



# Occupational accidents and occupational muscular skeletal diseases in hairdressers – an analysis of German insurance data

# Outline

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1. Introduction – Centre of Excellence for Health Services Research for Healthcare Professionals (CVcare)
2. Data from Statutory German Accident Insurance (BGW)
  - workplace & work-related traffic accidents
  - suspected occupational diseases

CVcare ■ ■ ■ ■ Centre of Excellence for Health  
Services Research for Healthcare Professionals

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# Introduction - MSD burden

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Source: Coral Club International

# Grandparents, Parents, Children

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Prevalence of MSD increases with age

## Socio-economic factors

- Social class
- Age
- Education
- Labour status/unemployment

## Work-related factors

- Trade sector
- Overload/incorrect loading
- Psychosocial stress
- Lack of gratification
- Work dissatisfaction
- Lack of social support

## Psychological factors

- Depressive disorders
- Fear or anxiety
- Stress, family pressures

## Behavioral factors

- Physical inactivity
- Malnutrition and malnourishment
- Tobacco use

## Structural factors

- Potential tripping hazards

## Physical constraints/ pre-existing conditions

- Overweight / obesity
- Sport injuries
- Accidents
- Impairment of senses

## Health competence

- Low health awareness

Musculoskeletal disorders

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graph TD; A[Socio-economic factors] --> D[Musculoskeletal disorders]; B[Work-related factors] --> D; C[Psychological factors] --> D; E[Behavioral factors] --> D; F[Structural factors] --> D; G[Physical constraints/pre-existing conditions] --> D; H[Health competence] --> D;
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# Work related disease and occupational disease

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- Work related disease:
- Exposure at work is one of several other factors causing the disease.
- Occupational disease
- The disease is mentioned on a list of the government.
  - It is likely that the disease would not have been occurred without the exposure at work

# MSD as occupational disease (OC) in Germany

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- Disc degeneration of the lumbar spine due to heavy lifting and bending forward for more than 90°
- Disc degeneration of the neck due to carrying customers
- Arthrosis of the knee due to kneeling and crouching
- Problems of tendons and tendons sheath due to new, unaccustomed strenuous work
- **Carpel tunnel syndrome due to repetitive movements, inclinations and forceful work of wrist**



Conclusion: Most MSD as OC do not apply for hairdressers

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## 2. Data on hairdressers from Statutory Accident Insurance

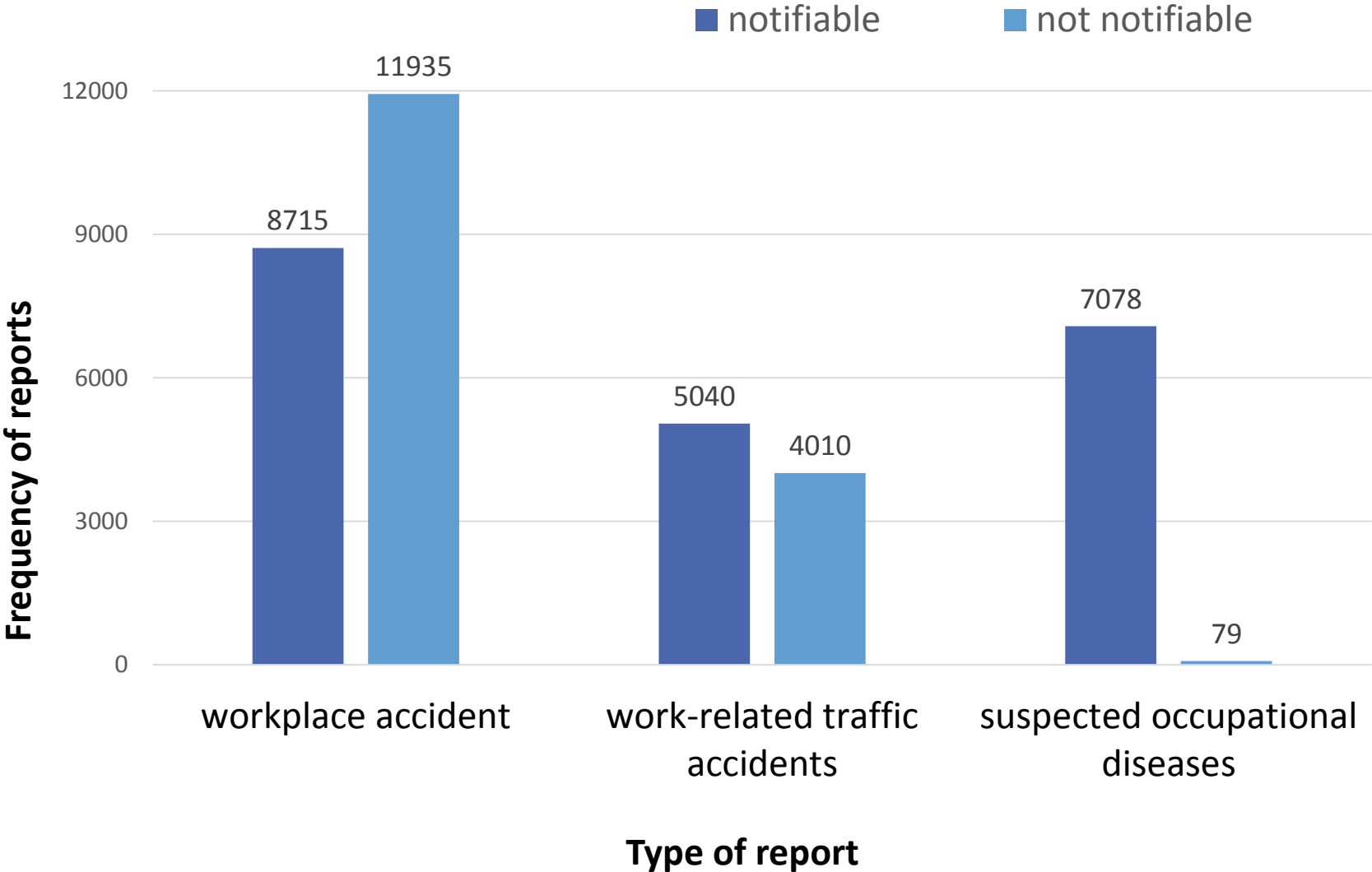
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Routine data from Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Services (BGW)

