

**Position statement of the Central Committee on Biological Safety  
on the risk assessment of influenza viruses**

In the directive 2000/54/EC of the European Parliament and the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work, influenza viruses (genus A, B and C) are generally allocated to **risk group 2**. The ZKBS agrees with this general assessment but recommends assigning some subtypes and strains to **risk group 3**. This regards subtypes and strains associated with a severe course of disease in humans or fowl, or viruses with an increased pandemic potential due to the lack of immunity in the population.

**Recommendation:**

According to § 5 paragraph 1 in conjunction with the criteria listed in Appendix I of the Genetic Engineering Safety Regulations (GenTSV) the following influenza A viruses are assigned to **risk group 3** as donor and recipient organisms in genetic engineering operations:

- the variant of subtype H1N1 that caused the Spanish Flu in 1918
- highly pathogenic avian influenza viruses (HPAIV)
- novel avian influenza A virus of subtype H7N9
- non-contemporary influenza A viruses of the subtype H2N2

**Additional safety measures:**

Besides the safety measures of **containment level 3** it is recommended to wear class 3 respiratory protection (e. g. FFP3 mask) during genetic engineering operations with the listed influenza viruses of **risk group 3**.

Furthermore, it is recommended to shower before leaving the laboratory when genetic engineering operations are performed with the 1918 Spanish Flu H1N1 (1918) variant. This includes changing clothing.

Note:

The influenza A viruses of subtypes H17N10 and H18N11 discovered recently in bats are also assigned to risk group 2.

Furthermore, reference is made to the following positions statement of the ZKBS on influenza A viruses:

- I. Influenza A virus HPAIV (2015), Az. 6790-05-02-34
- II. Influenza A virus SC35 and SC35M (2015), Az. 45242.0116
- III. Influenza A virus Novel avian H7N9 (2013), Az. 45242.0103
- IV. Influenza A virus HPAIV adapted to mammals (2013), Az. 45310.0108
- V. Influenza A virus NS1 mutants (2001), Az. 6790-10-71
- VI. Influenza A virus risk assessment of recombinant viruses (2016), Az. 45310.0113