

# Influenza

## The Austrian Experience

Ingomar Mutz, Leoben (Austria)

# Influenza in Austria

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## **Austrian Yearbook of Statistics:**

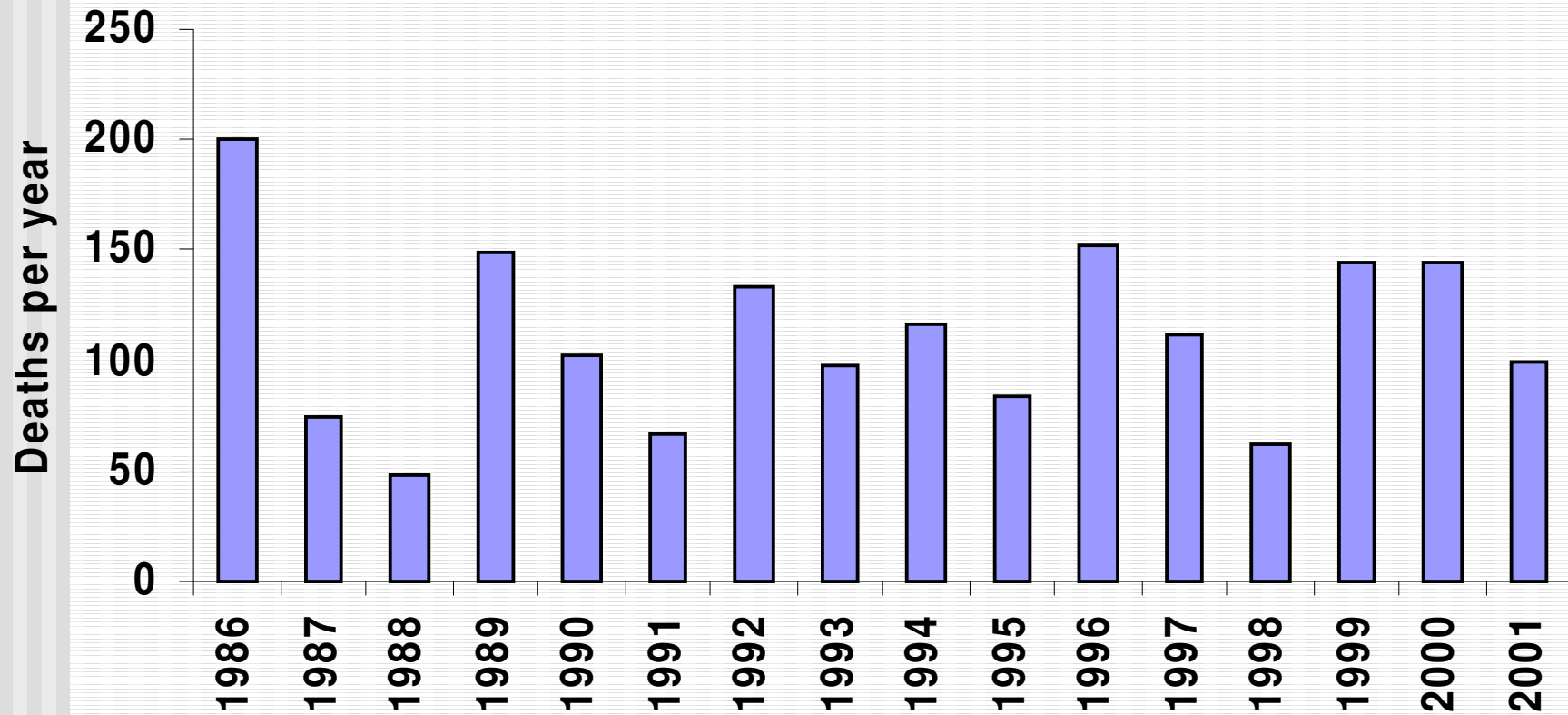
The annual number of deaths due to influenza is given between 50 and 150.

This number is incorrect and much too low.

The reports do not clearly differentiate between confirmed cases of influenza versus respiratory infections due to other viruses.

Therefore, this report system is not able to correctly describe influenza epidemics in Austria.

Deaths due to influenza



### Deaths per week

The weekly death rate in most years shows a peak around new year.

This phenomenon is called **excess mortality**.

