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Muskuloskeletal disorders caused by physical overload - situation in Latvia

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IEGULDĪJUMS TAVĀ NĀKOTNĒ



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- **Musculoskeletal disorders**

- are health problems of muscles, tendons, the skeleton, cartilage, the vascular system, ligaments and nerves.
- **Work-related musculoskeletal disorders** (MSDs) include all musculoskeletal disorders that are induced or aggravated by work and the circumstances of its performance.



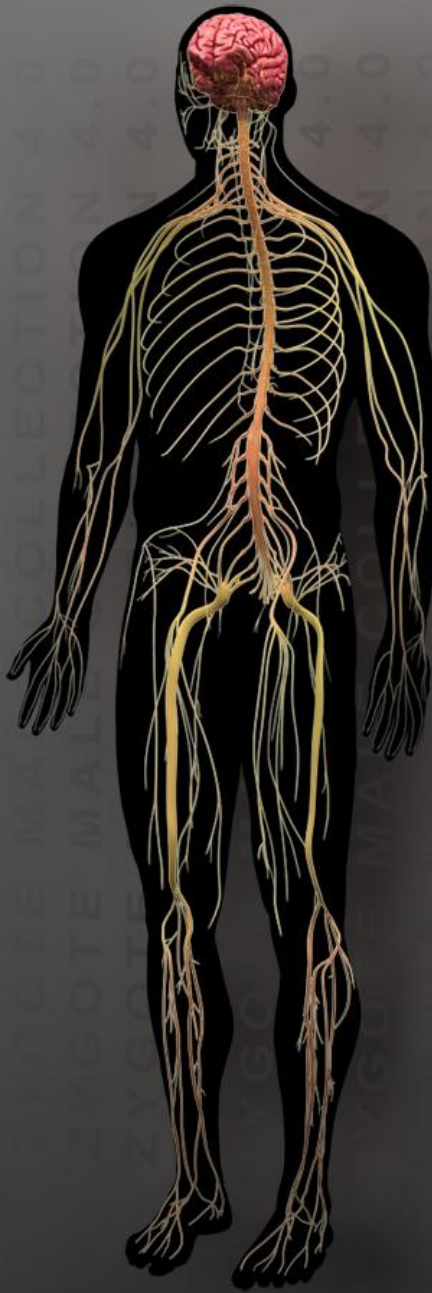
Musculoskeletal disorders

- **Occupational musculoskeletal disorders** are such health disturbances which are caused by working conditions and are included in list of occupational diseases.
- Musculoskeletal disorders (MSDs) remain the **most common occupational diseases in the European Union** and workers in all sectors and occupations can be affected.





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Musculoskeletal disorders

- MSD are one of the most important causes of **long-term sickness absences**.
- MSDs may lead to high costs to enterprises and the society as a whole.
- **MSD impact on the Latvian economy is also huge** resulting from reduced work productivity, increased number of patients, health-care and disability costs.



The aim of the study

- The **aim** of the study was **investigation of occupational MSDs and its incidence tendencies in Latvia in 1996 – 2011** to improve early diagnosis, the initiation of treatment and rehabilitation in order to accelerate patients' return to work.



Material and methods

- **The analysis of registered occupational diseases** according to the data of the Latvian State Registry of Occupational Diseases for the time period between 1996 and 2011 was performed.
- The absolute number of patients with first time registered occupational diseases and initially registered occupational diseases was analysed.



Material and methods

- **The structure** of occupational diseases was analysed.
- **The comparison** of Occupational morbidity in several European countries was performed.
- Analysed **ways to reduce the incidence of** the most widespread occupational diseases – **musculoskeletal disorders.**

