

# When the floor is too slippery and the costume too long...

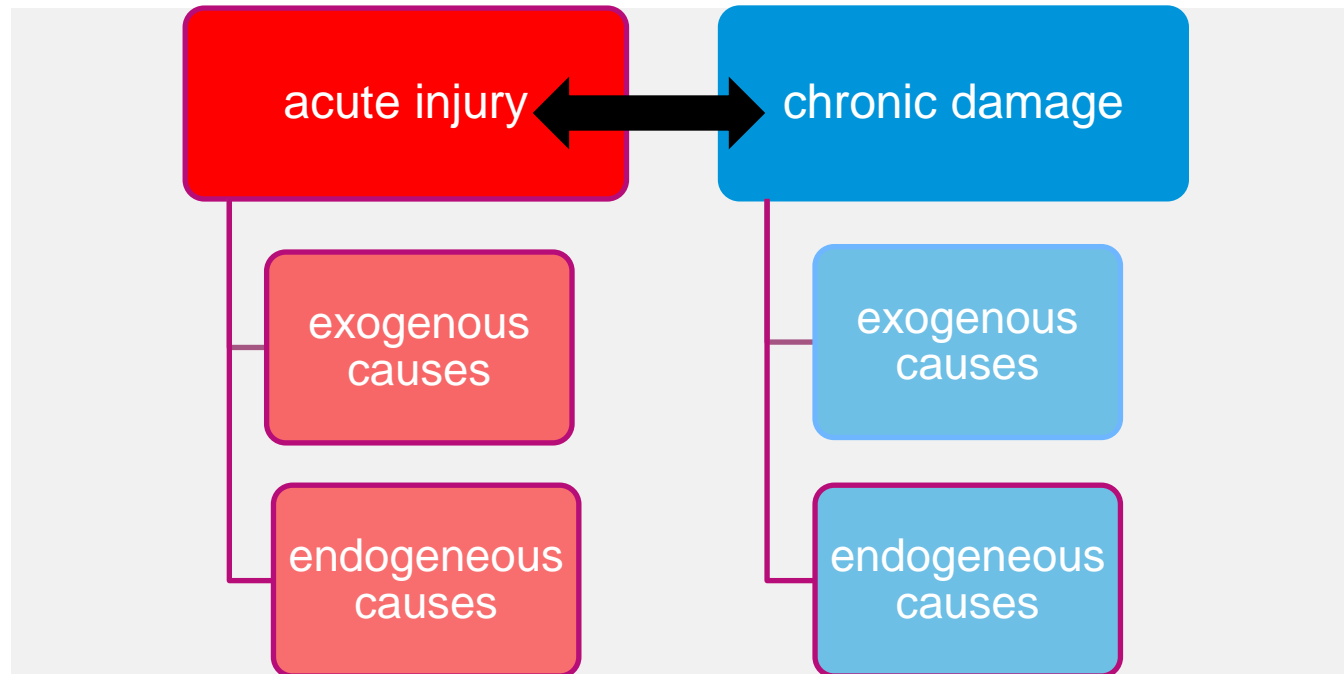
## Exogenous hazards

Eileen M. Wanke



# Definitions

## acute – chronic – exogenous – endogenous



**Figure: Relationship between acute injuries and chronic damage due to faulty use and overuse**

- 46 % of prospective musical theatre performers become ill or injured up to twice a year
- 30 % even three to four times yearly

# Reciprocal influence

## acute – chronic – exogenous – endogenous

### Example: chronic – acute

*Despite chronic complaints the performer went on in an intensive training phase, including an exam at the end of January, as a result of which an accident at work happened in February*

### Example: acute – chronic

*After an accident at work the subject got back to work too soon. An accident happened resulting from chronic inappropriate physical loads*

### Example: chronic – chronic

*A **modified** gait due to complaints in the left knee joint resulted in increased load on the right side of the body and hip joint complaints or back complaints*

➤ Do not trivialize minor complaints/accidents

# Exogenous causes

- dance floor
- dance partner, colleague
- costume/work clothes (e.g. shoes)
- make-up, mask
- props
- (changing) working environment (rooms), stairs/corridors/scenery
- dance technique / voice technique
- non-dance-specific movement sequences/choreographic requirements