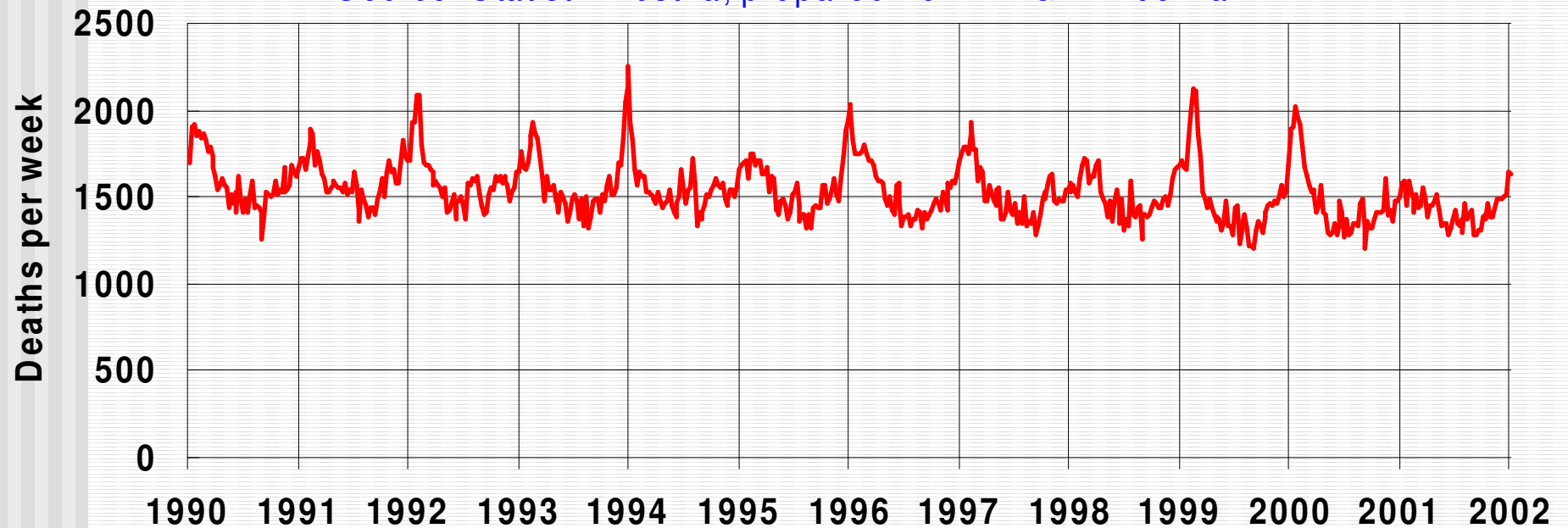
Because in the year **2001** there was no influenza epidemic in Austria there also was no excess mortality due to influenza.

This allows for a better calculation of excess mortality due to influenza during other years.