1. Workplace accidents
2. Work-related traffic accidents
3. Occupational diseases



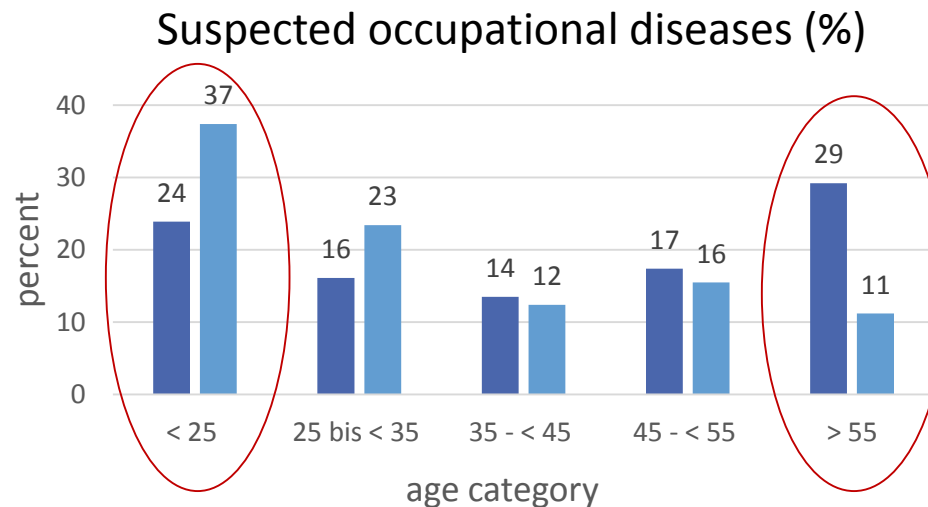
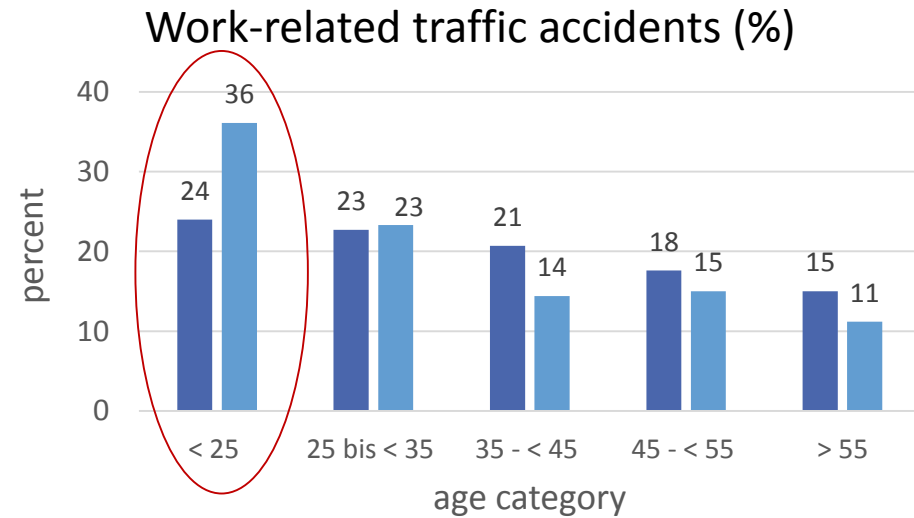
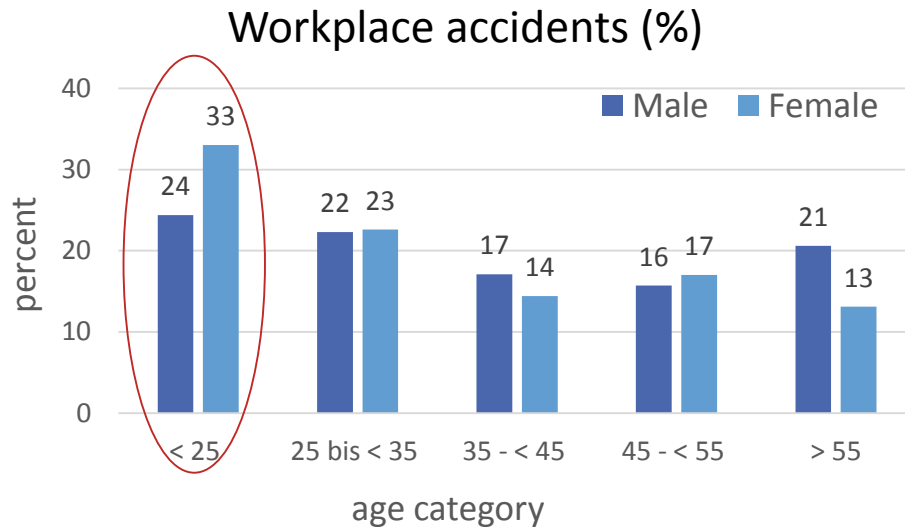
# Reported incidents for the years 2012-2016 in hairdressing



