

Dangerous beauty: Influenza virus A/H1N1

Tips to inactivate the influenza virus.



What you should know about the new influenza virus.

Origin, symptoms, pandemic warning.

Origin

The "new influenza" is a respiratory tract disease caused by influenza viruses of type A/H1N1. As the new influenza virus consists of different influenza viruses (e.g. of the pig), it was first called "swine influenza" or "swine flu".

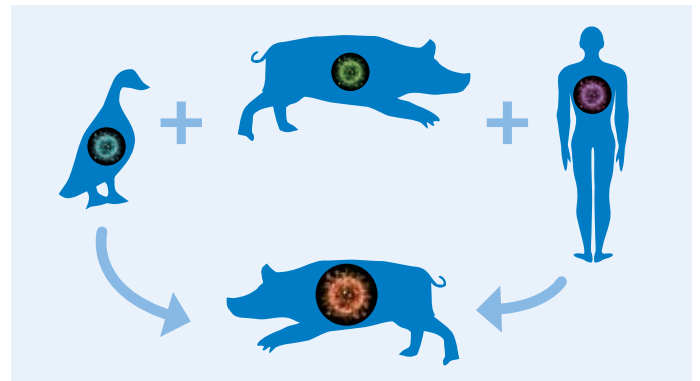
The classic "swine influenza virus" (influenza subtype A/H1N1) was first isolated in 1930 already. The infection rate among pigs was and is indeed high, however mortality is low.

Now, the obviously new manifestation of the pathogen is alarming because it does not only attack animals but also human beings and can be transmitted from human to human. It first appeared in Mexico, which is why the "new influenza" or "swine flu" is also referred to as "Mexico flu".

National and international health authorities use the term "new flu" or "new influenza".

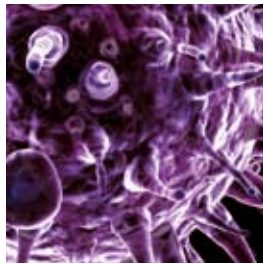
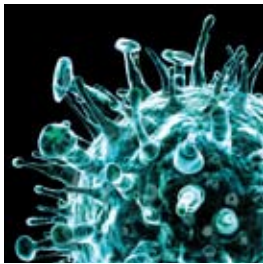
Symptoms

Concerning the current respiratory diseases in humans caused by swine influenza viruses, the WHO has found a new variant of the subtype A/H1N1 called "virus type influenza A/H1N1". The occurring symptoms are very similar to those of a flu which is caused by the known seasonal influenza viruses.



According to the RKI: www.rki.de

Basically, it cannot be foreseen which influenza virus type will develop from a seasonal flu into an epidemic. An epidemic results in clearly more cases with severe course up to cases of death than a flu disease related to seasons. Old and sick people as well as children are especially at risk – a healthy immune system can successfully fight even a severe influenza.



Pandemic

If a national epidemic wave of influenza develops into a worldwide epidemic, this is called a "pandemic". The WHO has drafted a pandemic plan for the approach in case of an outbreak of a global flu epidemic. It is divided into six different warning phases – from the first, still isolated occurrence of a new influenza virus in only one WHO region up to the pandemic proclamation.

Altogether, there are six WHO regions: Africa, America, Southeast Asia, Europe, Eastern Mediterranean, Western Pacific.

From phase 5 to phase 6

Phase 5 refers to a continued human-to-human transmission of a virus in at least two states of a WHO region; concerning the new influenza, America was such a region. Phase 6 means that there have been increased human-to-human transmissions in at least 2 different WHO regions; after Mexico/America this concerned Europe in the current case.

With the proclamation of phase 6 on June 11, 2009, governments all over the world have been informed of the pandemic and prompted to implement their own national pandemic plans.



The WHO regions:

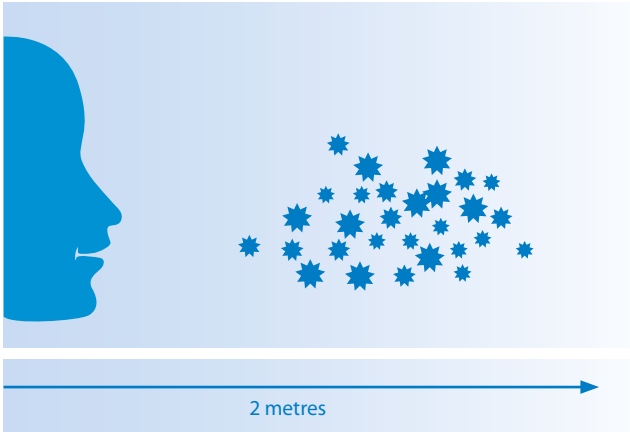
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|--------|-----------------------|-----------------|
| Africa | Eastern Mediterranean | Southeast Asia |
| Europe | America | Western Pacific |

Transmission routes and protection.