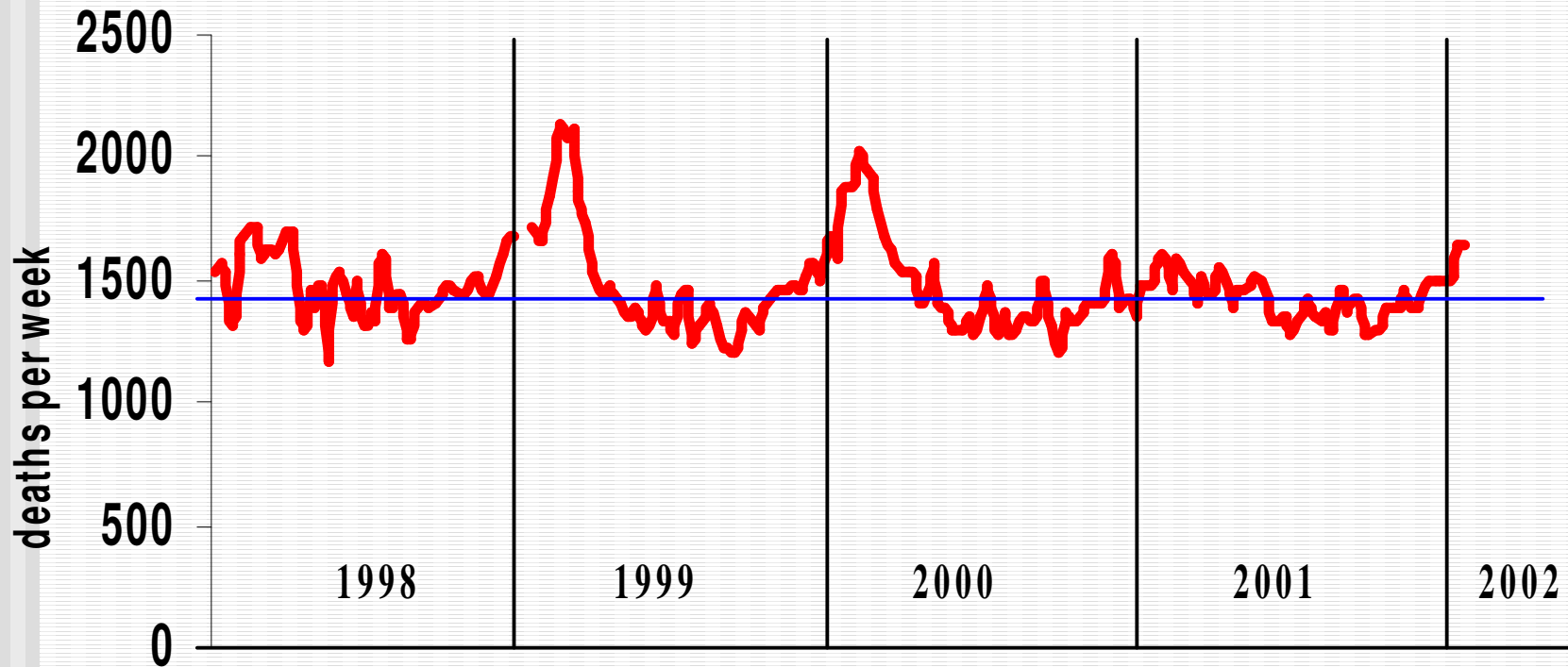
The weekly death rate in years without epidemic  
can be calculated as **1.433**

