

WORK-RELATED SKIN DISEASES

A EUROPEAN OVERVIEW



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Scientific Knowledge and Good Practice in
Insurance Medicine and Social Security

 **Försäkringskassan**

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ITALY

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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 (2m^2)**
- **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**



EPIDEMIOLOGY

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- 2008 European Agency for Safety and Health at Work report **“Occupational skin diseases and dermal exposure in the European Union (EU-25): policy and practice overview”**
 - 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**





EPIDEMIOLOGY

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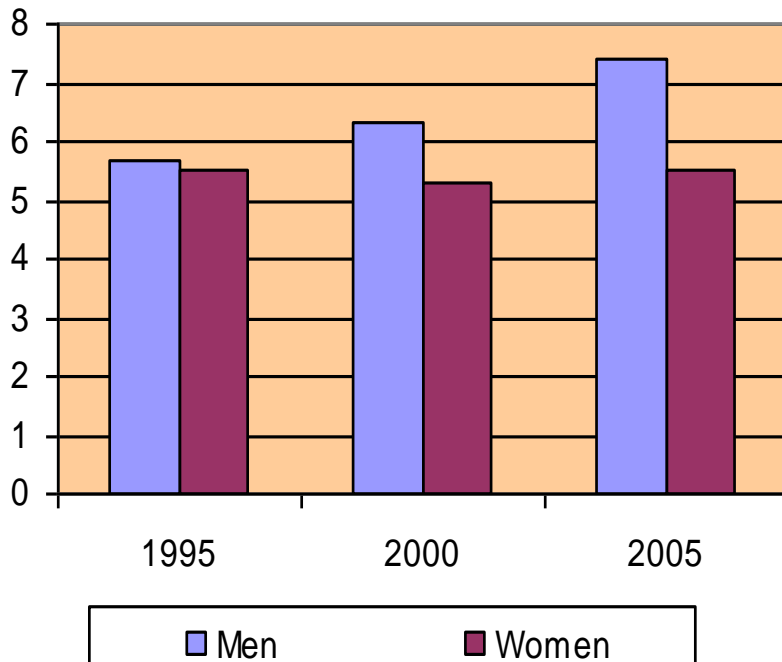
Disease	2001		2002		2003		2004		2005	
	% of occ. dis.	Inc. rate	% of occ. dis.	Inc. rate	% of occ. dis.	Inc. rate	% of occ. dis.	Inc. rate	% of occ. dis.	Inc. rate
Contact dermatitis	10.90	5.20	10.90	7.40	10.40	7.70	7.80	5.90	6.90	5.50
Contact urticaria	0.25	0.10	0.22	0.10	0.30	0.20	0.20	0.10	0.11	0.10
Skin cancer	0.01		0.03		0.02		0.02		0.02	0.00
Total no. of skin diseases	11.20	5.30	11.10	7.50	10.70	7.90	8.00	6.00	7.10	5.60
Total no. of occupational diseases	100.00	47.10	100.00	67.60	100.00	73.50	100.00	74.90	100.00	78.80



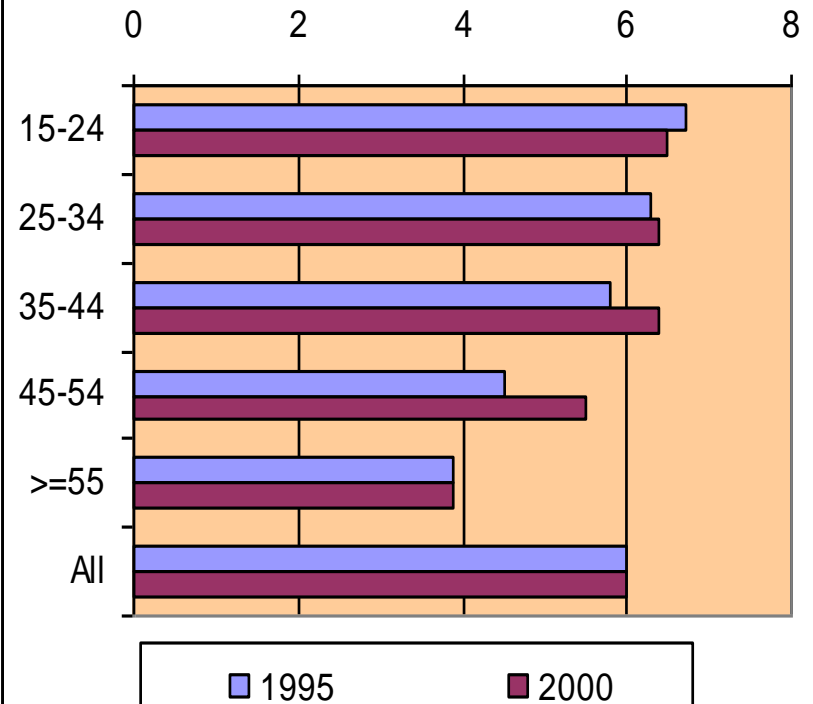
EPIDEMIOLOGY

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% of occupational skin diseases - by gender