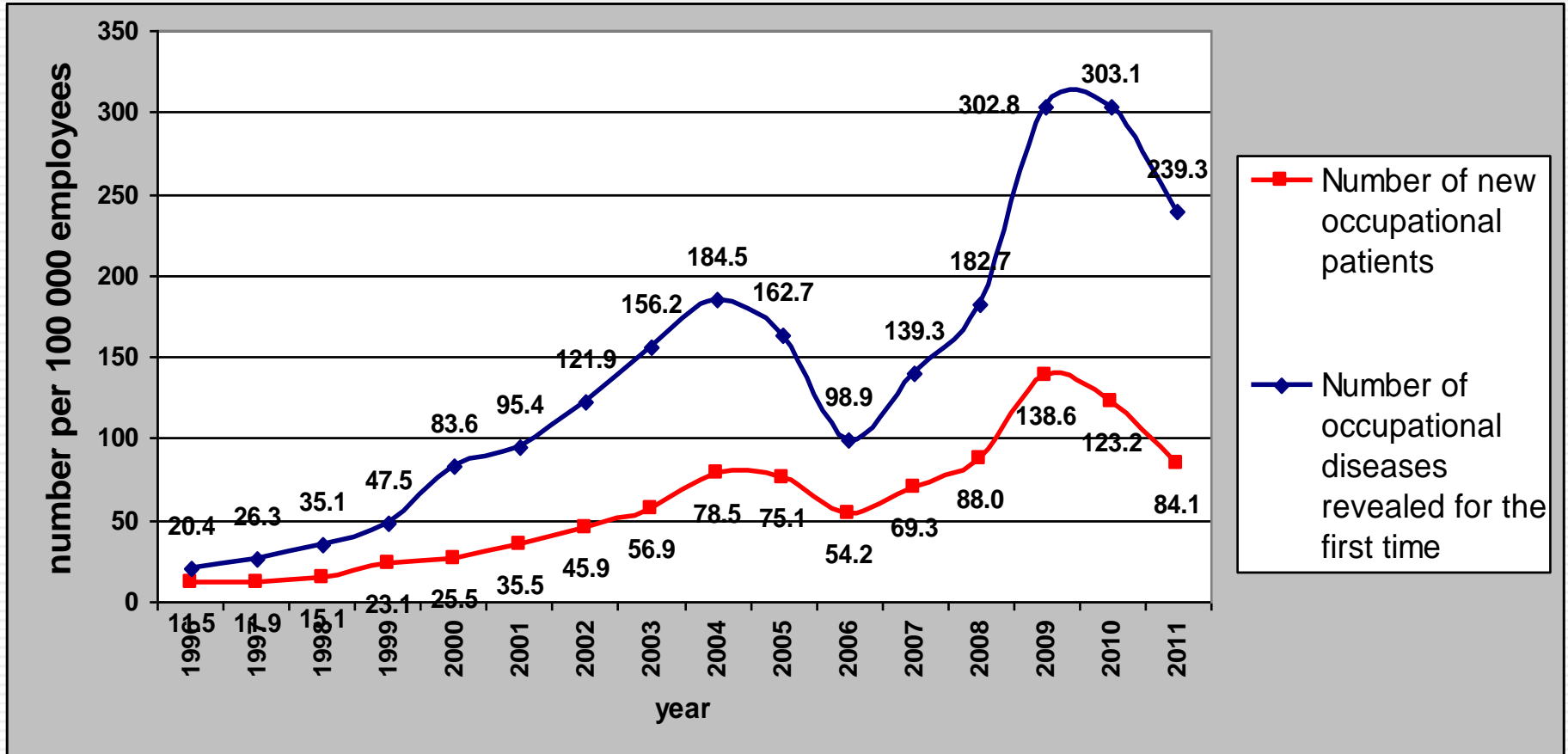


Results

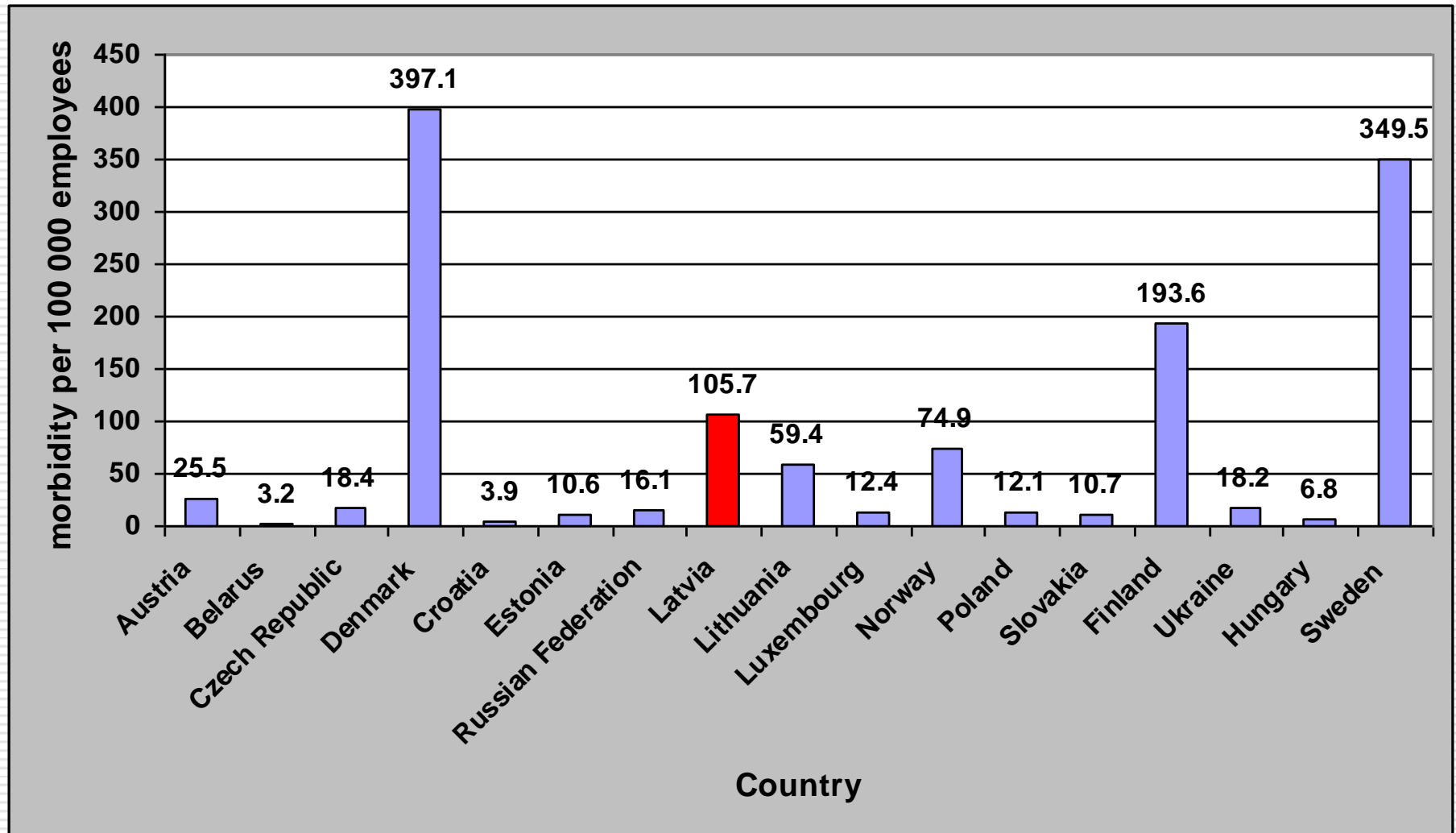
- The number of **firstly diagnosed** occupational diseases and patients has gradually **increased** from 1996 until 2011 except small decline for year 2010 -2011.
- The total number of **firstly diagnosed** and registered occupational patients per 100 000 employees **has risen** from **11.5** in 1996 to **84,1** – in 2011 (exceeded by **12** times).