## Weekly Death Rates in Austria 1990 - 2002

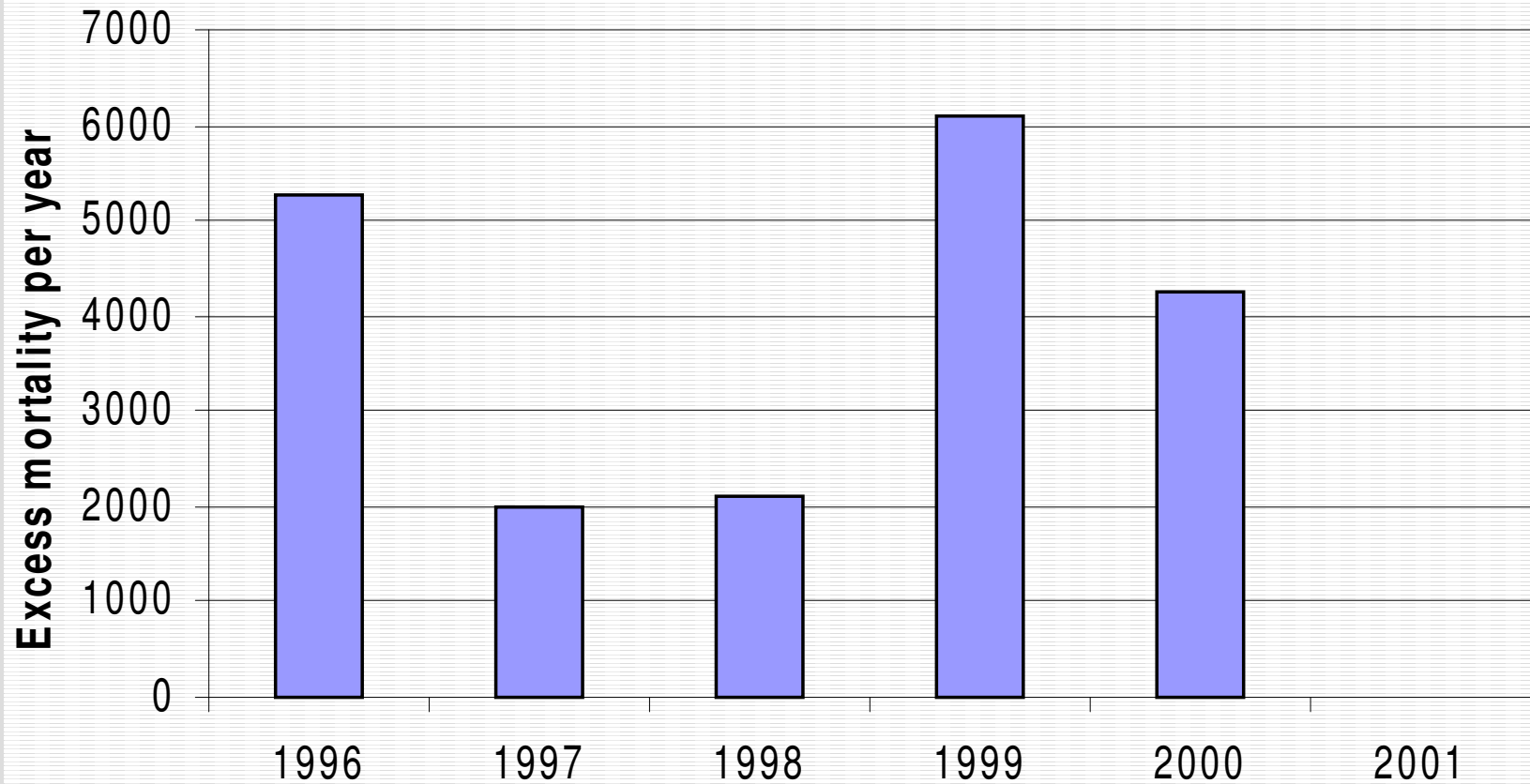
Source: Statistik Austria, prepared from ARGE Influenza