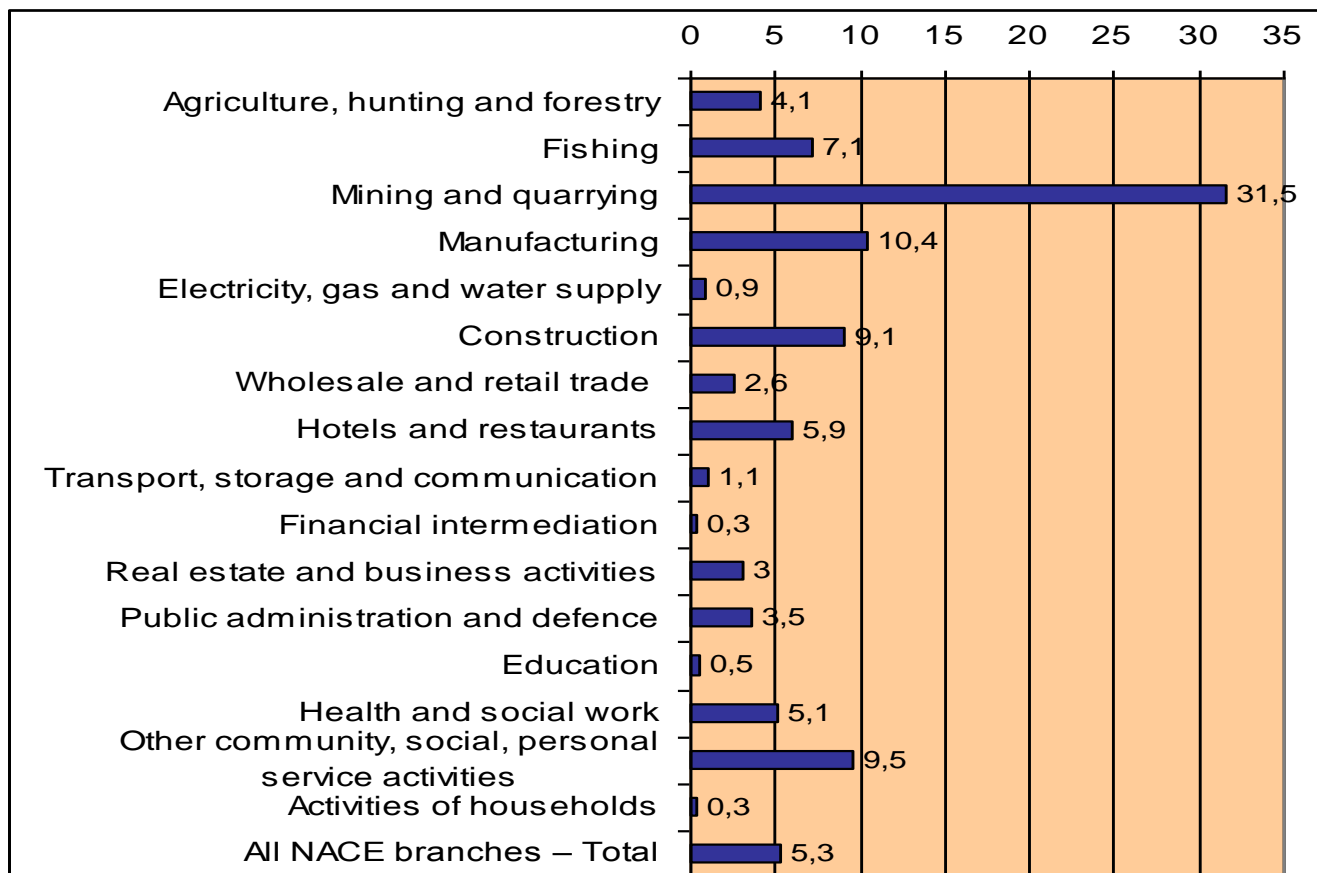


% of occupational skin diseases - by age





EPIDEMIOLOGY





RECOGNITION

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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



RECOGNITION

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- **ILO new list of OD 25 March 2010**

ILO List of OD (incl. suspected OD)	
1.	ODs caused by occupational exposure to:
1.1	chemical agents
1.2	physical agents
1.3	biological agents
2.	ODs by target organ systems
2.1	respiratory
2.2	skin
2.3	musculo skeletal diseases
2.4	mental / behaviour
3.	occupational cancer
4.	other diseases



RECOGNITION

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- **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



RECOGNITION

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EUROPEAN LEVEL

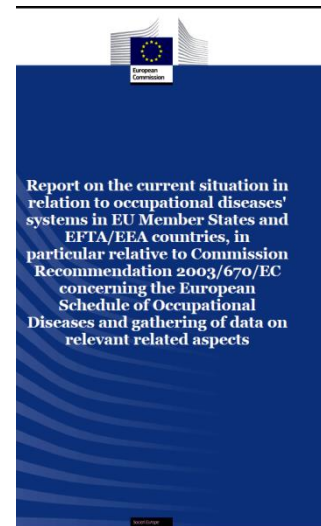
- **Commission Recommendation 2003/670/EC 19 September 2003**
 - European schedule of occupational diseases (Annex I)
 - Scientifically recognised as occupational in origin
 - Liable to compensation
 - Preventive measures must be applied
 - The diseases statistics of MS are collated annually and released 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.



RECOGNITION



- 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.