## Number per 1.000 workers of workplace / work-related traffic accidents and occupational diseases

year	1. workplace accidents		2. work-related traffic accidents		3. suspected occupational diseases	
	hair-dressers	all insured	hair-dressers	all insured	hair-dressers	all insured
2012	7.7	15.3	3.4	4.3	7.1	2.7
2013	7.9	15.2	3.3	4.6	6.6	2.7
2014	7.6	15.8	2.9	4.2	6.4	2.7
2015	7.6	15.7	4.2	4.3	5.8	2.8

# Incident statistics stratified by age and gender



# Workplace accidents – injured body part & type of injury

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Injured body part
Hand (56%)
Feet (14%)
Knee (7%)
Wrist (6%)
Shoulder/elbow (5%)

Type of injury
Rupture (50%)
Bruise (18%)
Dislocation (16%)
Fracture (11%)
Burns (2%)

## Accident circumstances (60% happened in the salon)

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Action which lead to an accident	%
1. Moving (e.g. walking, running, go up or down)	38
2. Working with hand tools	26
3. Driving or go with a vehicle	20
4. Manual handling (grabbing, holding something)	11
5. Other (e.g. carrying loads)	6

# Reported suspected occupational diseases (2012-2016)

## MSD – TOP 3

Group of diseases	Reporting year					Total (%)
	2012	2013	2014	2015	2016	
1. Skin disease	1.071	1.056	932	819	733	4.611 (67)
2. Respiratory disease	266	241	216	207	179	1.109 (16)
<b>3. Musculoskeletal disorders</b>	<b>104</b>	<b>94</b>	<b>82</b>	<b>105</b>	<b>113</b>	<b>498 (7)</b>
4. Chemical influences	47	45	60	39	43	234 (3)
5. Dusts and exogenous allergic substances	4	3	6	8	9	30 (<1)
6. Infectious agents	1	3	0	0	2	6 (<1)
7. Other (noise-induced hearing loss)	99	67	74	67	55	362 (5)
Total	1.592	1.509	1.370	1.245	1.134	6.850 (100)

## Type of the suspected occupational MSD

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Type of MSD	%
<b>1. Diseases of the back and spine</b> [cervical disc shifts; low-back-pain, other protrusion]	<b>59</b>
<b>2. Diseases of the upper extremities</b> [epicondylitis, tenosynovitis, shoulder diseases, periarthrosis of the hand, carpal tunnel syndrome, rhizarthrosis]	<b>33</b>
<b>3. Diseases of the lower extremities</b> [gonarthrosis, injury of knee joints]	<b>8</b>

→ Only **10** suspected cases with MSD were confirmed as occupational disease



### 3. Data from three health insurance companies in GER (2011) MSD – TOP 1

Health insurance companies	IKK Classic		AOK Bayern		IKK Nord	
	No. of hairdressers 29,646 (%)	All (%)	18,167 (%)	All (%)	4,029 (%)	All (%)
1. MSD	<b>21</b>	26	<b>16</b>	23	<b>21</b>	25
2. Injuries/Poisoning	<b>14</b>	13	<b>12</b>	14	<b>15</b>	24
3. Respiratory diseases	<b>11</b>	16	<b>15</b>	11	<b>14</b>	13
4. Psychological diseases	<b>11</b>	9	<b>10</b>	10	<b>12</b>	9

## Conclusion

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- Hairdressing is not accidents prone
- Following German law MSD in hairdressers is seldom recognized as an occupational disease
- MSD is a frequent cause of absence from work

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# Thank you for your attention

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