Dynamics of Occupational Morbidity per 100 000 Employees



Comparison of Occupational Morbidity in Several European Countries in 2005

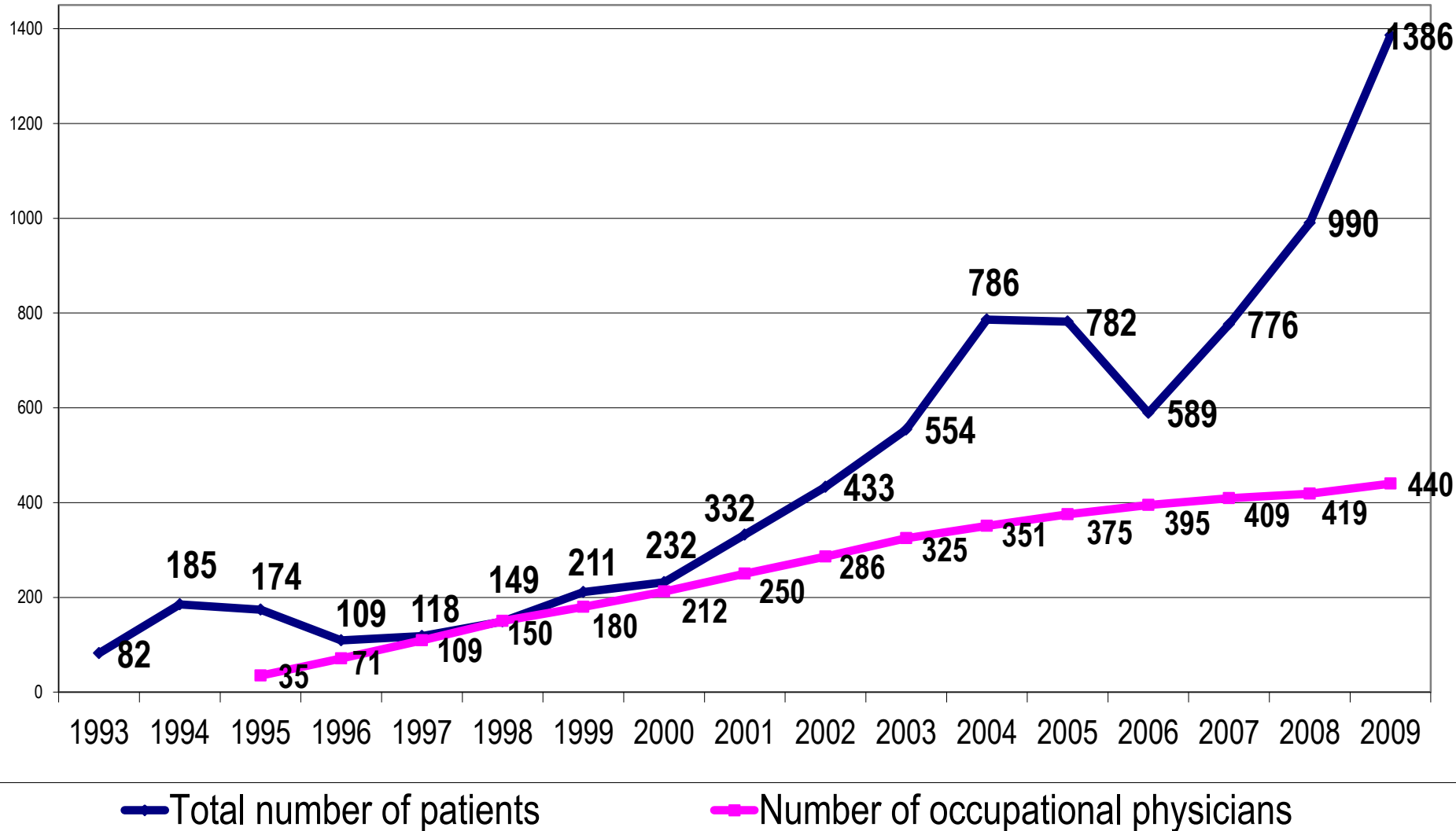


Occupational diseases

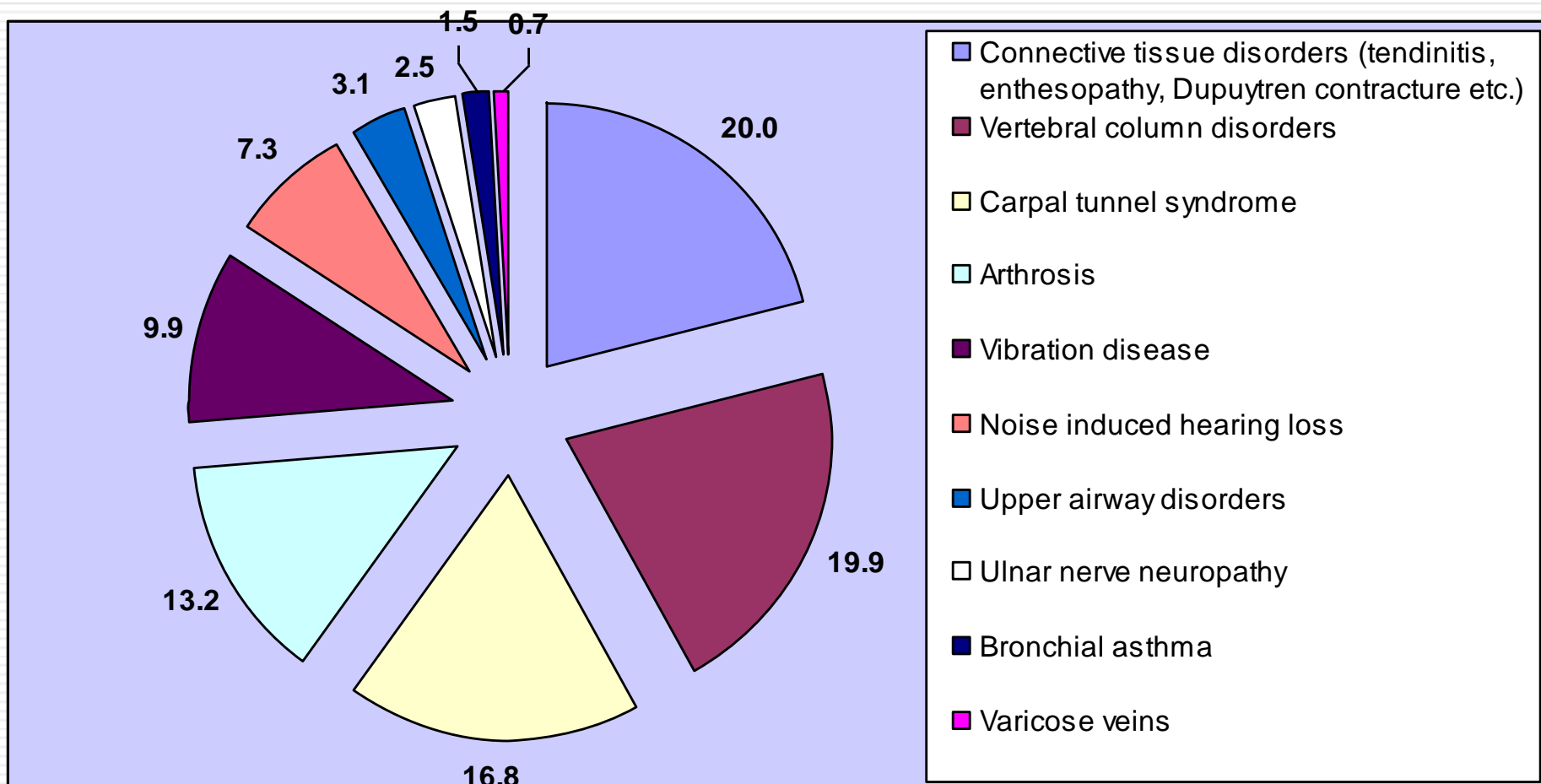
- ❑ **Main reasons in increase of registered occupational diseases:**
- ❑ **System for workers health surveillance** established in 1997
- ❑ Correct decision to give over rights to carry out health examinations only to occupational physicians
- ❑ Presently there are **480 occupational physicians** in Latvia
- ❑ **Training of occupational physicians**