Disrupt chains of infections with highly effective products such as **desderman® pure** or **mikrozid® AF**!

Transmission routes

Infection with the pathogen of the new influenza is mainly identical to that of a seasonal flu virus. This means from human to human via droplet infection or via a smear infection during which the virus is transmitted via contact of the hands with contaminated objects or surfaces:



According to the RKI: www.rki.de

- **Droplet infection:**
via coughing or sneezing of an infected person.
- **Smear infection:**
via contact when shaking hands or in case of contact with contaminated objects. Influenza viruses can survive several hours and more on surfaces such as door handles, banisters, tables or tableware, for example. Washing one's hand on a regular basis or hand disinfection can reduce the risk of virus transmission via objects.

Measures and recommendations:

The German Robert Koch Institute (RKI) mentions disinfectants with the effect spectrum "limited virucidal efficacy" (efficacy against enveloped viruses) such as **desderman® pure** for hands and **mikrozid® AF** for surfaces to disrupt the chain of infection.

Hand disinfection with a disinfectant with proven and correspondingly declared efficacy against enveloped viruses is required after direct patient contact, contact with materials containing pathogens or with contaminated objects as well as after taking off gloves before leaving the transfer lock.



Daily **wipe disinfection** of the patient-related (hand contact) surfaces (e.g. nightstand, wet area, door handles) with a disinfectant with proven and correspondingly declared efficacy against enveloped viruses. If required, the disinfection measures are to be extended to further surfaces at risk of contamination.¹⁾



Further information and recommendations:

The WHO provides information about the new influenza at <http://www.who.int/csr/disease/swineflu/en/>

Information and updates given by the ECDC (European Centre for Disease Prevention and Control) at <http://ecdc.europa.eu>

The CDC (Centers of Disease Control and prevention) provides information on the "new influenza" concerning human beings on their website at <http://www.cdc.gov/h1n1flu/>

A comprehensive compilation on flu related issues is available at <http://www.pandemicflu.gov/>

¹⁾ Source: Recommendations of the Robert Koch Institute on hygiene measures in patients suspected of or with confirmed influenza. The recommendations refer to spatial accommodation, staff protection measures, disinfection, cleaning, waste disposal, transport of patients and outpatient care. Issued on August 14, 2009

²⁾ Source: German Federal Health Gazette, Health Research, Health Protection 2004, 47:62-66, DOI 10.1007 /s00103-003-0754-7

The new influenza pathogen – the "enveloped virus" type

Pathogens are divided into "enveloped" and "non-enveloped" viruses, each of which should be disinfected with correspondingly tested disinfectant. The influenza pathogen A/H1N1 is an enveloped virus.

Enveloped viruses – test and declaration

The declaration "limited virucidal product" (meaning and efficacy against enveloped viruses) is made on the basis of tests using relevant test viruses which allow the conclusion on the efficacy against HIV, HCV and HBV. For the declaration "limited virucidal product", the vaccinia virus and BVDV (Bovine Viral Diarrhea Virus) are currently available as test viruses.²⁾

With schülke against enveloped viruses.

Inactivate the influenza virus
with **desderman® pure** and **mikrozyd® AF**.



desderman® pure

Alcoholic preparation for hygienic and surgical hand disinfection.

➡ Our Plus

- bactericidal (incl. Tb) | fungicidal | effective against lipophilic and hydrophilic viruses:
polio-, rota-, adeno-, vaccinia-, herpes simplex viruses, HAV, HBV, HCV, HIV, noro-viruses (effective against enveloped viruses*)
- fast effect and fast drying by means of the ethanol-base
- with a plus-effect for skin protection and care
- without colour and perfume, thus also convenient for allergic persons

* acc. to RKI recommendation, Federal Health Gazette 01/2004



mikrozyd® AF liquid

Ready for use preparation on alcoholic basis for a fast disinfection of medical devices.

➡ Our Plus

- dries quickly
- aldehyde-free
- very extended efficiency (bactericide, fungicide, effective against enveloped viruses*)

* acc. to RKI recommendation, Federal Health Gazette 01/2004



mikrozyd® AF Jumbo wipes

Alcohol based wipes for fast effective disinfection of medical devices.

➡ Our Plus

- dries rapidly, leaving no streaks
- aldehyde free
- very extended efficiency (bactericide, fungicide, effective against enveloped viruses*)

* acc. to RKI recommendation, Federal Health Gazette 01/2004

Use disinfectants safely. Always read the label and product information before use.