**Frequent exogenous and endogenous causes of acute injuries and chronic damage in musical theatre and dance (modified according Wanke et al. 2011, 2012a u. b, 2013, 2014 und Wanke 2012)**

# Indirect exogenous factors

- lighting
- climate (air – temperature – velocity – humidity)
- seasonal planning (training, rehearsals, examination – and performance planning)
- social environment in the educational institution
- quality of offers

**Frequent exogenous and endogenous causes of acute injuries and chronic damage in musical theatres (modified according to Wanke et al. 2011, 2012a u. b, 2013, 2014 und Wanke 2012)**

# Endogenous causes

- anatomical-physiological prerequisites
- physical constitution/training condition
- (general performance capability, basic stamina)
- technical skills
- nutritional status
- fluid balance
- seasonal preparation



Frequent exogenous and endogenous causes of acute injuries and chronic damage in musical theatres (modified according to Wanke et al. 2011, 2012a u. b, 2013, 2014 und Wanke 2012)

# Endogenous causes

- psychological factors (e.g. stress tolerance, mental resilience)
- social environment (e.g. financial security)
- knowledge of self-care

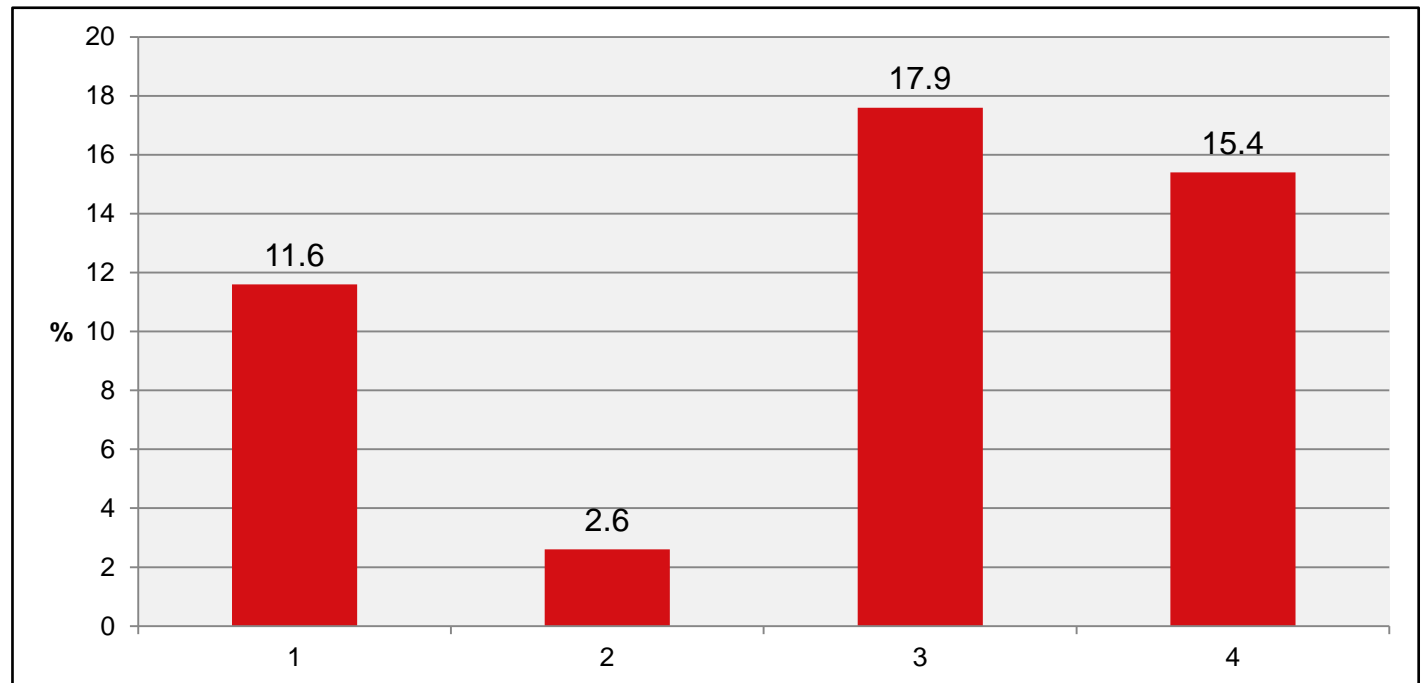
**Frequent exogenous and endogenous causes of acute injuries and chronic damage in musical theatres (modified according to Wanke et al. 2011, 2012a u. b, 2013, 2014 und Wanke 2012)**