Number of first registered occupational diseases (absolute numbers) and registered occupational physicians

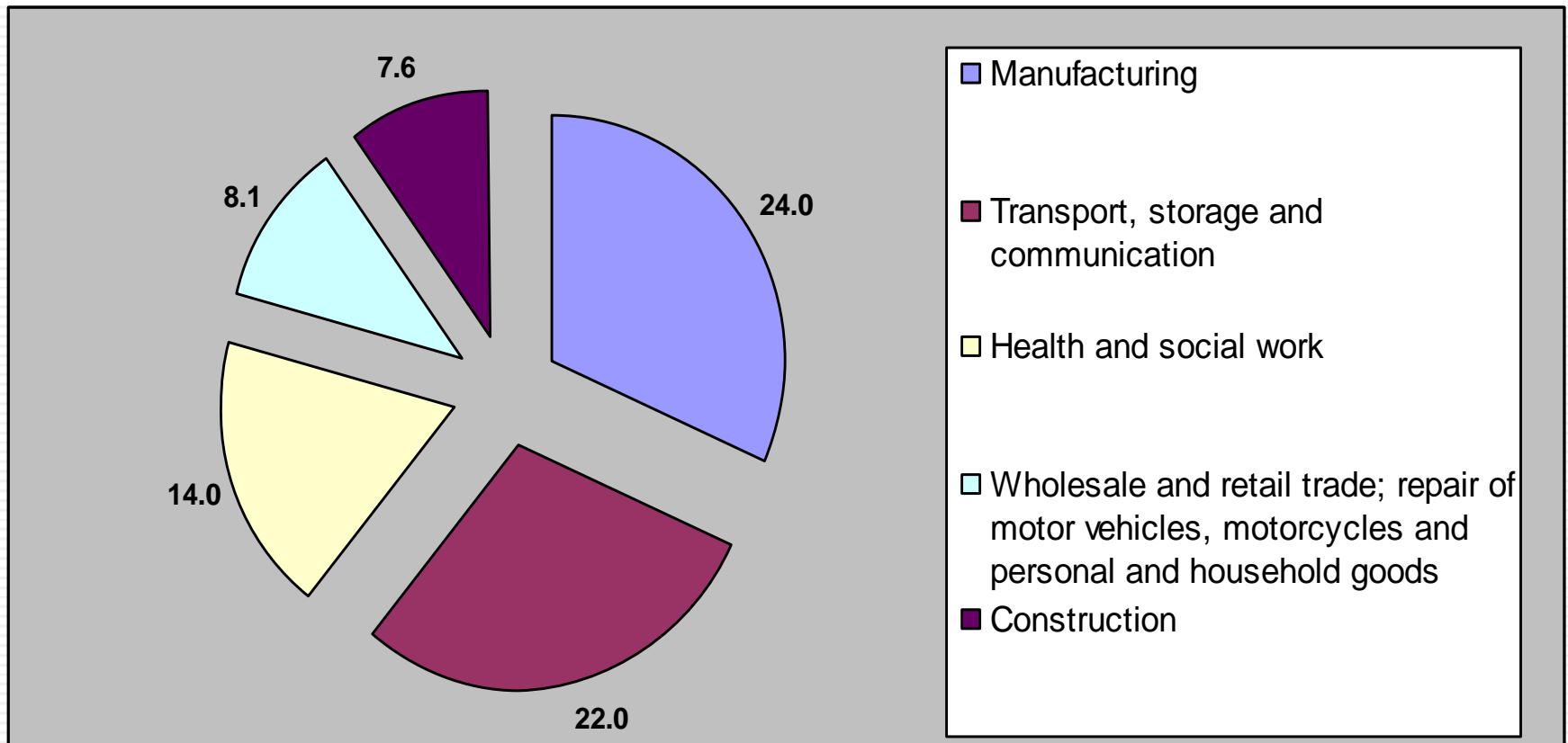


Top 10 of Occupational Diseases in 2011



Top 5 of Sectors of Economical Activity with High Occupational Morbidity

(% of total number of new occupational patients in 2011)