## Deaths per week 1998 - 2001



## Excess mortality due to Influenza in Austria



Data from Mag.pharm. Kurt Vymazal, ARGE Influenza

## Influenza in Austria

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**Excess mortality as an indicator of influenza epidemics:**

**1996: 5.200 deaths**

**1997: 1.990 deaths**

**1998: 2.100 deaths**

**1999: 6.100 deaths**

**2000: 4.200 deaths**

**2001: no excess mortality, short and little virus circulation**

**2002: no excess mortality, short and little virus circulation**

Data from Mag.pharm. Kurt Vymazal, ARGE Influenza



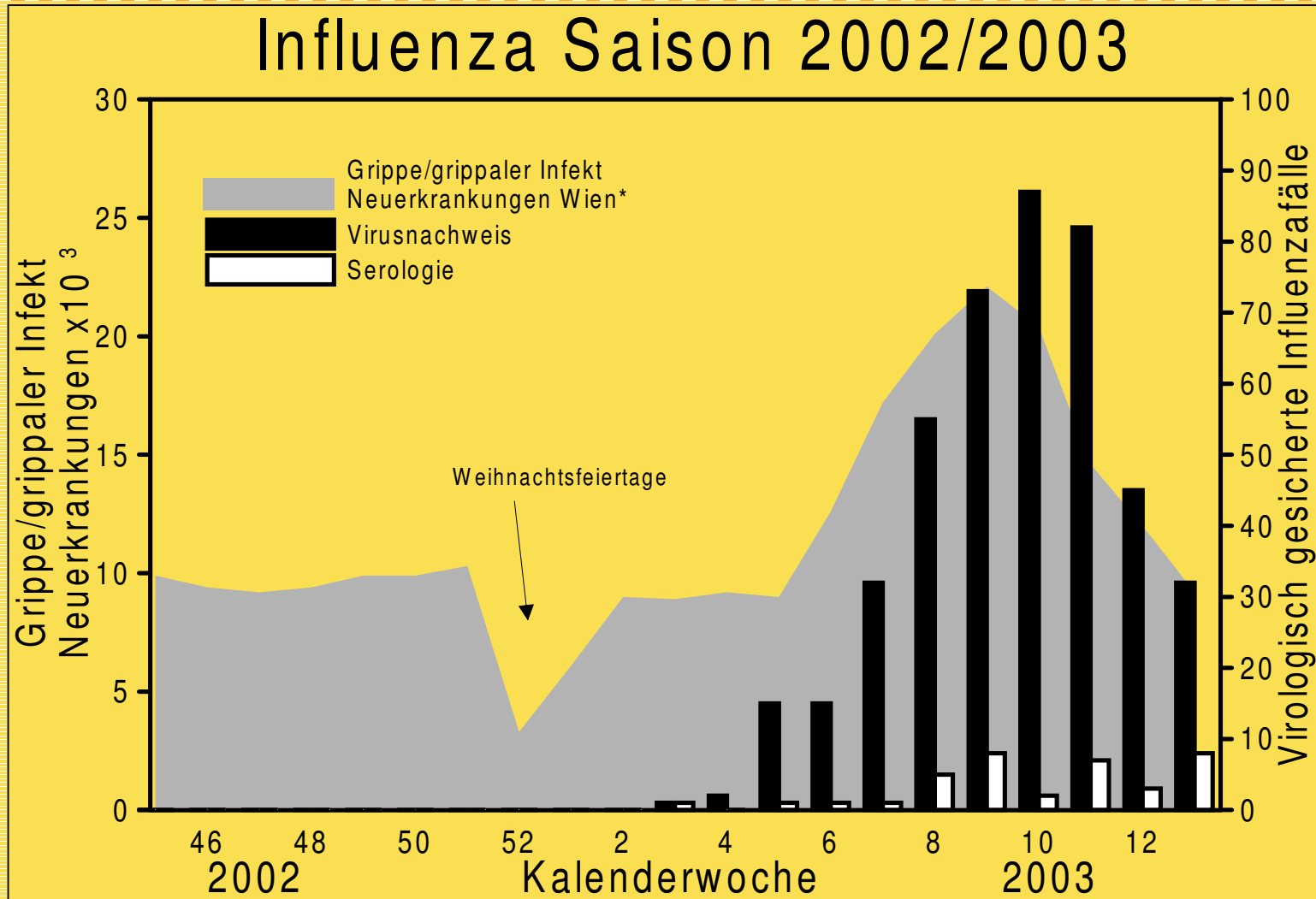
## Influenza in Austria

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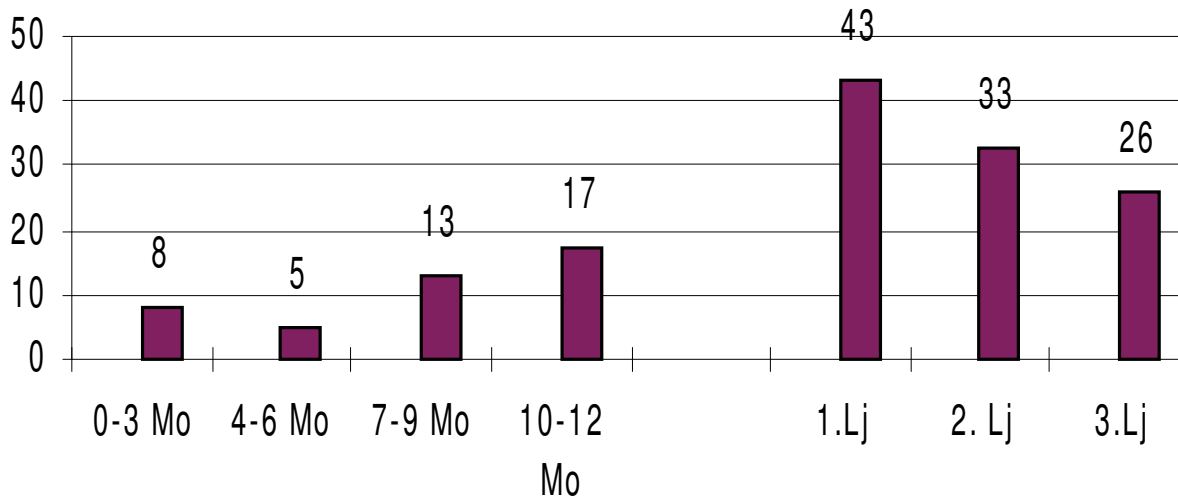
**Correlation of excess mortality and indicators of influenza:**

**Excess mortality correlates with the circulation of influenza virus in the population and the transgression of the epidemic threshold in Vienna.**

# Influenza Saison 2002/2003



### Children with Influenza, LKH Leoben, 1995-2004



n = 156; Age distribution 0 - 3 years = 92

Hospitalisation  
for  
influenza  
in children

≈ 300/yr  
in Austria

156 children, age 0-18 years

43 = 28% 1<sup>st</sup> year

33 = 21 % 2<sup>nd</sup> year

26 = 17% 3<sup>rd</sup> year

= 59%  
during the  
first three years of life!