RECOGNITION



- **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



RECOGNITION

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



RECOGNITION

- **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



RECOGNITION

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- **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



RECOGNITION

- **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

23 countries having a specific compensation system

EE*	AT	BE	BG	CY	PT	CH	
GR*	CZ	DK	FI	FR	RO	UK	
HU*	DE	IE	IT	LU	SK		SE
SI*	LT	MT	NO	PL	ES		

NL** IS**

* 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



REPORTING

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AND COLLECTING DATA

- **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)



CUTANEOUS RISK

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- **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 Committee for Standardisation published a technical specification (**CEN/TS15279 - 2006**) «Workplace exposure – measurement of dermal exposure – principles and methods»
 - **European Commission mandate M/461** “Standardisation activities regarding nanotechnologies and nanomaterials”



PREVENTION

- **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 Agency for Safety and Health at Work in Bilbao (EU-OSHA) (<http://ew2003.osha.europa.eu>)
 - The European Foundation for the Improvement of Living and Working Conditions (Eurofound) in Dublin (<http://www.eurofound.europa.eu>).



PREVENTION

- **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





PREVENTION

- **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 antiinflammatory creams or ointments)





ITALIAN DATA

INAIL



- **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



- **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

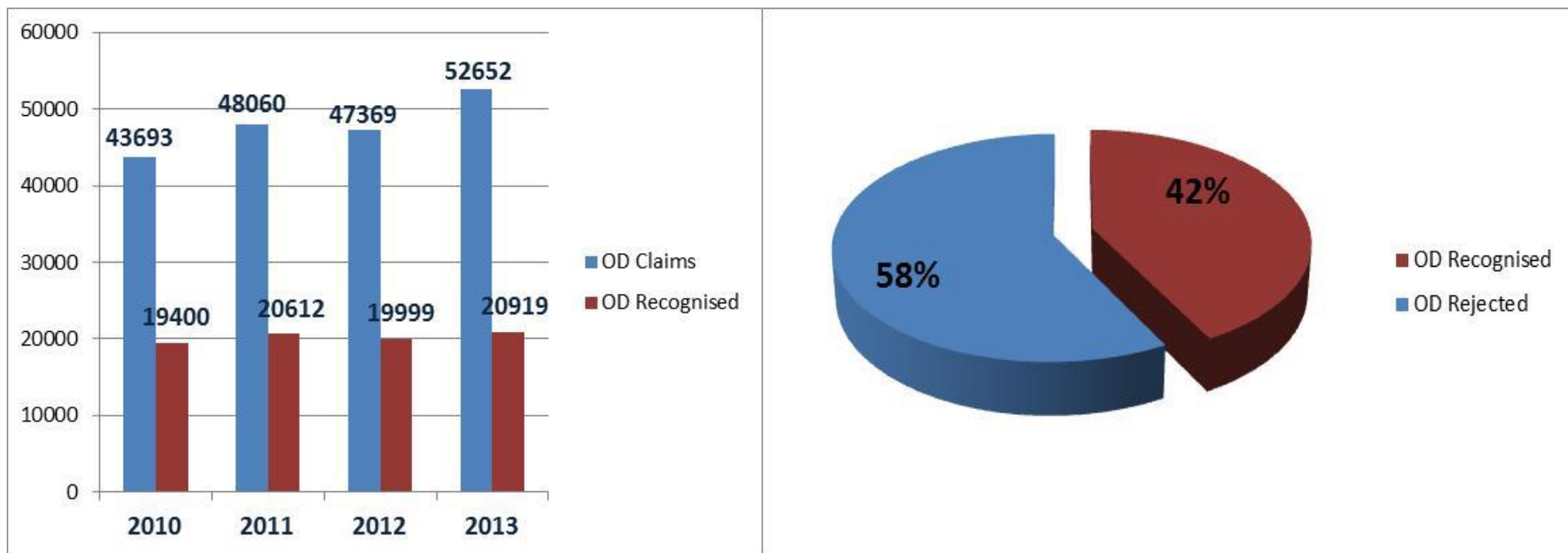
INAIL

TOTAL OD

TREND 2010/2013

OD CLAIMS: 191.774

OD RECOGNISED: 80.930





ITALIAN DATA

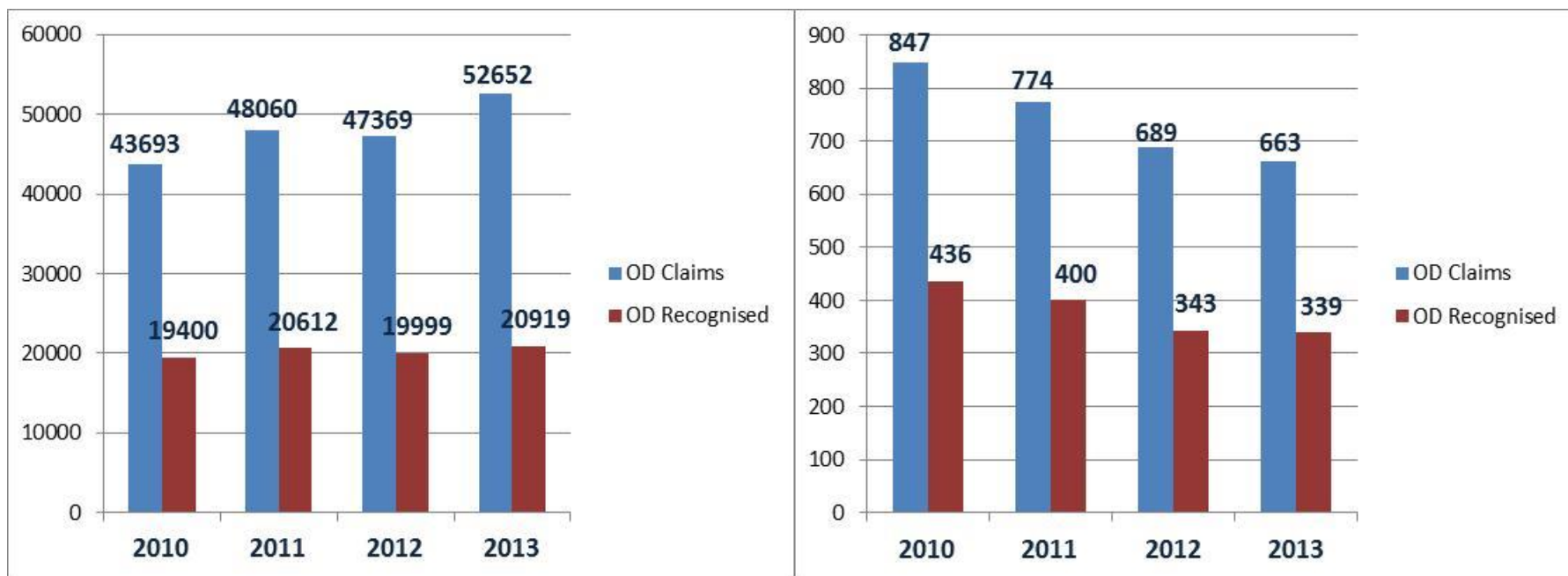
INAIL

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%



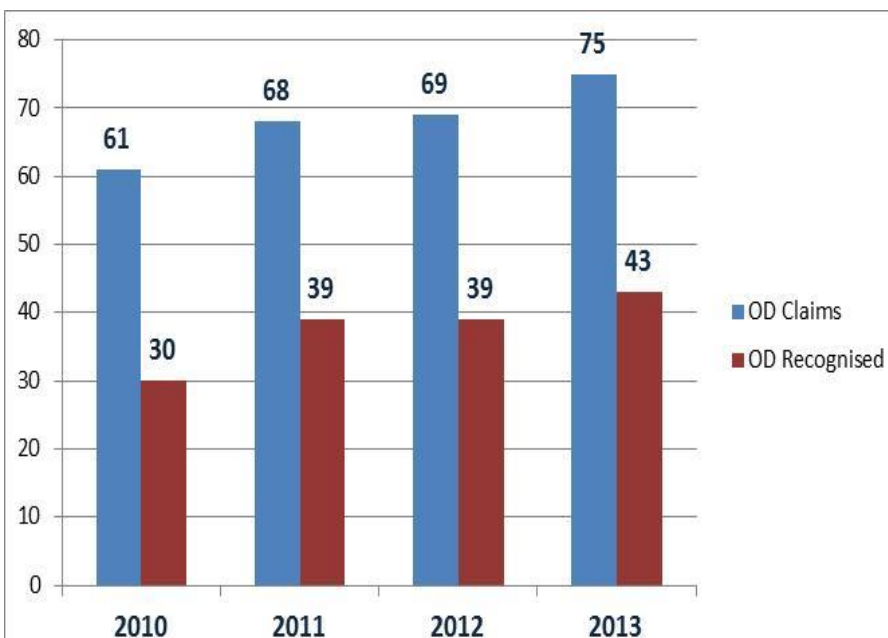
ITALIAN DATA SKIN CANCERS