Musculoskeletal disorders

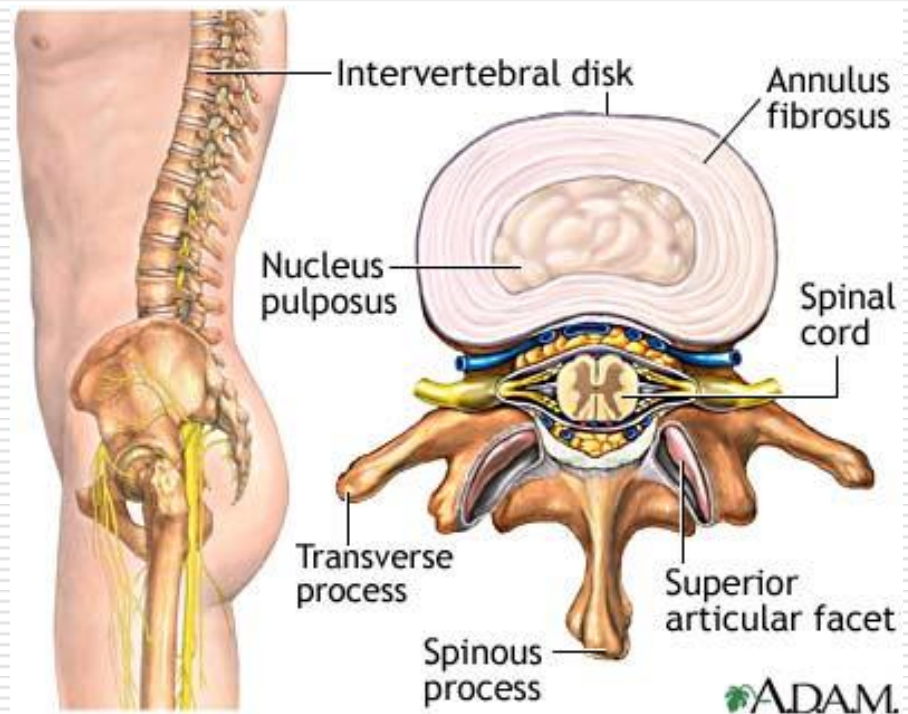
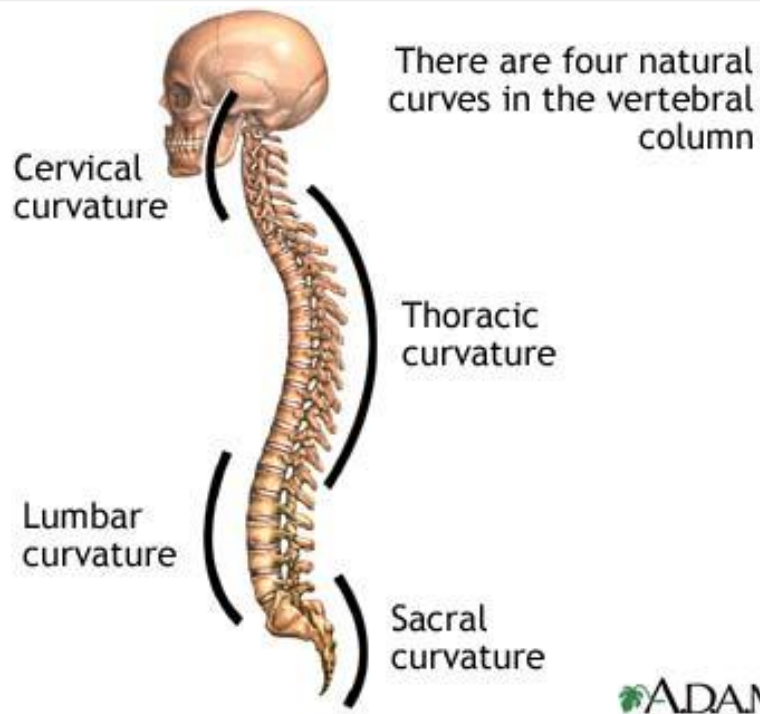
- ❑ Occupational **MSDs were 53.1% of all occupational diseases** revealed for the first time in 2011.
- ❑ In **94.8% of all patients** with firstly revealed occupational disease, as harmful working risk factor **physical overload** was mentioned (*i.e. heavy lifting, repetitive motions or awkward working posture, manual handling*).