# Causes of acute injuries in musical theatres

(see work sheet)

Choose from the exogenous hazards:

- dance partner
- dance floor
- props
- costume



According to: Wanke, EM; Kunath, EK; Koch, F; Davenport, J; Weisser, B; Groneberg, DA; Mache, S; Endres, E; Vitzthum, K: Survey of health problems in musical theater students: a pilot study. Med Probl Perform Art 2012 Dec; 27(4): 205–11.

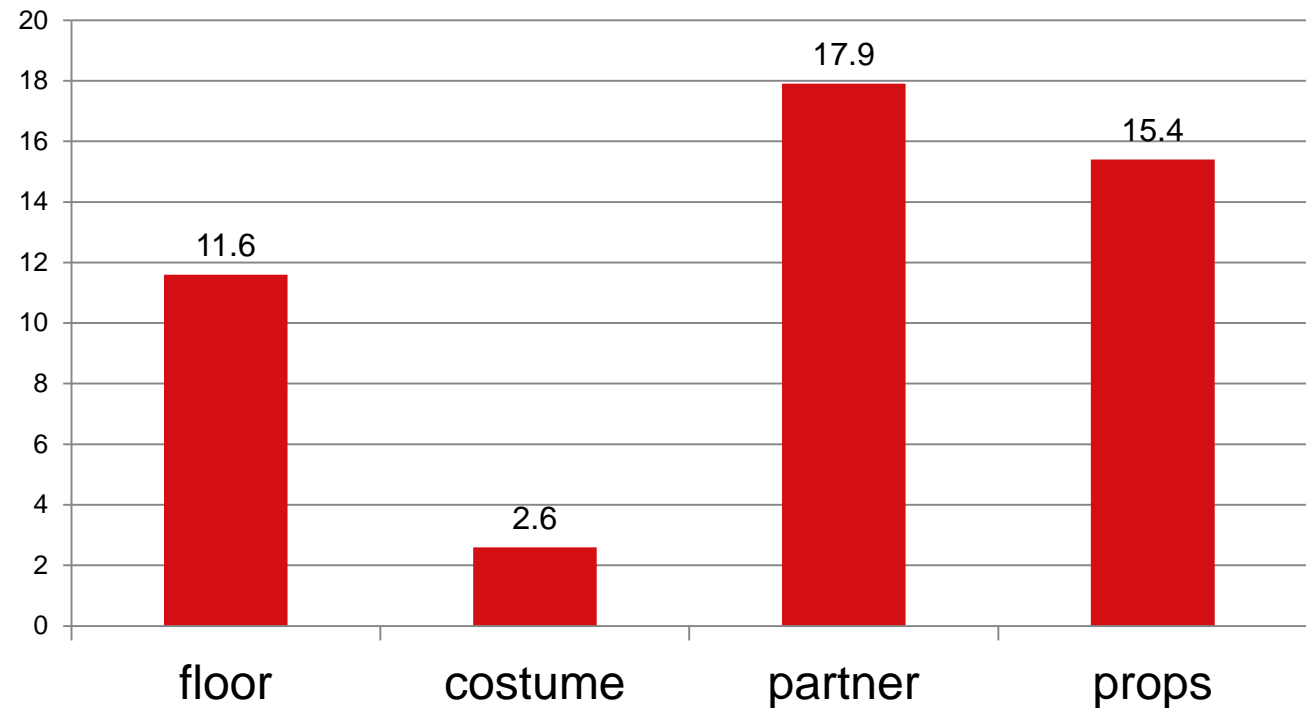


# Causes of acute injuries in musical theatres

(see work sheet, result)

Choose from the exogenous hazards:

- dance partner
- dance floor
- props
- costume



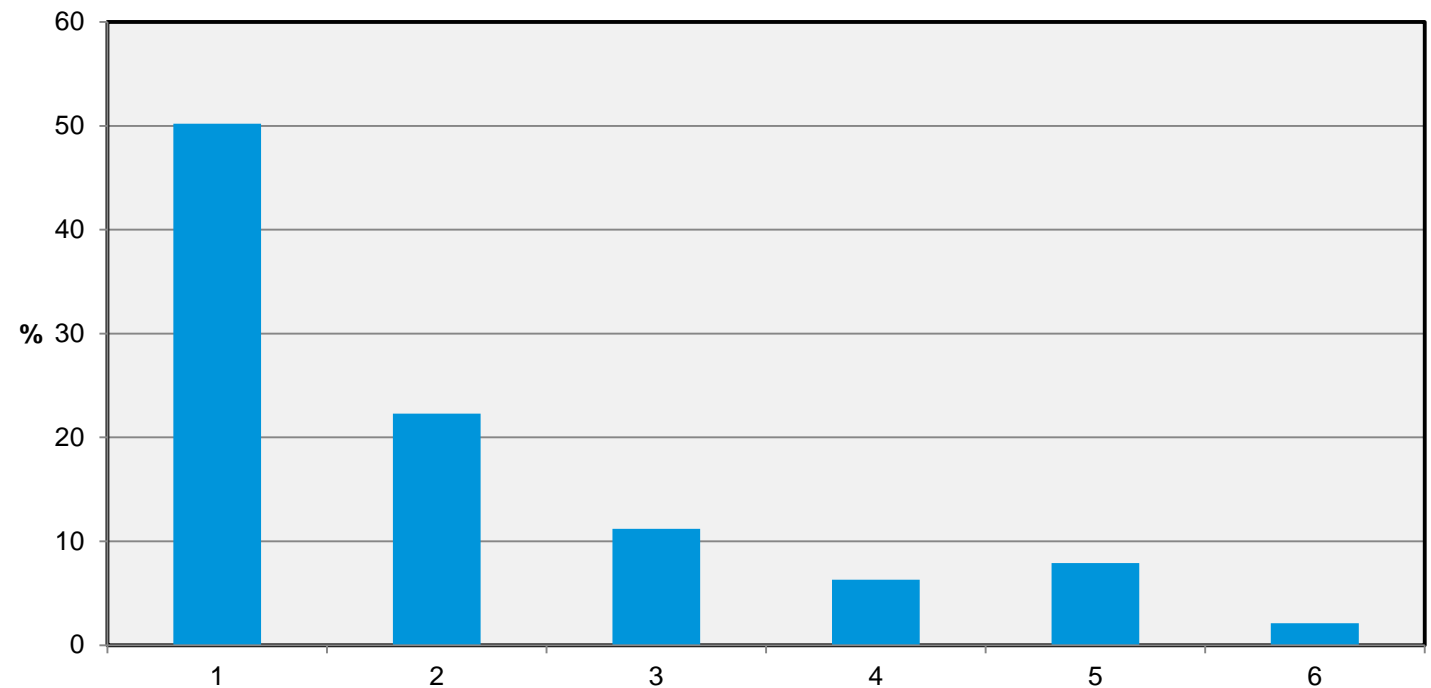
According to: Wanke, EM; Kunath, EK; Koch, F; Davenport, J; Weisser, B; Groneberg, DA; Mache, S; Endres, E; Vitzthum, K: Survey of health problems in musical theater students: a pilot study. Med Probl Perform Art 2012 Dec; 27(4): 205–11.

# Causes of chronic complaints

(see work sheet)

Choose from the following causes:

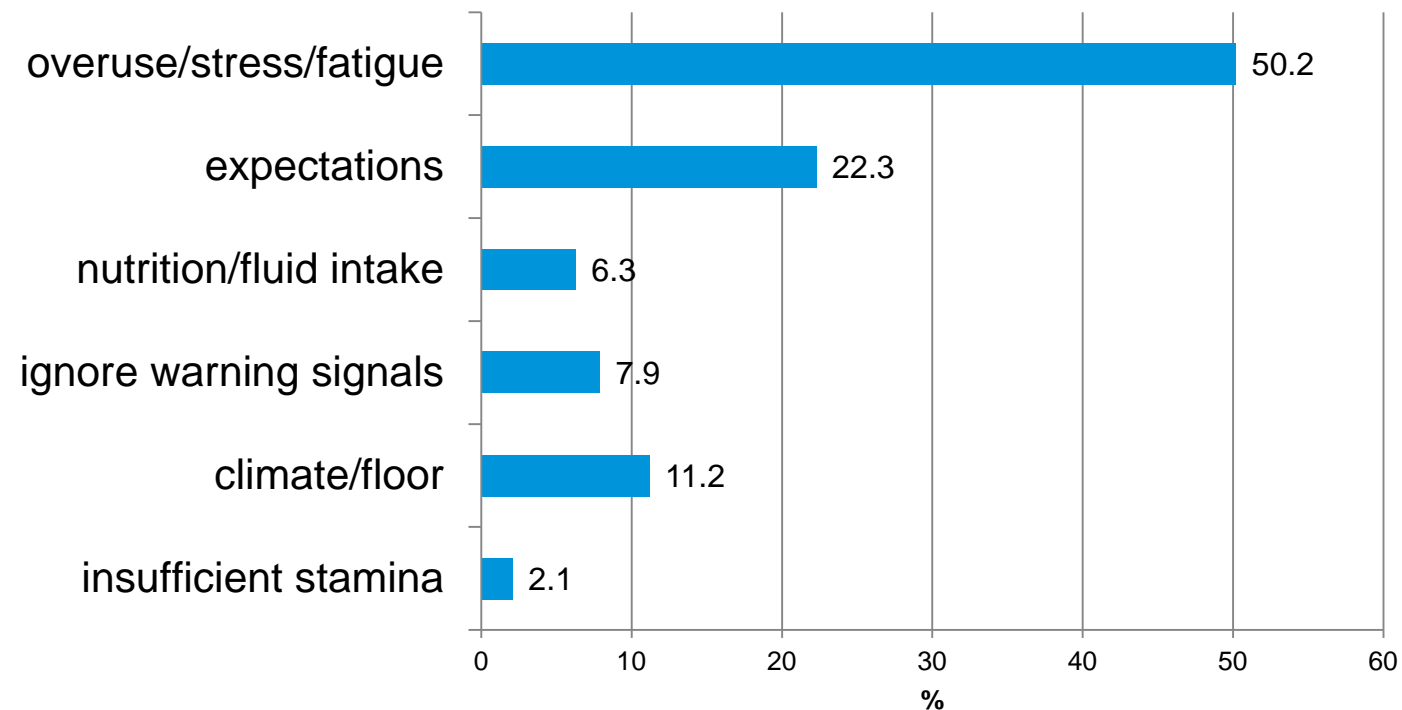
- benefit entitlement/ expectations
- climate/floor
- overload/fatigue/stress
- ignoring warning signals
- inadequate fitness
- nutrition/fluid intake



According to: Wanke, EM; Kunath, EK; Koch, F; Davenport, J; Weisser, B; Groneberg, DA; Mache, S; Endres, E; Vitzthum, K: Survey of health problems in musical theater students: a pilot study. Med Probl Perform Art 2012 Dec; 27(4): 205–11.

# Causes of chronic complaints

(see work sheet, result)



According to: Wanke, EM; Kunath, EK; Koch, F; Davenport, J; Weisser, B; Groneberg, DA; Mache, S; Endres, E; Vitzthum, K: Survey of health problems in musical theater students: a pilot study. Med Probl Perform Art 2012 Dec; 27(4): 205–11.

# Imprint

**Publisher:****Verwaltungs-Berufsgenossenschaft (VBG)**

Massaquoipassage 1

22305 Hamburg

Mailing address: 22281 Hamburg

**Author:**

Priv.-Doz. Dr. Dr. med. Eileen M. Wanke

**Illustrations:**

Alice Wanke (slides 1, 4, 6)

**Translation and text editing:**

Alice Wanke and Jeremy Leslie-Spinks

**Realisation:**

Jedermann-Verlag GmbH

[www.jedermann.de](http://www.jedermann.de)

This set of slides belongs to the teaching materials of the syllabus “Prevention in Musical Theatre and Dance” (Scotsy.MD1.15), 2017

Under [www.vbg.de/prevention-musical-dance](http://www.vbg.de/prevention-musical-dance) you will find the following additional material:

- Methodological-didactical commentary
- Background information for teachers
- Work sheets
- Media collection