INAIL

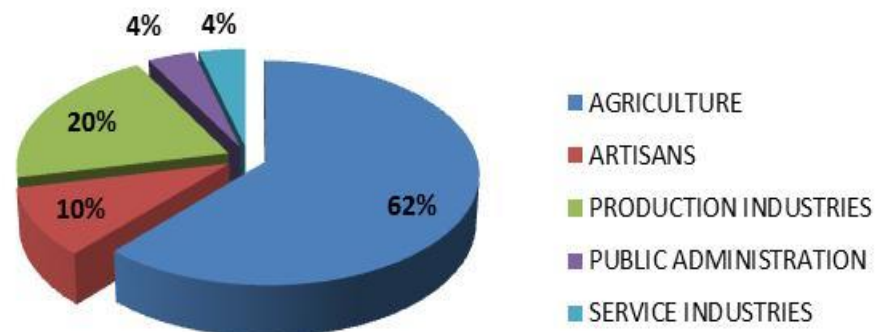
TREND 2010/2013

OD CLAIMS: 273

OD RECOGNISED: 151



OD RECOGNISED BY ECONOMIC SECTOR



FEMALE: 22 - 15%

MALE: 129 - 85%



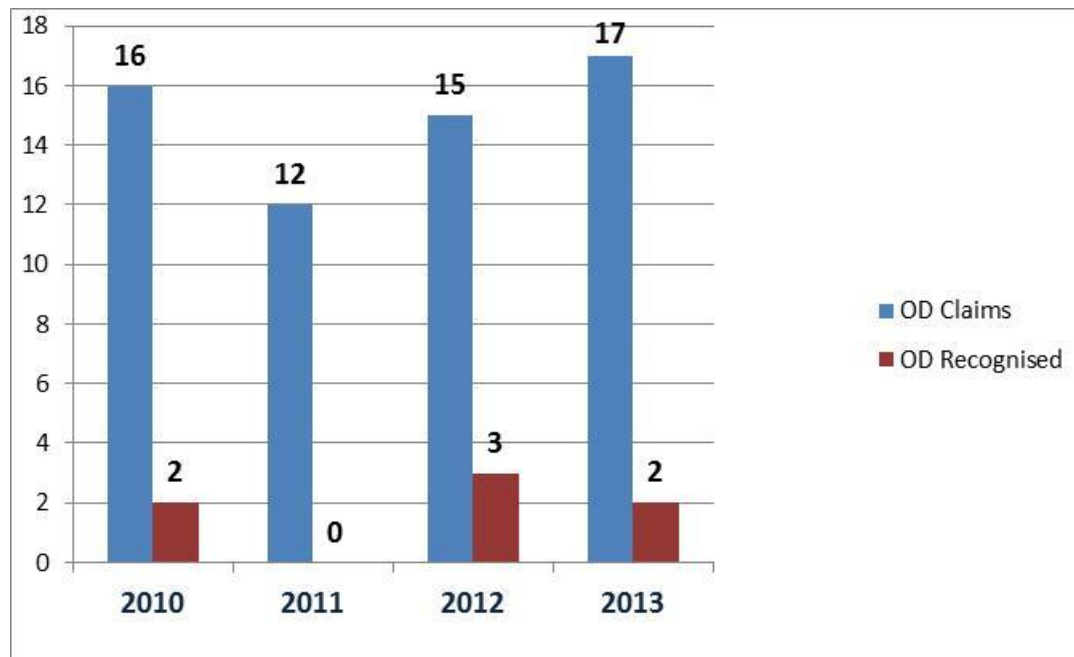
ITALIAN DATA SKIN MELANOMA

INAIL

TREND 2010/2013

OD CLAIMS: 60

OD RECOGNISED: 7



FEMALE: 0

MALE: 7



ITALIAN DATA

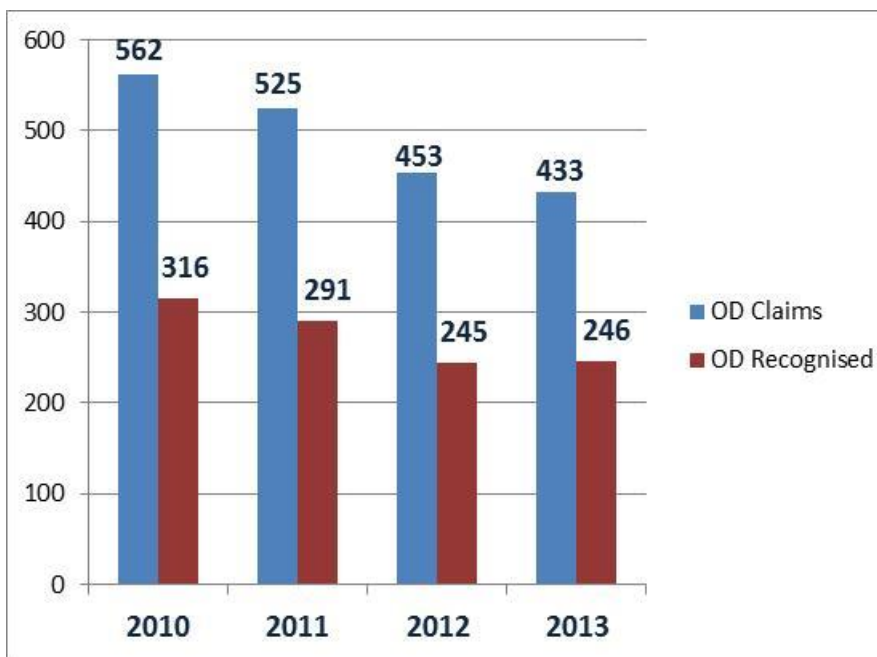
CONTACT ALLERGIC DERMATITIS

INAIL

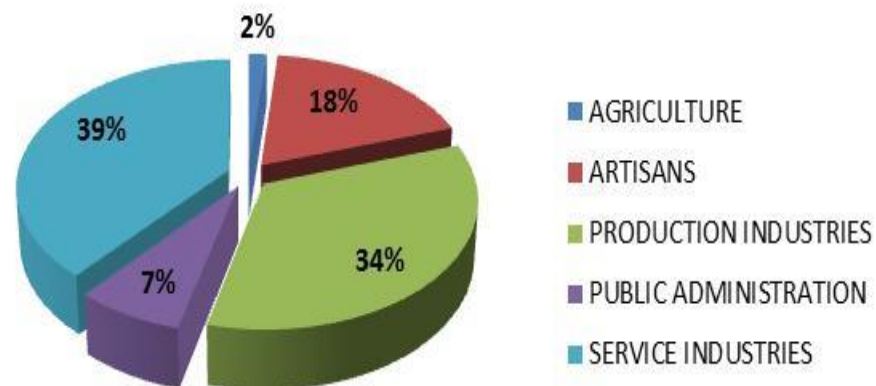
TREND 2010/2013

OD CLAIMS: 1.973

OD RECOGNISED: 1.098



OD RECOGNISED BY ECONOMIC SECTOR



FEMALE: 490 - 45%

MALE: 608 - 55%



ITALIAN DATA

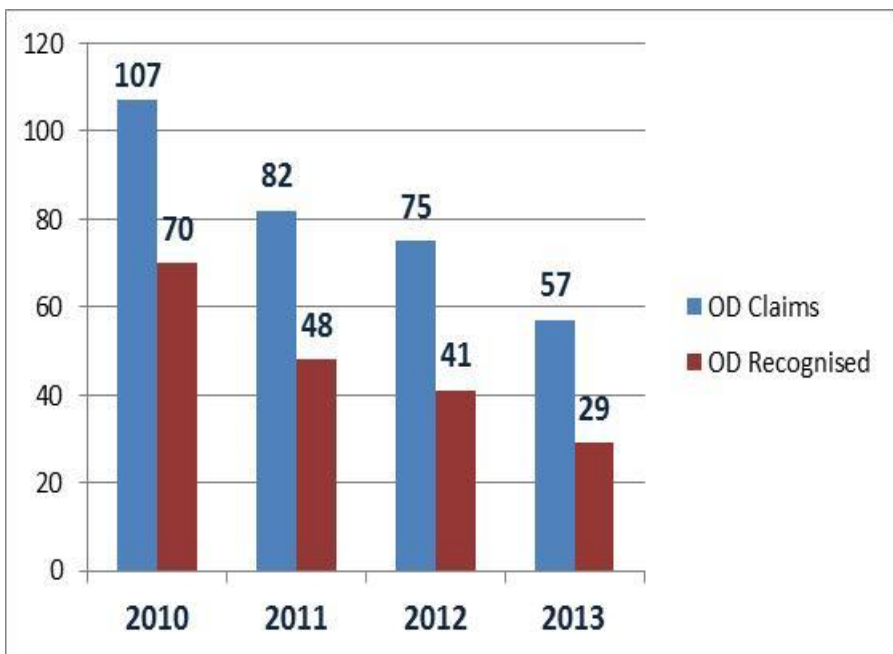
INAIL

CONTACT IRRITATIVE DERMATITIS

