PLEASE NOTE:
IN COMPLIANCE WITH EACCME REQUIREMENTS ALL SPEAKERS ARE REQUESTED TO INCLUDE A SLIDE DISCLOSING CONFLICTS OF INTEREST AT THE BEGINNING OF THEIR PRESENTATION.
## Faculty Disclosure

<table>
<thead>
<tr>
<th>x</th>
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SUMMARY

• Introduction
• Epidemiology
• Recognition
• Reporting and collecting data
• Cutaneous risk
• Prevention
• Italian data
• Conclusions
• Recommendations
INTRODUCTION

• Skin is the most extensive organ in the human body (2m²)
• Exposed to chemical, physical and biological risks
• Occupational skin diseases are among the most important emerging risks in Europe
• No standard definition for occupational dermatoses
• Different MS systems
  – occupational health
  – reporting methods
  – social insurance legislation
• Poor epidemiological description
• Risk factors control

- In 2001 OSD accounted for 11.2% of all OD
- In 2005 OSD accounted for 7.1% of all OD
- No standard definition to approach skin diseases
- European Occupational Diseases Statistics (EODS) collects data from new MS since 2004
- The number of cases is underestimated
<table>
<thead>
<tr>
<th>Disease</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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<tbody>
<tr>
<td></td>
<td>% of occ. dis.</td>
<td>Inc. rate</td>
<td>% of occ. dis.</td>
<td>Inc. rate</td>
<td>% of occ. dis.</td>
</tr>
<tr>
<td>Contact dermatitis</td>
<td>10.90</td>
<td>5.20</td>
<td>10.90</td>
<td>7.40</td>
<td>10.40</td>
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<tr>
<td>Contact urticaria</td>
<td>0.25</td>
<td>0.10</td>
<td>0.22</td>
<td>0.10</td>
<td>0.30</td>
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<tr>
<td>Skin cancer</td>
<td>0.01</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Total no. of skin diseases</td>
<td>11.20</td>
<td>5.30</td>
<td>11.10</td>
<td>7.50</td>
<td>10.70</td>
</tr>
<tr>
<td>Total no. of occupational diseases</td>
<td>100.0</td>
<td>0</td>
<td>47.10</td>
<td>100.00</td>
<td>67.6.</td>
</tr>
</tbody>
</table>
EPIDEMIOLOGY

% of occupational skin diseases - by gender

% of occupational skin diseases - by age
The chart below shows the distribution of injuries by NACE branches. The highest percentage of injuries is in the Mining and quarrying sector (31.5%), followed by Manufacturing (10.4%), Fishing (7.1%), Agriculture, hunting and forestry (4.1%), and so on. The lowest percentage is in the Activities of households (0.3%).
RECOGNITION

INTERNATIONAL LEVEL

• ILO Convention N° 121/1964 provided a list of OD
  – Among diseases caused by biological, physical and chemical agents, specific skin diseases are listed

• List of OD Recommendation N° 194/2002
  – Requires that national lists of OD comprises the diseases contained in the ILO list.

