

DON'T BE SCARED OF HIV, HBV AND HCV!

Information for dental care teams

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Why this booklet?

Questions, insecurities and fears often emerge when dental care is provided to people living with HBV, HCV, HIV or AIDS.

We would like to show you that **there is no infection risk to you, your team or other patients if standard precautions for infection control and occupational health and safety measures are complied with**. Even in case of **workplace accidents**, e.g. needlestick injuries or cuts with contaminated instruments, or when open wounds or mucous membranes come into contact with fluids containing viruses, **the infection risk can be minimised by immediate interventions** and, if required, post-exposure prophylaxis (→ p. 12–15).

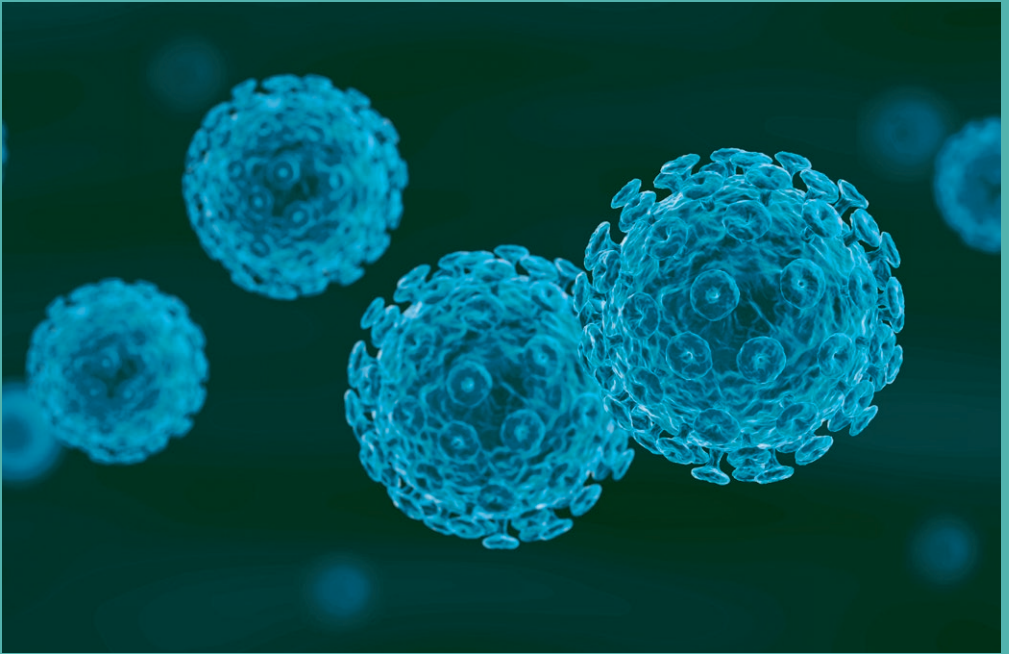
This booklet provides you with the most important facts on this topic and answers frequently asked questions.

Please assist with disseminating this information and reducing unwarranted fear of infection, thus ensuring professional dental care free of discrimination for people living with infectious diseases such as HIV, HBV and HCV.

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THE MOST IMPORTANT FACTS



What is HIV, what is AIDS?

The acronym **HIV** stands for 'human immunodeficiency virus'. HIV mainly damages the immune system.

No cure is available for this infection yet. However, very effective anti-retroviral medications are available that prevent the virus from replicating. If diagnosed and treated in time, people living with HIV today have an almost normal life expectancy while enjoying a good quality of life.

If, on the other hand, an HIV infection remains untreated, the immune deficiency progresses and promotes, for example, the occurrence of neoplasia. At worst, life-threatening illnesses such as opportunistic infections begin to appear after several years. This is called **AIDS** (short for 'Acquired Immune Deficiency Syndrome'). Today however, AIDS can in most cases be avoided, and even severe symptoms will often resolve with treatment.

What are HBV and HCV?

The acronyms **HBV** and **HCV** stand for hepatitis B and hepatitis C virus respectively. These can cause inflammation of the liver (hepatitis). Hepatitis B and C infections are among the most common blood-borne diseases. Around 90 percent of HBV infections resolve spontaneously, for HCV this occurs in only about 20 percent of cases. For many years, chronic HBV or HCV infections may show few or no symptoms. Long-term effects may include liver cirrhosis and/or hepatocellular carcinoma.

