### NON-MELANOMA SKIN CANCER: EUROPE'S HIDDEN OCUPATIONAL DISEASE









### **Occupational Cancer**

- A group of diseases caused wholly or partly by exposure to a carcinogen at work, or by a particular set of circumstances at work.
- Carcinogens: Agents that cause the development or increase the incidence of cancer.
  - Biological carcinogens: viruses (HBV, HIV)
  - Chemical carcinogens: asbestos, polycyclic aromatic hydrocarbons
  - Physical carcinogens: ionising radiation, UV radiation.
- Workers who are exposed to the risk:
  - Constructions workers
  - Gardeners
  - Farmers
  - Postal workers
  - Electricians





- Melanoma
- Non Melanoma
  - Cutaneous squamos cell carcinoma
  - Basal cell carcinoma
  - Actinic keratosis









# **Skin Cancer**Risk factors

- Age: Skin cancer risks increases as you age, which is likely due to accumulated exposure to UV radiation.
- Immune suppression: Conditions that weaken the immune system, such as viruses, diseases or immune suppression therapy associated with organ transplantation, may increase skin cancer risks.
- Gender: Men are approximately two times more likely to develop basal cell carcinomas and three times more likely to develop squamous cell carcinomas than women.



# **Skin Cancer**Risk factors

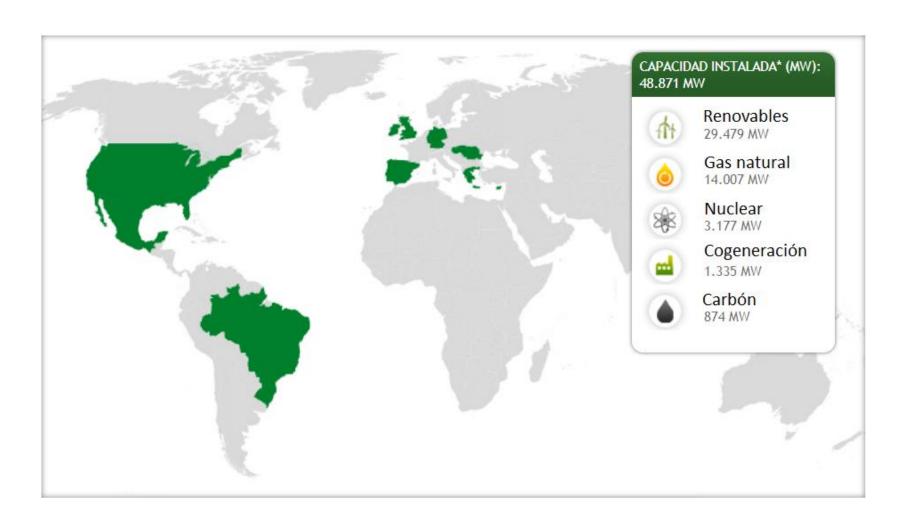
- **Skin tone:** Caucasians have a greater risk of developing skin cancer than non-whites.
- Family and/or personal history: Individuals with one or more parents or siblings with skin cancer may be at increased risk.
   Individuals who have previously been diagnosed with skin cancer are also at increased risk of developing the disease again.
- Chemical exposure: Certain chemicals, including arsenic, industrial tar, coal, paraffin and certain types of oil, may increase the risk of certain types of non-melanoma skin cancers.
- **UV exposure:** People who work outdoors during the day or who choose to spend much of their leisure time outdoors and are **exposed to UV light** are at an increased risk.

## **Skin Cancer Data**



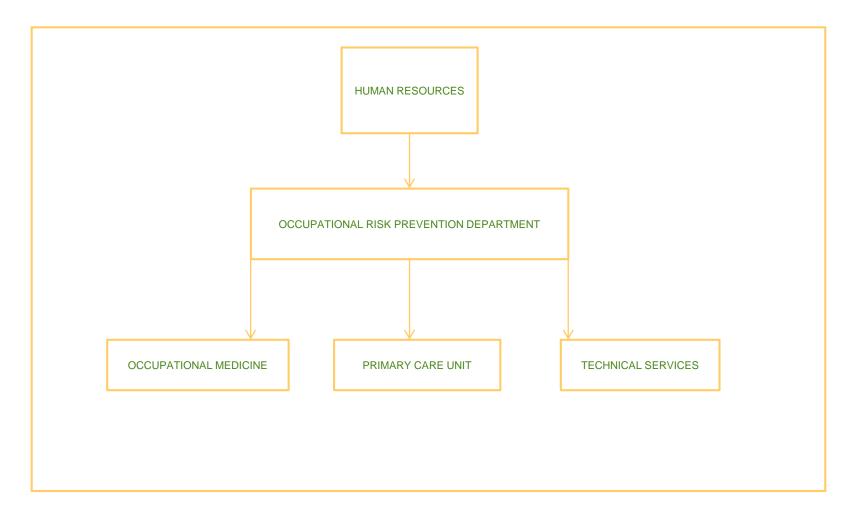
- In Europe, 14,5 million workers spend at least 75% of their working time outdoor
  - Kauppinen T et al. Occupational exposure to carcinogen in European Union. Occupational and Environmental Medicine Journal. 2000
- Occupationally UVR-exposed workers have almost double the risk of developing squamous cell carcinoma and at least 43% higher risk of developing basal cell carcinoma compared with non exposed workers
  - Schmitt J et al. Occupational ultraviolet light exposure increases the risk for the development of cutaneous squamous cell carcinoma: a systematic review and meta-analysis. British Journal of Dermatology. 2011
  - Bauer A et al. Is occupational solar ultraviolet irradiation a relevant risk factor for basal cell carcinoma? A systematic review and meta-analysis of the epidemiological literature. British Journal of Dermatology. 2011
- Skin cancer is not acknowledged as occupational disease in many european countries