• ILO new list of OD 25 March 2010
  – Skin diseases are included
## ILO List of OD (incl. suspected OD)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ODs caused by occupational exposure to:</td>
</tr>
<tr>
<td>1.1</td>
<td>chemical agents</td>
</tr>
<tr>
<td>1.2</td>
<td>physical agents</td>
</tr>
<tr>
<td>1.3</td>
<td>biological agents</td>
</tr>
<tr>
<td>2.</td>
<td>ODs by target organ systems</td>
</tr>
<tr>
<td>2.1</td>
<td>respiratory</td>
</tr>
<tr>
<td>2.2</td>
<td>skin</td>
</tr>
<tr>
<td>2.3</td>
<td>musculo skeletal diseases</td>
</tr>
<tr>
<td>2.4</td>
<td>mental / behaviour</td>
</tr>
<tr>
<td>3.</td>
<td>occupational cancer</td>
</tr>
<tr>
<td>4.</td>
<td>other diseases</td>
</tr>
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</table>
• ILO new list of OD 25 March 2010
  – Includes a range of internationally recognised occupational diseases
  – Has open items in all sections
  – The open items allow for the recognition of the occupational origin of diseases if a causal relationship with work is established
• Commission Recommendation 2003/670/EC 19 September 2003
  – European schedule of occupational diseases (Annex I)
  – Scientifically recognised as occupational in origin
  – Liable to compensation
  – Preventive measures must be applied
  – The diseases statistics of MS are collated annually and released in the form of the EODS (EUROSTAT)
  – Additional list of diseases suspected of being occupational in origin (Annex II) subjected to notification that may be considered for inclusion in Annex I at a later stage.
• Report on the current situation in relation to occupational diseases' systems in EU Member States and EFTA/EEA countries, in particular relative to Commission Recommendation 2003/670/EC concerning the European Schedule of Occupational Diseases and gathering of data on relevant related aspects.
• Objectives of the European schedule of occupational diseases
  – To improve the knowledge at EU level by collecting and comparing information
  – To encourage MS to formulate quantified objectives to reduce the number of diseases
  – To help workers to prove the link between their occupations and their diseases for compensation
NATIONAL LEVEL

• European MS determine for themselves the criteria for recognising occupational diseases

  – OD resulting from physical, chemical or biological factors associated with a patient’s job are recognised in all EU MS

  – The reporting of any occupational disease is obligatory

  – Skin diseases are included in the national lists of OD
In most countries the recognition of OD is based on the recognition of a “professional risk”

- Causal relationship between the disease and exposure to a harmful situation or agent
- The exposure is linked to a workplace
- The disease occurs among the groups of people concerned with a frequency higher than in the general population
- The recognition of the individual cases can be based on a national list of occupational diseases based on the European list of OD
• Characteristics of National lists
  – National lists are sometimes more comprehensive than the European list (Finland and Germany)

  – May include specific diseases relevant to the country concerned

  – The main aim of the list is to facilitate notification and compensation
• Four main types of national list systems
  – No OD compensation system (IS, NL)
    • No national list
    • No specific compensation of OD
    • Compensation only by employers’ liability
  – Very open compensation system of OD without a national list (SE)
  – Mixed systems with a national list and a complementary clause (AT, IT, BE, EE, DE, LV, LT, SK, DK, FR, HU, PT, CH)
    • The legal conditions for recognition differ between MS (restrictive conditions in DE, wide conditions in FR)
  – Closed systems with a national compensation list, no complementary clause reported, with some differentiation in detail (GR, CY, MT, NO, BG, CZ, PL, RO, SI, FI, IE, ES, UK).
**RECOGNITION**

26 countries having a list of ODs

<table>
<thead>
<tr>
<th>EE</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CY</th>
<th>PT</th>
<th>CH</th>
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<tr>
<td>GR</td>
<td>CZ</td>
<td>DK</td>
<td>FI</td>
<td>FR</td>
<td>RO</td>
<td>UK</td>
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<td>HU</td>
<td>DE</td>
<td>IE</td>
<td>IT</td>
<td>LU</td>
<td>SK</td>
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<tr>
<td>SI</td>
<td>LT</td>
<td>MT</td>
<td>NO</td>
<td>PL</td>
<td>ES</td>
<td></td>
</tr>
</tbody>
</table>

23 countries having a specific compensation system

| SE |

* these 4 countries have a list of ODs just for recognition and recording (no specific benefits for the victim)

** no list, no specific compensation system
• **Primary goals**
  – Identify the main problems
  – Detect new diseases and risk factors
  – Gain insight in the causes and prevention of OD
  – Predict and study trends and take precautions

• **European Data**
  – National statistics for OD recognised EODS and later to WHO and ILO
  – Information on age, gender, diagnosis, occupation, economic sector, severity and causative agent