A **very effective vaccine** is available **against HBV**. According to occupational health and safety legislation, it must be offered to (at-risk) employees and should, in their own interest, be taken advantage of by the entire dental care team.

There is **no vaccine** available yet **against HCV**. However, drugs with very few side effects have been available for some time now that offer the possibility of a cure for most people with chronic hepatitis C.



HOW ARE HIV, HBV AND HCV TRANSMITTED?



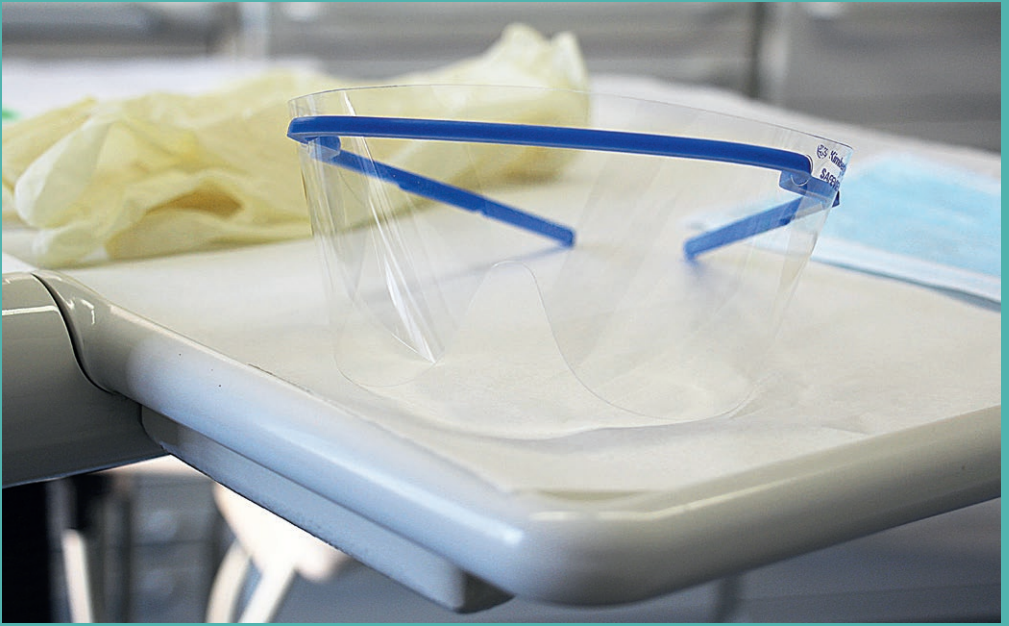
HIV, HBV and HCV are transmitted by body fluids

A risk of infection exists only when a sufficient quantity of virus enters the body, e.g. via contaminated cannulas, scalpels or periodontal scalers, or comes into contact with open wounds or mucous membranes via blood splatter. There are differences in the infectiousness of these agents: The hepatitis B virus is about 100 times and the hepatitis C virus about 10 times more infectious than HIV.

The risk of HIV transmission during dental treatment is very low if viral load is permanently undetectable through antiretroviral therapy. In most cases, patients are well informed about viral load as it is monitored regularly.

Independent of viral load, no HIV infection risk at all exists during everyday social contact (e.g. shaking hands, touching surfaces, coughing or sneezing on someone, sharing toilets or working with HIV positive people).





PRECAUTIONS FOR DENTAL PROCEDURES



No special infection control or occupational health and safety measures are required with respect to HIV, HBV and HCV ...

Many people don't know they have an infectious disease, or they don't tell their treating dentists or the practice team about it on the basis of previous negative experiences. There is no duty to disclose. All patients must therefore be treated as if infectious. The infection control plan of your practice must include procedures that protect both employees and patients from infections.

The universal precautions for infection control include:

- wearing personal protective equipment composed of disposable gloves, face masks, and protective goggles/visor, as well as a surgical gown if there is a risk of fluid spatter
- appropriate cleaning, disinfection, and, if required, sterilisation of all medical equipment (instruments) according to their allocated risk categories (see Robert Koch Institute recommendations, infection control plan)
- after treatment, disinfection of surfaces near the patient
- secure disposal of used syringes and scalpels
- disposal of contaminated waste such as swabs, surgical covers, dental wadding rolls etc. via the normal household rubbish.