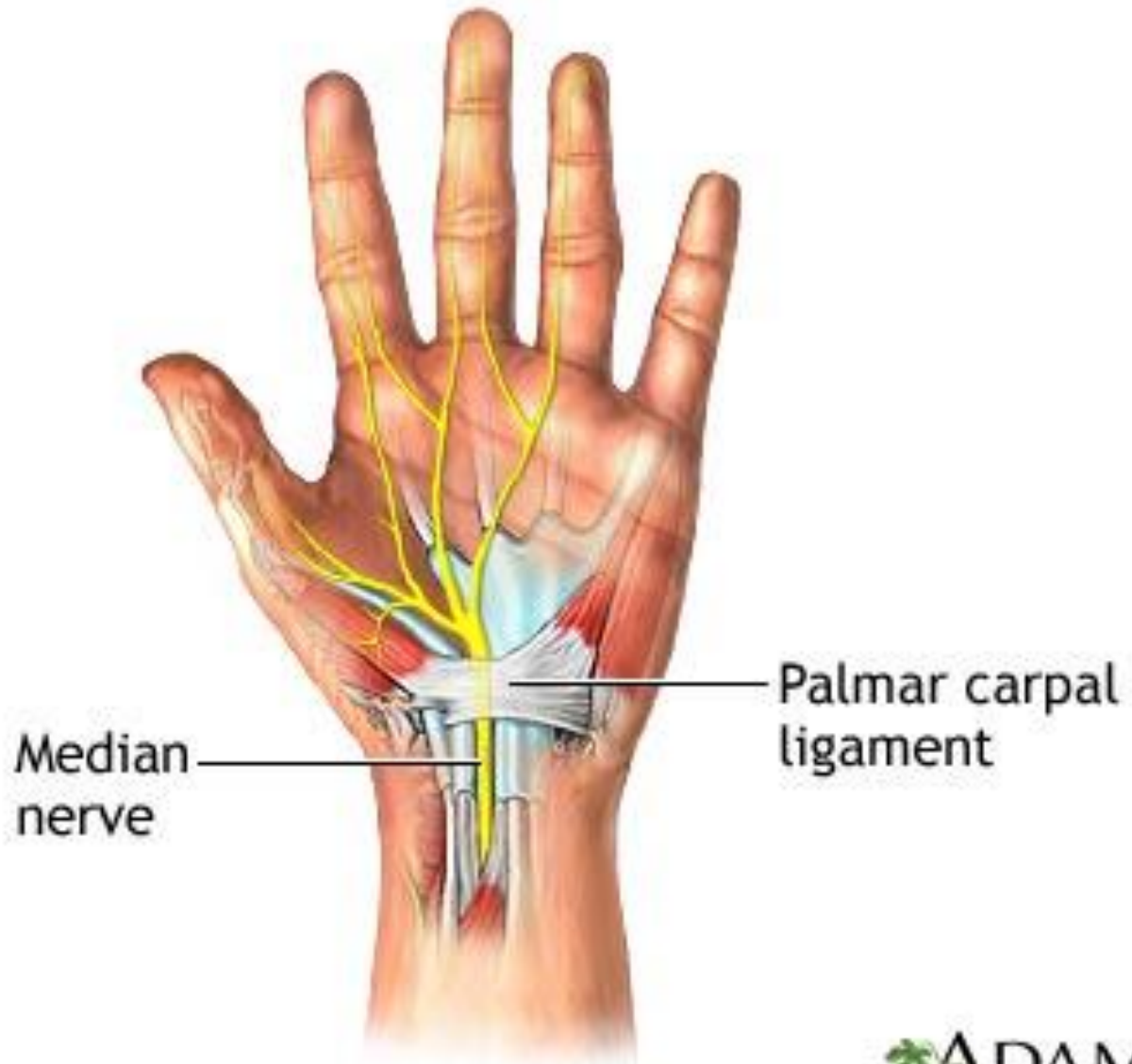
Musculoskeletal disorders

- Of all firstly revealed occupational disorders in 2011: **20 %** were **connective tissue MSDs**, such as tendinitis, bursitis, rotator cuff syndrome, etc. These disorders were localized mostly in hand and arm.
- **19.9%** were diseases of **vertebral column**.
- **13.2%** were arthroses of different localization.