• **National data**
  – Data on OD are collected from doctors (GPs, OP, Dermatologists)
  – Forwarded to national institutions and/or local authorities
  – Most EU MS have national surveillance schemes for reporting and registration of OD (In Italy the National Register is held at INAIL)
• To fully recognise the risks of dermal exposure
  – More information about the extent of the hazards and workers’ exposure
  – The prevalence of OSD in EU indicates the the exposure assessment is important
  – Difficult to quantify dermal exposure: no occupational exposure levels (OELs)
  – Difficult for employers a realistic risk assessment and control measures
  – European RISKOFDERM project coordinated by the DUTCH Institute TNO
  – European Commission mandate M/461 “Standardisation activities regarding nanotechnologies and nanomaterials”
Skin diseases can be prevented by the combined application of the following measures

- Technical
- Organisational
- Medical

The aim is to eliminate or minimise the exposure of skin to RF

Different methods across EU including workers’ health surveillance

European bodies concerned with occupational safety and health

- The European Foundation for the Improvement of Living and Working Conditions (Eurofound) in Dublin (http://www.eurofound.europa.eu).
• **General or collective prevention (more effective)**
  
  – Avoidance of allergens/carcinogens/corrosives products
    • Removal
    • Replacement
    • Transforming, neutralising, reducing or entrapping
    • Avoidance of contact
  
  – Use in closed or isolated systems for continuous operations
  
  – General ventilation and localised extraction
  
  – General cleanliness at and of the workplace
  
  – Better knowledge of the products handled
    • safety instruction sheets
    • pictograms
  
  – Basic organisational measures
• Personal protection (less effective)
  – Programme in three stages
    • Before and during work
      – First stage: use individual means of protection
        (clothing - gloves-, creams, gels)
    • After work
      – Second stage: adequate cleaning of the skin - hands - before any break
      – Third stage: skin care
        (emollient, moisturising and/or anti-inflammatory creams or ointments)
• **INAIL Workers’ Compensation Authority**
  – **1934** Social protection of 6 OD
  – **1965** T.U. 1124 (art. 3 e art. 139)
  – **2000** D.L.vo n. 38 art. 10 (OD National Register)
  – **2008** D.M. 9.4.2008 (New National list of OD: 85 industry and 24 agriculture)

• **OSD listed**
  – Contact irritative dermatitis, Contact allergic dermatitis, other diseases, skin cancers
  – Industry (diseases due to exposure to specified chemical compounds and physical agents such as XR, infrared and solar radiation)
  – Agriculture (diseases due to exposure to specified chemical compounds and solar radiation)

• **Mixed system (OD list and open clause)**
  – Integrated system of protection from prevention to RTW with benefits in cash and kind
ITALIAN DATA

• INAIL Central Directorate for Statistics
  – Occupational skin diseases listed and not listed
  – 2010-2013 trend
  – Ratio OD recognitions/OD claims
  – Ratio OSD/OD
  – ICD-10
  – Economic sector and occupation
  – Gender
ITALIAN DATA

TOTAL OD
TREND 2010/2013
OD CLAIMS: 191,774
OD RECOGNISED: 80,930
ITALIAN DATA

IMPACT OF SKIN DISEASES
TREND 2010/2013
OSD CLAIMS: 2.973
OSD RECOGNISED: 1.518

OSD CLAIMS 2010/2013: 1,6%
OSD RECOGNISED 2010/2013: 1,9%
TREND 2010/2013
OD CLAIMS: 273
OD RECOGNISED: 151

FEMALE: 22 - 15%
MALE: 129 - 85%

OD RECOGNISED BY ECONOMIC SECTOR

AGRICULTURE: 62%
ARTISANS: 10%
PRODUCTION INDUSTRIES: 4%
PUBLIIC ADMINISTRATION: 4%
SERVICE INDUSTRIES: 20%
ITALIAN DATA
SKIN MELANOMA

