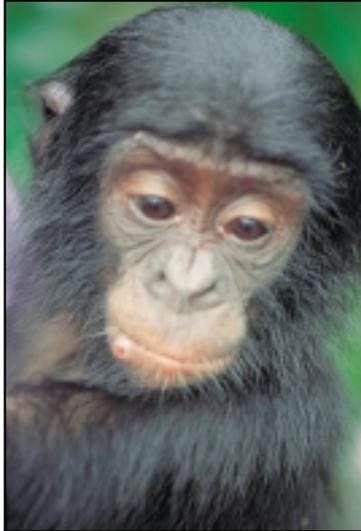


African Apes and humans share more than 98% genetic make-up. Basically all their viruses, bacteria, fungi and parasites are transmissible to humans - and vice versa!



Herpes simplex in a young bonobo - transmitted from humans.

W. Reischel

Ebola is one of the most dangerous viral diseases in humans, it kills 80% of infected people. So far there is no cure. It is unknown where the virus occurs in nature.

In 1976, 300 people died of Ebola in the DR Congo, and in 1994 a further 200 people died there. Then in 1996, again 70 died in the Gabon. The likelihood of a lethal viral epidemic increases with the development of faster transport.

In 1994, 30% of the chimpanzees in Tai National Park also died of an Ebola epidemic. This was the first documented case of the Ebola virus where the location of the infection was actually known. Scientists started the search for the natural source of the virus, which means that the species that are hosts are not showing symptoms, but passing the virus on to other species where it can then break out.

New viruses can permanently affect people, one of which is the **Human Immunodeficiency Virus (HIV) that causes AIDS**. Studies on wild chimpanzees and other primates can prove to be invaluable: Researchers discovered that the two viruses HIV-1 and HIV-2 are closely related with viruses that occur in two primate species.

The **HIV-1 virus** which is responsible for most of the AIDS cases in humans is very similar to the SIV in chimpanzees. Interestingly, chimpanzees do not show symptoms and many scientists regard this as a unique chance for research.

When we understand why chimpanzees are resistant to SIV, then we can gain crucial understanding of how to protect humans from HIV.



W. Reischel

Tonsil inflammation (above) and ulceration (below) in a gorilla - both transmitted by humans.



W. Reischel

Can diseases be transmitted by the consumption of wild animals?

Obviously bushmeat is not part of veterinary monitoring and can be regarded as a disease risk for people. Wild animals and especially primates are the carriers of different viruses that are very dangerous to people. So far, we do not know all the pathogens. Who knew of Ebola and HIV 40 years ago?

A high infection risk exists if freshly killed chimpanzees or other primates are dissected or prepared for food, with humans that are in contact with their blood. Most viruses get killed when cooked - but not all!