seen as being at 'high risk' of having HIV:
  - People with HIV are sometimes not allowed to work in certain units (kitchen, barber etc.).
  - People with HIV are sometimes placed in single cells or the cellmate is informed about their sero-status.
- Think through your decision carefully before going to be tested and don't be pressurised into having a test unless you have had enough time to decide whether it is the best thing for you. Remember that the test is there for your benefit alone, not for anything or anyone else.
- Get advice from your clinic about early intervention treatment options and support for people who have positive results. Recent advances in medical treatment of HIV mean that some doctors now think that it is worth knowing if you have HIV infection.
- For example, it is possible for doctors to monitor how well you are through measurement of viral load, so that if your health deteriorates to a point at which you may be at risk from infections like PCP (a virulent pneumonia) drugs can be prescribed which prevent or significantly delay their onset. If your doctor knows that you are at risk from such conditions, they will be prepared to diagnose and treat any infection more promptly.
- Some healthy people with HIV who have HIV-induced damage to their immune systems may benefit from antiviral drugs. However, others who only discover that they are HIV positive when they get ill do not have the option of early treatment. All effective medicine should also be accessible in prison.

#### Post-test counselling

For those with a negative test result it is inevitable to give prevention advice and to discuss the impact of that result. A positive test result should be followed by post-test counselling to offer psychological support where needed and serve relevant information. In a session in which enough time is allowed to digest information and to ask questions, it is important to sort out and discuss possible emotional and psychological problems in case of a positive test result.

There are important elements of post-test counselling:

- If necessary make a plan for and/or refer to on-going psychological support.
- Explain further tests (i.e. for hepatitis C - PCR, liver biopsy).
- Help obtain referrals to receive additional medical care and treatment and other necessary services (such as drug treatment).
- Allow such people to receive prevention counselling to help initiate behaviour change aimed at preventing the transmission or acquisition of HIV and hepatitis.
- Provide prevention services and referrals for sex and needle sharing partners of HIV-infected people.
- Provide information about the risk of infecting others and ways to prevent this.
- Provide family planning information and referrals for women of childbearing age.
- Suggest local support groups.
- Give accurate literature to take away.



**FOR MORE INFORMATION ON HIV/AIDS IN PRISON, INCLUDING TESTING, MAKE REFERENCE TO:**

Health in prisons - A WHO guide to the essentials in prison health, WHO 2007, chapter 7. HIV infection and human rights in prisons

**FURTHER READING:**

UNODC, WHO. HIV testing and counselling in prisons and other closed settings. Policy brief. New York, United Nations, 2009. This policy statement provides guidance to countries and prison systems about how HIV testing and counselling should be made available in prisons.

[http://www.unodc.org/documents/hiv-aids/UNODC\\_WHO\\_UNAIDS\\_2009\\_Policy\\_brief\\_HIV\\_TC\\_in\\_prisons\\_ebook\\_ENG.pdf](http://www.unodc.org/documents/hiv-aids/UNODC_WHO_UNAIDS_2009_Policy_brief_HIV_TC_in_prisons_ebook_ENG.pdf)

UNODC, WHO, UNAIDS. HIV in places of detention. A toolkit for policymakers, programme managers, prison officers and health care providers in prison settings. New York, United Nations, 2008. This toolkit aims to provide information and guidance primarily to individuals and institutions with responsibilities for prisons and prisoners.

<http://www.unodc.org/documents/hiv-aids/V0855768.pdf>

UNODC, WHO, UNAIDS. HIV/AIDS prevention, care, treatment, and support in prison settings: A framework for an effective national response. New York, United Nations, 2006. This document provides a framework for mounting an effective national response to HIV in prisons, based on the evidence reviewed in the Evidence for Action Technical Paper and on accepted international standards and guidelines.

[http://www.unodc.org/pdf/HIV-AIDS\\_prisons\\_July06.pdf](http://www.unodc.org/pdf/HIV-AIDS_prisons_July06.pdf)



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Mainline Magazine (1997): Special Edition 8th International Conference on the Reduction of Drug Related Harm, 18-19.

Santos et al. (2012): Manual of Environmental Interventions for Tuberculosis Control in Prisons, Global Fund TB Project Brazil.

([http://www.unodc.org/documents/hiv-aids/Bresil\\_Larouze\\_Final\\_Manual\\_tuberculose\\_ingles\\_site\\_27-7-2012.pdf](http://www.unodc.org/documents/hiv-aids/Bresil_Larouze_Final_Manual_tuberculose_ingles_site_27-7-2012.pdf) accessed 29 March 2014).

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WHO (2007): Health in prisons - A WHO guide to the essentials in prison health, Geneva.

([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/99018/E90174.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/99018/E90174.pdf) accessed 29 March 2014).

WHO (1993): WHO Guidelines on HIV and AIDS in Prisons. World Health Organization, Geneva.

UNODC, WHO. (2009) HIV testing and counselling in prisons and other closed settings. Policy brief. New York, United Nations.

([http://www.unodc.org/documents/hiv-aids/UNODC\\_WHO\\_UNAIDS\\_2009\\_Policy\\_brief\\_HIV\\_TC\\_in\\_prisons\\_ebook\\_ENG.pdf](http://www.unodc.org/documents/hiv-aids/UNODC_WHO_UNAIDS_2009_Policy_brief_HIV_TC_in_prisons_ebook_ENG.pdf) accessed 29 March 2014).

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