TREND 2010/2013

OD CLAIMS: 60
OD RECOGNISED: 7

FEMALE: 0
MALE: 7
ITALIAN DATA

CONTACT ALLERGIC DERMATITIS

TREND 2010/2013
OD CLAIMS: 1.973
OD RECOGNISED: 1.098

FEMALE: 490 - 45%
MALE: 608 - 55%

OD RECOGNISED BY ECONOMIC SECTOR:
- AGRICULTURE: 39%
- ARTISANS: 18%
- PRODUCTION INDUSTRIES: 34%
- PUBLIC ADMINISTRATION: 7%
- SERVICE INDUSTRIES: 2%
ITALIAN DATA

CONTACT IRRITATIVE DERMATITIS

TREND 2010/2013

OD CLAIMS: 321
OD RECOGNISED: 188

FEMALE: 74 - 39%
MALE: 114 - 61%

OD RECOGNISED BY ECONOMIC SECTOR

AGRICULTURE
ARTISANS
PRODUCTION INDUSTRIES
PUBLIC ADMINISTRATION
SERVICE INDUSTRIES
ITALIAN DATA
CONTACT URTICARIA

TREND 2010/2013
OD CLAIMS: 62
OD RECOGNISED: 12

OD RECOGNISED BY ECONOMIC SECTOR

FEMALE: 9 - 75%
MALE: 3 - 25%
Italian Data

Skin Changes Due to Physical Agents

Trend 2010/2013

OD Claims: 64
OD Recognised: 41

Female: 6 - 15%
Male: 35 - 85%

OD Recognised by Economic Sector:
- Agriculture: 76%
- Artisans: 15%
- Production Industries: 7%
- Public Administration: 2%
- Service Industries: 0%
ITALIAN DATA
RADIODERMATITIS

TREND 2010/2013
OD CLAIMS: 35
OD RECOGNISED: 14

FEMALE: 1 - 7%
MALE: 13 - 93%

OD RECOGNISED BY ECONOMIC SECTOR

- Agriculture: 36%
- Artisans: 7%
- Production Industries: 0%
- Public Administration: 57%
- Service Industries: 0%

ITALIAN DATA
ITALIAN DATA

OTHERS

TREND 2010/2013
OD CLAIMS: 185
OD RECOGNISED: 7

FEMALE: 2 - 29%
MALE: 5 - 71%
CONCLUSIONS

- 2010-2013 OD increased constantly
- OSD decreased except for skin cancers
- Ratio OD recognitions/OD claims = 42%/58%
- Ratio OSD/OD recognised = 1,9%
- Economic sector
  - Contact allergic dermatitis 39% in Agriculture and 34% in Production industries
  - Contact irritative dermatitis 44% in the Production industries and 25% in Agriculture
  - Contact urticaria 33% Agriculture
  - Skin cancers 62% Agriculture
  - Skin changes due to physical agents 76% Agriculture
  - Radiodermatitis 57% Public Administration 36% Service industries 7% Artisans
- Gender 31% Female 69% Men

Prevention
Health surveillance programs
CONCLUSIONS

• Occupation
  – Contact allergic dermatitis (n=1098)
    • Hair dressers and beauticians  n=195
    • Constructions  n= 101
    • Nurses  = 191
  – Contact Irritative Dermatitis (n=188)
    • Constructions  n= 30
    • Hair dressers and beauticians  n= 14
    • Nurses  = 11
  – Skin cancers and melanoma (n= 151+7)
    • Farmers  n=93
RECOMMENDATIONS

• Exposure assessment is necessary
• Proactive approach rather than corrective action
• Harmonization of recognition systems
• Awareness of employees
• Keep physicians up to date with current development in this field
BIBLIOGRAPHY


• Report on the current situation in relation to occupational diseases' systems in EU Member States and EFTA/EEA countries, in particular relative to Commission Recommendation 2003/670/EC concerning the European Schedule of Occupational Diseases and gathering of data on relevant related aspects. ec.europa.eu/social/BlobServlet?docId=9982&langId=en

• INAIL Annual President Report 2013, Rome 9th July 2014
Thank you for your attention