Not required are measures such as the following, which may also be perceived as discriminatory:

- treatment only at the end of clinic hours or the working day
- treatment in a separate treatment room
- wearing two pairs of gloves for routine procedures
- disinfecting all surfaces in a treatment or waiting room, including the floor, and prohibiting entry afterwards
- separate treatment of the dental instruments used.

In order to protect HIV-infected patients with AIDS from further severe illnesses, the rules for dealing with immunosuppressed patients apply (→ see the recommendations of the Commission for Hospital Hygiene and Infection Control at the Robert Koch Institute).

... but sensitivity is!

Not only for people with infectious diseases is it important to remain in control of who finds out about their diagnosis. The opportunity to fill in the medical history questionnaire away from prying eyes protects privacy and increases the likelihood that all illnesses are disclosed. Only when they feel safe from rejection and exclusion are people likely to answer questions about their personal medical history honestly.

The sensitive treatment of this information is now your responsibility. 'Warnings' on patient files or documentation forms, for example, are unnecessary as the same standard precautions for infection control and occupational health and safety apply to all patients. In addition, such a marker may be observed by others and represents a contravention of data protection provisions.





WHAT TO DO AFTER POSSIBLE CONTACT WITH HIV, HBV OR HCV?



Apply urgent measures and seek medical advice

In the course of providing dental care, an infection risk for the practice and treatment team exists only in cases of needlestick injuries or cuts with contaminated instruments, and in case of a fluid potentially containing viruses (blood) coming into contact with an open wound or mucous membrane.

The risk of infection depends mainly on the amount of infectious agent that has been transmitted or absorbed, as well as on the site and duration of contact with the infectious agent. The amount of infectious agent is particularly high in the early phase of the diseases, which often doesn't produce symptoms. Under effective HIV treatment however, the amount of virus is very small and the risk of transmission very low.

Urgent measures after contact with potentially infectious material:

- **Needlesticks or cuts:** do not impede blood flow but avoid manipulating the tissue; rinse the injury with hand disinfectant
- **Contact with broken or damaged skin:** rinse thoroughly with soapy water, then clean the affected skin surface – including a generous area beyond – using a hand disinfectant (swabs should be dripping wet)
- **Contact with lips/inside of the mouth:** spit out the substance, rinse several times briefly with water, then rinse several times briefly with chlorhexidine or octenidine
- **Contact with the eye:** rinse the eye with plenty of water using a commercially available eye wash cup.

After a transfer of blood during the treatment of a person with suspected HIV or hepatitis infection, immediately see the physician responsible for workplace accidents. They will, with the consent of the affected person, determine the further course of action with respect to serological testing and post-exposure prophylaxis (PEP, → S. 14–15). PEP should be initiated within the first two hours after the potential transmission event, or within no more than 48 hours. Name, address, telephone number and opening hours of respective service providers should always be within reach.



POST-EXPOSURE PROPHYLAXIS (PEP)



Post-exposure prophylaxis is available for **HIV** and **HBV**. It can significantly lower the risk of infection.

HIV: PEP for HIV normally consists of a four-week course of certain antiretroviral medications. The deciding factors for PEP being recommended or offered are the viral load of the HIV-infected person (index case) and the type of injury or contamination. To exclude potential resistance to anti-HIV medication, it should be investigated whether the source person (index case) is taking antiretroviral medication and if yes, which types. After PEP has been initiated, further consultation with a specialist HIV service provider is recommended.

Further information is available from:

- List of clinics providing PEP: www.aidshilfe.de/pep-stellen
- PEP for HIV guidelines: www.daignet.de (submenu 'HIV-Leitlinien').

HBV: Hepatitis B vaccination offers excellent protection against infection with this virus. According to occupational health and safety legislation, this vaccine must be offered to all (at-risk) employees in dental practices. Their immune status must be monitored as part of regular occupational health care. For unvaccinated persons or persons with insufficient immunity, active vaccination and, if required, a simultaneous dose of hepatitis B immunoglobuline (passive immunisation) are recommended as PEP.