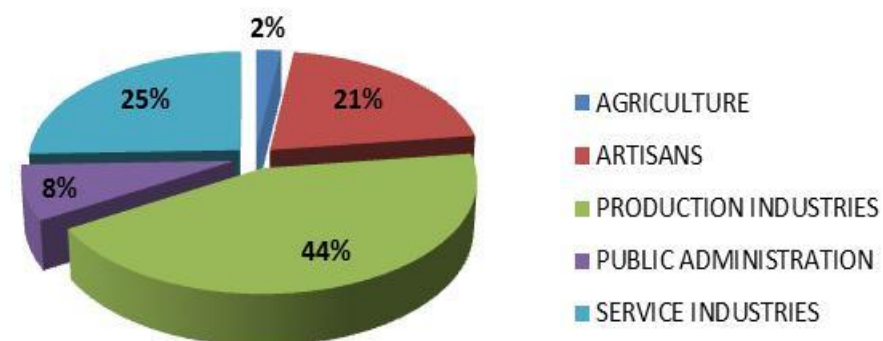
TREND 2010/2013

OD CLAIMS: 321

OD RECOGNISED: 188



OD RECOGNISED BY ECONOMIC SECTOR



FEMALE: 74 - 39%

MALE: 114 - 61%



ITALIAN DATA

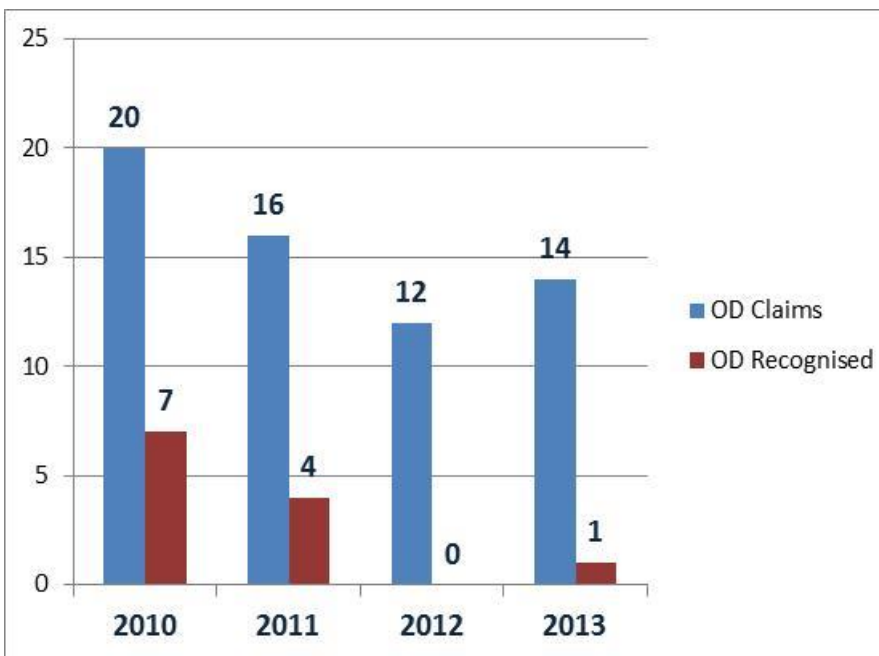
CONTACT URTICARIA

INAIL

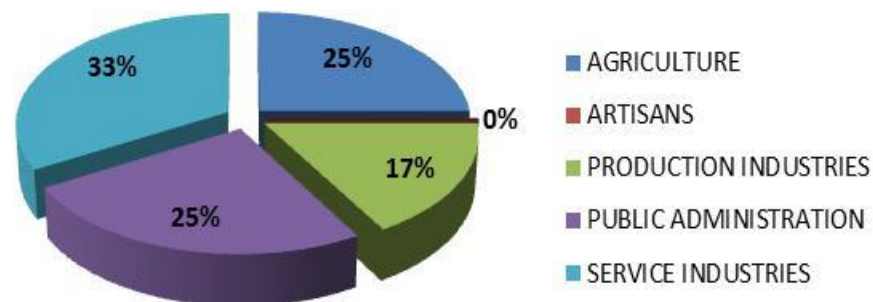
TREND 2010/2013

OD CLAIMS: 62

OD RECOGNISED: 12



OD RECOGNISED BY ECONOMIC SECTOR



FEMALE: 9 - 75%

MALE: 3 - 25%



ITALIAN DATA

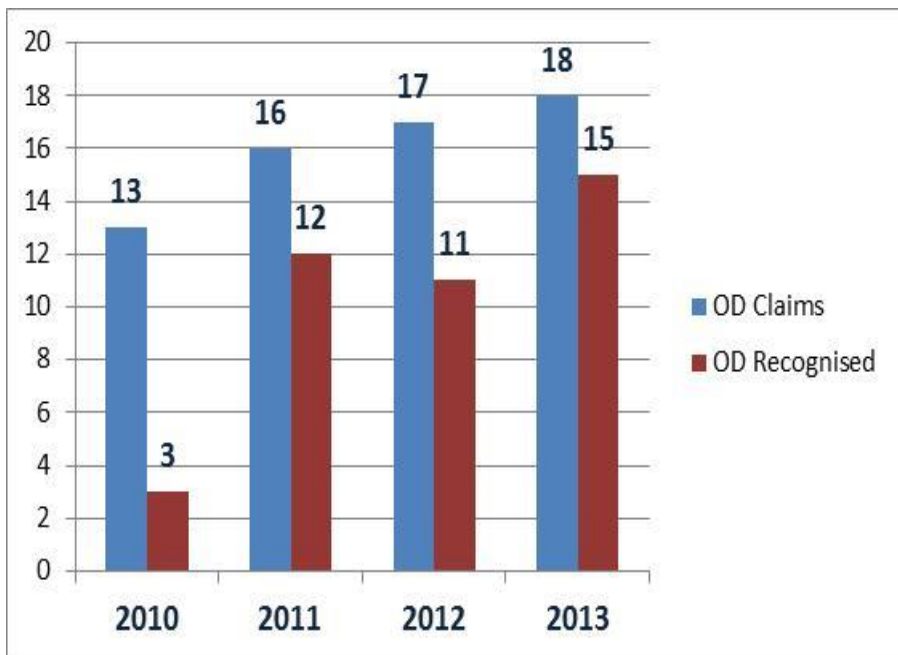
INAIL

SKIN CHANGES DUE TO PHYSICAL AGENTS

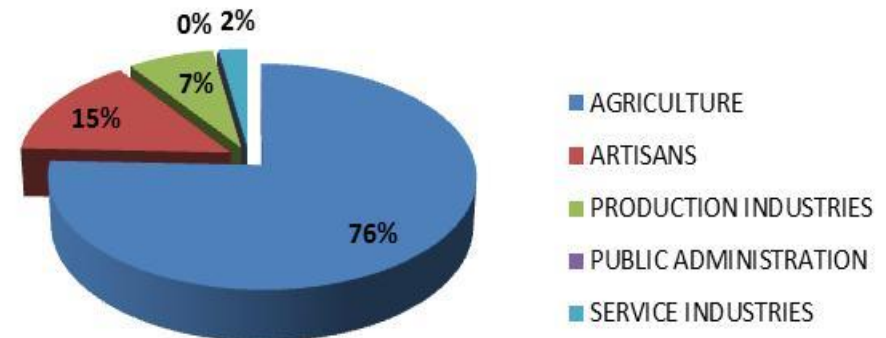
TREND 2010/2013

OD CLAIMS: 64

OD RECOGNISED: 41



OD RECOGNISED BY ECONOMIC SECTOR



FEMALE: 6 - 15%

MALE: 35 - 85%



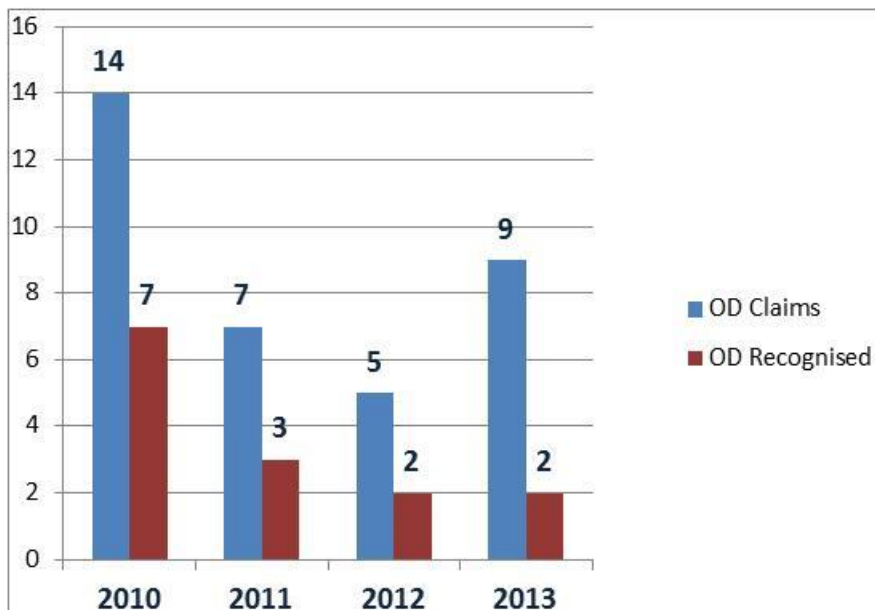