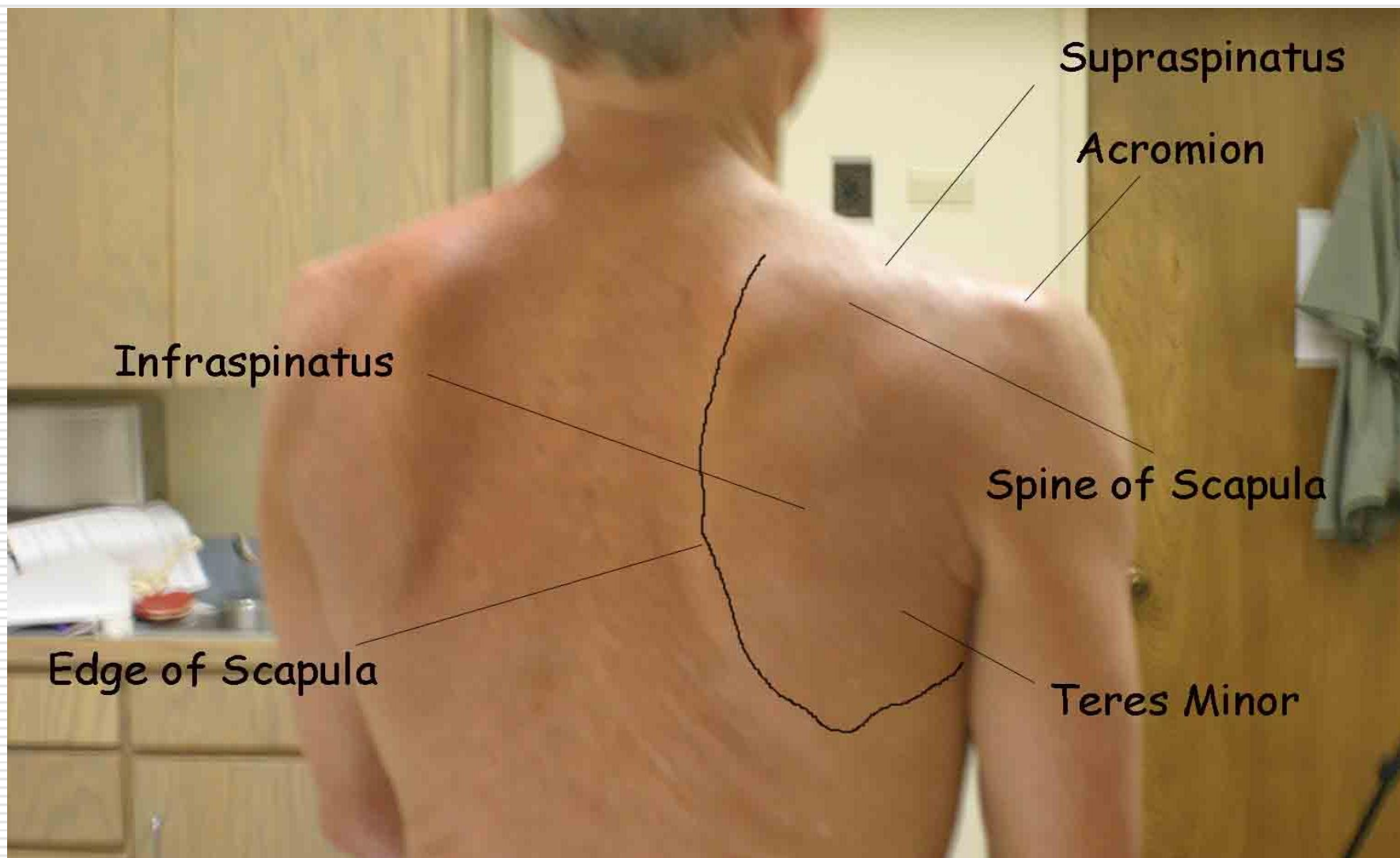




Wrist Tendinitis



Rotator Cuff Tendinitis



Sectors of economic activity

- Main sectors with the highest occupational morbidity were **manufacturing; transport, storage and communication; health and social work, wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods; construction.**



Main conclusions

- **Number of occupational diseases and patients** revealed annually for the first time has been gradually increasing. **Increase** of registered occupational diseases is also related to **growing awareness of employees, increasing number of occupational physicians, as well as possibility to receive compensation.**



Main conclusions

- Occupational **MSDs** were **54.5%** of all occupational diseases revealed for the first time in 2011.
- The **mean age** of patients was **54 years**, work stage -20 - 30 years.



MSD health promotion and re-integration programm

- ❑ **Employees** in raising awareness of MSDs and their prevention capabilities.
- ❑ **Occupational health and safety measures** to prevent development of MSD (employees/employers).
- ❑ Employers 'and employees' own role in the prevention of MSDs.



MSD health promotion and re-integration program

- ❑ **Early diagnosis and treatment** improvement (general practitioners and occupational health services tactics).
- ❑ **Early rehabilitation** provision.
- ❑ **Recovery criteria and guidelines** for the physicians.
- ❑ MSD patients **return to work** - the mechanism and conditions for use.
- ❑ Disabled custom jobs as possible.



A photograph of three men in an industrial or construction setting. The man on the left wears a white hard hat, glasses, and a tan jacket, looking towards the center. The man in the middle wears a white hard hat with safety goggles on his forehead, glasses, and a blue shirt, holding a clipboard and writing. The man on the right wears a white hard hat, glasses, and a blue jumpsuit, looking at the clipboard. The background shows industrial equipment and a landscape with hills under a bright sky.

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