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[Top 10 Viral Infections](#)

From flu to HIV

Scientists still debate if they are alive or not, but look what they can inflict in us (and this is just a selection of the most common ones):

1. Flue is caused by a virus transmitted through air. The incubation lasts 1-2 days. The symptoms include fever, cough, loss of appetite, headaches. Ordinary flue can be treated by resting and liquid warm food. The problem that preoccupies the mankind is the possible cross between the virus of ordinary flue and avian flue, which is more deadly, but transmits with higher difficulty. Spanish flu hit the world in 1918-1919 and killed over 30 million persons, soon after the First World War.
2. Measles too is caused by a virus transmitted through air. The incubation lasts 10-14 days, and the virus causes fever, tearing, nose running, throat ache, white dots in the mouth, reddening of the face and trunk. The treatment includes resting, warm liquid, no water, and antibiotics against secondary bacterial infections. Vaccination or experiencing this disease in the childhood ensures immunity for life.
3. Chicken pox (varicella) virus is transmitted via air. The incubation lasts 10-20 days and the disease manifests through fever and the emergence of red dots, accompanied by itching and swelling. The treatment consists in resting, proper diet, and avoiding scratching. Experiencing the disease during the childhood ensures immunity for life.
4. The virus causing poliomyelitis is ingested from infested feces. The disease has an incubation period of 1-3 weeks. It causes fever, throat ache and, in severe cases, partial paralysis caused by the killing of nerve cells. The patients must rest in bed and be isolated. The oral vaccine ensures complete immunity.
5. Yellow fever is transmitted through the bite of the Aedes mosquito. The incubation lasts 3-10 days. The virus causes fever, weakening of the liver, jaundice, and kidney failure. The patient must rest in bed; there is no specific treatment. The vaccine ensures a 10-year immunity.
6. Rabies is transmitted through the bite of an infected animal (usually a dog). The incubation period varies, and the viral infection causes muscular spasms, fits, delirium, breathing difficulties and the refuse of drinking liquids. Immediate vaccination is required in case of biting. Quarantine must be installed in the area, and all infected animals must be killed. Anti-rabies vaccine must be administered in the areas of high risk.
7. Americas escaped the Black Death because of the isolation. But when discovered, the smallpox struck. In 1518, an outbreak of smallpox in the Haiti island left just 1,000 of the Native Indians alive. 100 years after the discovery of America by Columbus, 90 % of its native population died of smallpox. Mexico passed from 30 million to 3 million inhabitants, Peru from 8 million to 1 million. Around the year 1,600, when the first European colonists reached Massachusetts, found it practically uninhabited, as smallpox had killed almost all local Indians. It is believed that, along the history, smallpox has killed more humans than all the wars of the 20th century together. Since 1914 to 1977 smallpox killed 300 to 500 million people. By 1970, smallpox still killed 2 million people annually, but OMS managed to eradicate the diseases through vaccination and the last case was found in Somalia, in 1977. This was possible because smallpox transmits only from human to human. At the time of eradication, no effective cure was known against smallpox. The first vaccine ever was created in 1798 by Edward Jenner and worked against smallpox.
8. Pneumonia affects 1 % of the planet's population and can be produced by viruses or bacteria. It produces fever, shiver, sweating, cough with expectoration, muscle, head and thoracic pain, appetite loss, weakness. This is the main cause of mortality in the world: it kills 3.5 million people each year. It attacks especially patients with severe immunodepression, those that follow chemotherapy, people who are older than 75, asthmatics, smokers, alcoholics, those with renal insufficiency and children under 2 years of age. It affects especially the populations of the poor countries. Therapy includes oxygen, liquids, and physiotherapy. Patients with a simple pneumonia can cure in 2-3 weeks, but elders or those with debilitating diseases can die of respiratory or cardiorespiratory failure. The vaccine trimetropin sulfamethoxazole is effective against the most frequent complications.
9. AIDS is estimated to be found in 46-60 million people and it's produced by the human immunodeficiency virus (HIV), spread through blood, semen, and vaginal fluids. Some say the virus is still in an early stage. The symptoms come rather late and start with exhaustion and fever. After that, ganglion inflammation appears along with persistent diarrhea, pneumonia and weight loss. In the final stage, the patient's general state is profoundly altered. Each minute, five new persons get infected with HIV, and the

virus kills young people, found in their productive period. It has killed 25 million people since 1981 and about 3.3 million people with HIV die annually. 68 million people could die between 2000-2020. Africa has lost 20 % of its labor power. Lifespan in Sub-Saharan Africa is now of 47 years; without AIDS, it would have been 62. In developed world, 58% of the new cases are drug addicts who share syringes, and 33% are infected through unprotected sexual contacts, but in undeveloped countries, it is mainly transmitted through unprotected sex and blood transfusions. 28 million of the HIV infected are found in Africa, and 0.5 million in Western Europe; 300,000 in Eastern Europe, 600,000 in Eastern Asia and Oceania; 2.6 million in America (mostly South America). Antiretrovirals can improve the immunity but its price is too costly for about 95 % of the infected. Only 4 % of the patients in the developing countries receive treatments. This treatment can cost 6-18,000 Euros (\$ 8-25,000) and the virus will get resistance to drugs if the treatment is interrupted. In pregnant women, antiretrovirals during the second and third trimesters of the pregnancy can avoid the child's infection. There is no vaccine, and the combination of up to four different drugs is the main principle in stopping the disease. These drugs keep the blood lymphocytes at normal levels, maintaining the virus latent but without its deadly ability. 10. The human papilloma virus (HPV) is more connected to genital warts. It can be transmitted through vaginal, anal and oral sex, but many strains, besides warts, cause uterine, tongue, mouth, anal, penile, vaginal, and throat cancers. In fact, it has turned into the main cause of uterine cancer in most countries. About 25 million women got an infection with a strain of the Human Papilloma Virus (HPV). Over 3 million have one of the four strains provoking cervical cancer and genital warts. There is a vaccine developed against the strains causing uterine cancer, which seems to protect against other types of these cancers, too.