ITALIAN DATA RADIOODERMATITIS

INAIL

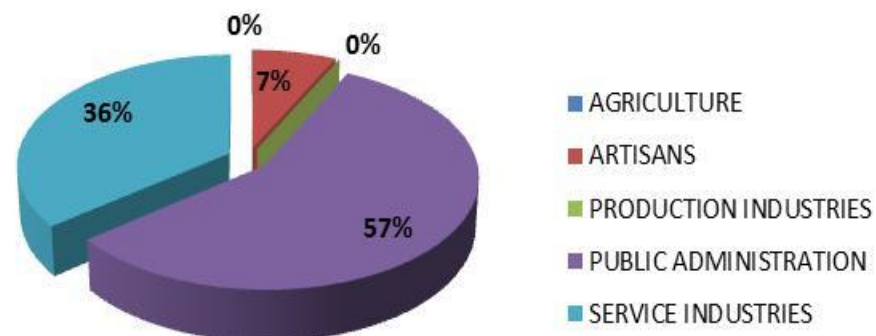
TREND 2010/2013

OD CLAIMS: 35

OD RECOGNISED: 14



OD RECOGNISED BY ECONOMIC SECTOR



FEMALE: 1 - 7%

MALE: 13 - 93%



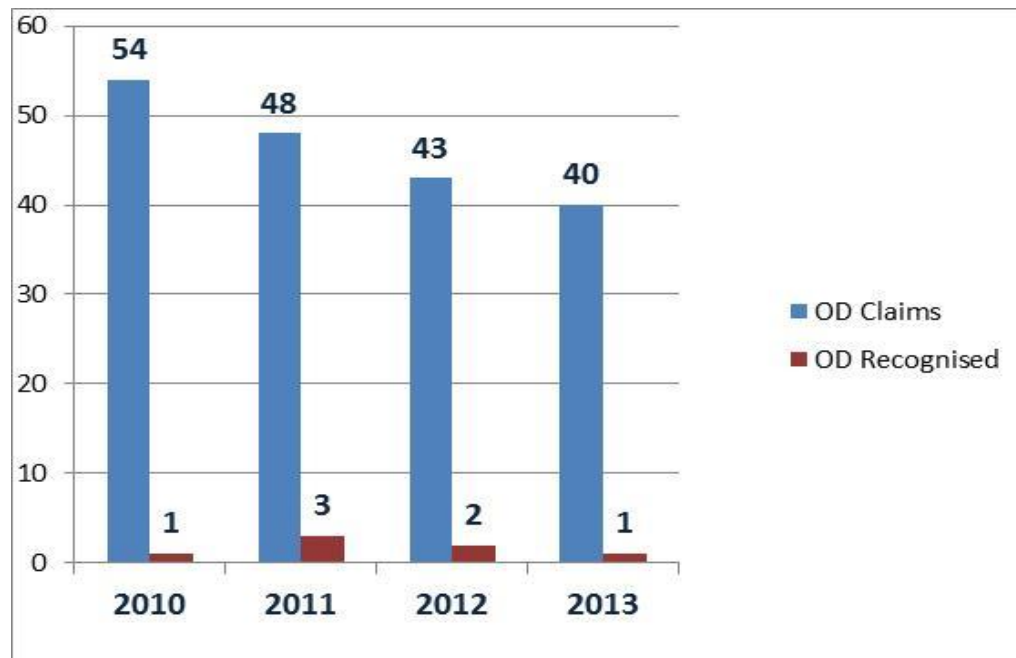
ITALIAN DATA OTHERS

INAIL

TREND 2010/2013

OD CLAIMS: 185

OD RECOGNISED: 7




FEMALE: 2 - 29%

MALE: 5 - 71%



CONCLUSIONS

INAIL

- 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 **INAIL**

- 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



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ec.europa.eu/social/BlobServlet?docId=3153&langId=en
- 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

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