## **ORGANIZATIONAL CHART**





### **HEALTH SURVEILLANCE**

- Routine Check-ups
  - Occupational Tasks
  - Risk evaluation
- Disabilities
- Epidemiology
- Education







#### FICHA POR OCUPACION

CÓDIGO:

075DX

ESCALON:

DENOMINACIÓN: OFICIAL ASISTENCIA TECNICA

ÁREA:

NEREG

MISION:

Realizar la operación local y resolución de incidencias en la red de AT, MT y BT, así como los trabajos de mantenimiento de las redes BT, instalación de medida BT y apoyo a otras unidades de la Zona, de acuerdo con las instrucciones de su jefatura, con el fin de mantener el buen estado de las instalaciones y la calidad del suministro.

FUNCIONES:

- Realizar la operación local de la red bajo la dirección del COI, así como el mantenimiento correctivo de primer nivel y la puesta en servicio de instalaciones en AT, MT y BT.
- Realizar el mantenimiento preventivo y correctivo de la red de BT, así como localizar e independizar las averías en instalaciones de enlace y de interior propiedad de clientes, cuando efectos a la red.
- Realizar la instalación, retirada o sustitución de los equipos de medida y control de BT, así
  como revisar, por muestreo, la correcta instalación de estos equipos por parte del personal de
  contrata.
- 4. Realizar el mantenimiento preventivo de líneas aéreas y subterráneas de AT, MT y de CTs que le marque su jefatura, en apoyo de la Unidad de Mantenimiento y UPLs, adoptando las correspondientes medidas de seguridad en la realización de los trabajos.

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REA DE SALUD LABORAL 26/09/2013

#### RESUMEN IDENTIFICACIÓN Y EVALUACIÓN POR OCUPACIÓN

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	Sobreesfuerzos al empusar o tirar de cargas.	X	Baja Ligeramente dañinas TRIVIAL
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	Exposicion a atmósferas y llamas de incendios.	хх	Baja Ligeramente dañinas TRIVIAL
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19	Agresiones por animales e insectos	$x \times x \times x \times x$	Baja Ligeramente dañinas TRIVIAL
29	Carga fisica	x x x	Baja Ligeramente dañinas TRIVIAL
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	Configuracion del puesto	x x	Baja Ligeramente dañinas TRIVIAL

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### **Skin Cancer Stats**

- In Spain, 4,000 cases of melanoma are diagnosed every year and more than 74,000 cases of non-melanoma skin cancer
- Iberdrola: 2200 (24,4%) outdoor workers
- From 2008 to 2018:
  - 11 (0,5%) skin cancer cases
  - 9 non melanoma skin cancer cases



# **Sun protection policy**

- Risk assessment: periodic assessment of the UVR exposure risk to all workers.
- Sun protection control measures: the introduction and maintenance of protective measures in line with occupational hazard controls.
- Training workers to work safely in the sun: the provision of information, instruction, training and supervision for workers.



# **Sun protection strategy**

- Create work schedules that minimize sun exposure
- Schedule breaks in the shade.
- Rotating employees between indoor and outdoor tasks
- Modify the workplace
- Provision of personal protective clothing and equipment



# **Sun protection equipment**

- Hats, caps
- sunglasses
- Long-sleeved shirts
- Pants
- Sunscreen





### **Conclusions**

- Outdoor workers are more likely to develop skin cancer
- Routine check ups increase chances for early treatment and cure
- Skin cancer in outdoor workers represents a collective challenge for dermatologists, Occupational medicine physicians, primary care physicians and healthcare policymakers.
- Regulation on the prevention, management and potential compensation for work related UV-induced skin cancer across Europe is really important.





# Thank you!

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