## Influenza immunization recommendation in Austria

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**Ideally  
all individuals should have the opportunity  
to be vaccinated against influenza.**

In accordance with WHO in  
Weekly epidemiological record (WER) July 17<sup>th</sup> 2002:  
No. 28, 2002, 77, 230-239

## Influenza immunization recommendation in Austria

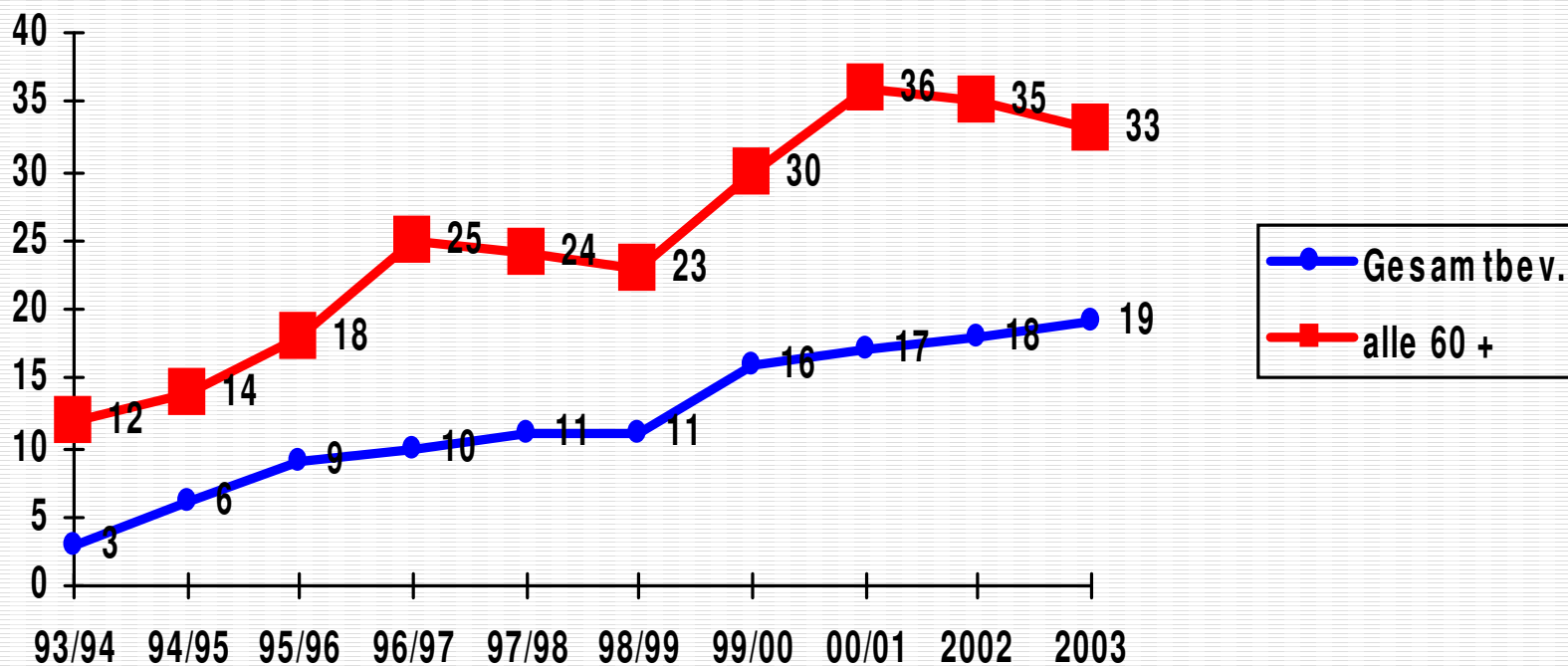
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**Immunization is recommended for everyone  
who wishes to be protected.**

**Immunization is especially recommended for**

- **children (after the 6<sup>th</sup> month of life), juveniles, and adults with increased risk due to underlying diseases such as chronic disorders of lungs, heart, and circulation, kidney diseases, metabolic diseases, and immunodeficiency disorders (inborn or acquired)**
- **persons > 60 years**
- **persons caring for high risk groups (sick children, nursing homes, hospitals)**
- **persons with frequent contact in public**

# Influenza immunization coverage in Austria



Data from Mag.pharm. Kurt Vymazal, ARGE Influenza