HCV: There is currently no PEP available for HCV. Immediately after the transfer of blood potentially containing HCV, a test should be conducted to detect a possible previous infection (baseline test). In case of infection, the first virus components can be detected in the blood after two to four weeks. A second blood test is therefore recommended after four weeks. If it is negative, the test may be repeated again after a few weeks. If an infection is confirmed, treatment can be carried out according to the current guidelines of the respective medical specialists' association.



FREQUENTLY ASKED QUESTIONS



Do I have to use special protection when treating people with HIV, HBV or HCV?

No, the standard precautions for infection control and occupational health and safety (→ S. 9) are sufficient.

What should I pay attention to when providing services to HBV/HCV-positive people?

Liver dysfunction caused by the illness can lead to longer blood clotting times. In addition, the delayed metabolism of certain drugs must be taken into account in dosing.

What should I pay attention to when providing services to people living with HIV?

There are possible drug interactions between HIV treatments and medications used in dentistry. For example, some HIV medications may prolong the sedative effects of benzodiazepines.

What should I pay attention to when providing services to people living with AIDS?

To protect people with AIDS from further severe diseases, the rules for dealing with immunosuppressed patients apply (→ see the recommendations of the Commission for Hospital Hygiene and Infection Control at the Robert Koch Institute).

Do I need special cleaning products to clean surfaces and instruments after treating people with HBV, HCV, HIV or AIDS?

No, no special chemicals are needed for cleaning and disinfection, and no special protective clothing is required.

Is transmission of these infectious agents possible through the spray (aerosol) produced by dental handpieces?

There is no documented case of HIV, HBV or HCV transmission through aerosols.

What if the blood of an infected patient gets on my skin?

Intact skin is an effective barrier against HIV. You can simply wash the fluid off under running water and then disinfect the skin using a hand disinfectant. If contact occurred with inflamed/damaged skin, you will also need to consult the physician responsible for workplace accidents.

What do I do if an infectious body fluid gets into my eye?

As an emergency measure, rinse the eye immediately with plenty of water (use eye wash cup). Seek advice from the physician responsible for workplace accidents immediately.

How high is the risk in case of a needlestick injury or cut?

This depends on the amount of infectious agent transmitted or absorbed and its infectiousness. In the acute phase of infection, the risk of transmission is particularly high. In contrast, under effective HIV treatment, viral load and therefore the risk of transmission are very low. For needlestick injuries and cuts, however, consult the physician responsible for workplace accidents immediately.

Is there anything to be considered when interacting with people with HBV, HCV, HIV or AIDS in the dental practice outside of the treatment room?

No, there is no risk of infection during day-to-day social contact. These viruses are not transmitted by e.g. shaking hands, touching surfaces or sharing toilets.

Am I obliged to inform dental laboratories about a patient's infection?

No, you are not even permitted to do so. Dental and medical personnel are subject to confidentiality. Therefore, diagnoses and personal information must not be passed on. Transmission of infections at the interface between dental practice and laboratory is prevented by the mandatory disinfection of all contaminated workpieces.

Can I work in a dental practice if I am HIV-, HBV- or HCV-positive?

Yes, this is possible in principle. There is no general prohibition of the employment of affected persons in health care. Limitations exist only for injury-prone invasive procedures. These should only be performed by persons with an undetectable viral load. Together with the physician responsible for occupational health and safety, it is useful to conduct an individual risk assessment in each case. Important information regarding the prevention of HIV, HBV and HCV transmission by health care workers is available as part of the recommendations of the German Association for the Control of Viral Diseases (Deutsche Vereinigung zur Bekämpfung der Viruskrankheiten, DVV).

Who can I talk to if I have further questions?

Your point of contact for all questions regarding your profession is your federal state's dental chamber (Zahnärztekammer). Further information is available from the German Dental Association (Bundeszahnärztekammer) at www.bzaek.de. You can find the most important facts about HIV and AIDS as well as the addresses of around 120 AIDS service organisations at www.aidshilfe.de.

What else can I do?

Not only you, but also your colleagues are likely to have concerns about HBV, HCV, HIV and AIDS. You could, for example, suggest an information or in-service training event on the topic at your practice. The regional AIDS service organisations would be pleased to support you with ideas, materials, contacts and speakers (address list available at www.aidshilfe.de). At the federal office of Deutsche AIDS-Hilfe, your contact is Kerstin Mörsch. You can reach her at kerstin.moersch@dah.aidshilfe.de or by calling **030 / 69 00 87-67**.

