

Understanding occupational health risk for workers

OSH Conference November 23rd
The Royal Court Hotel Mombasa

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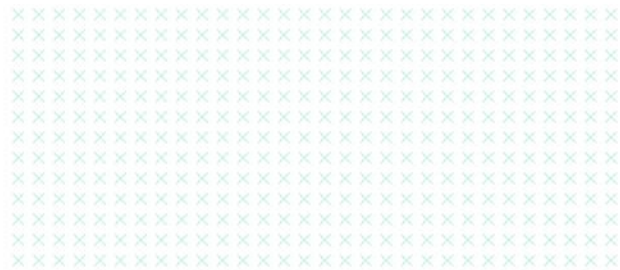
Arbeidstilsynet







Working hours – shift work



Research

Complex assessments of effects

- Direct and indirect health effects
 - Many contributing factors:
 - Age
 - Motivation
 - Kind of work

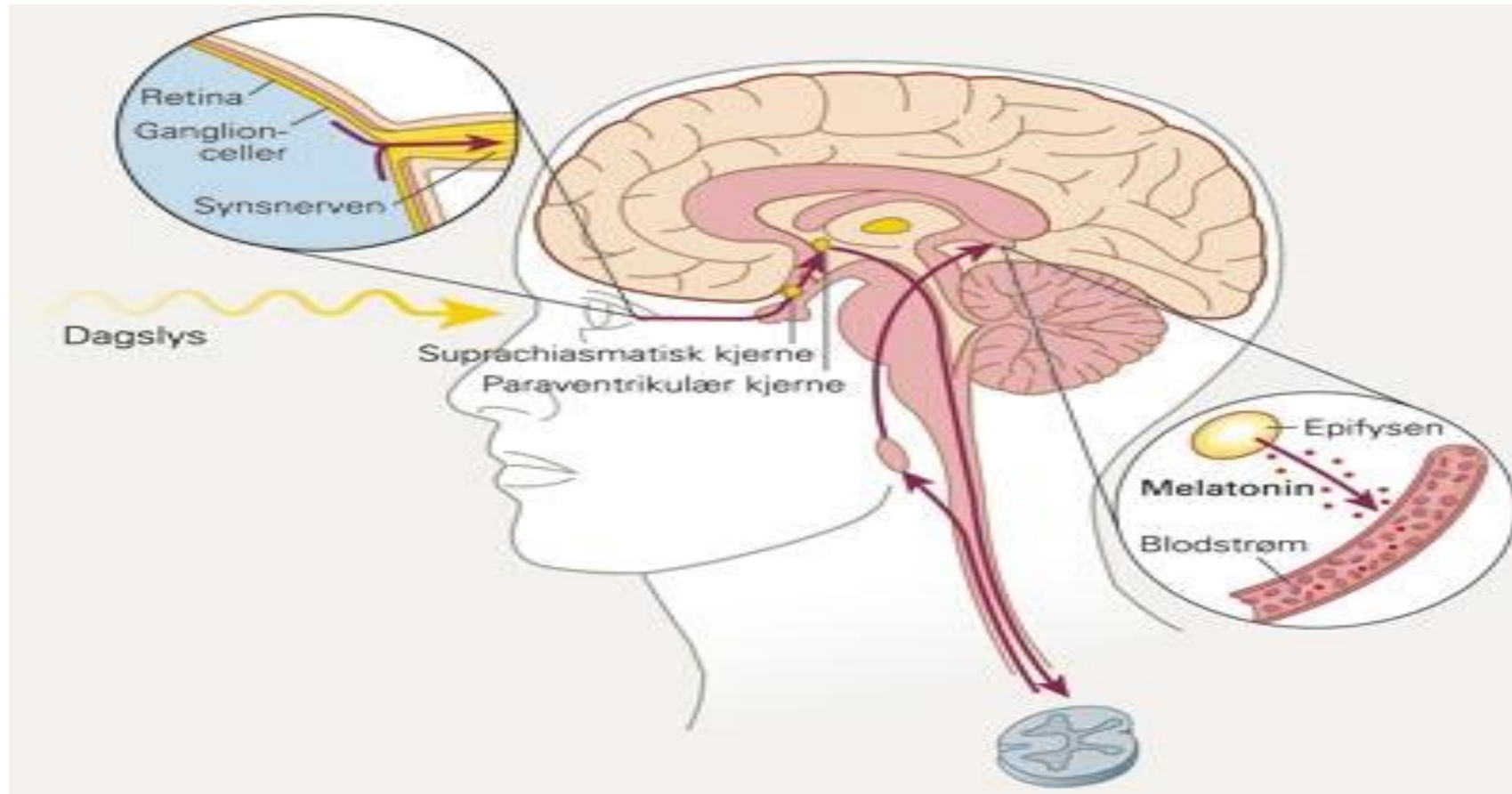
Aspects

- Long hours
- Nightwork
- Shift work

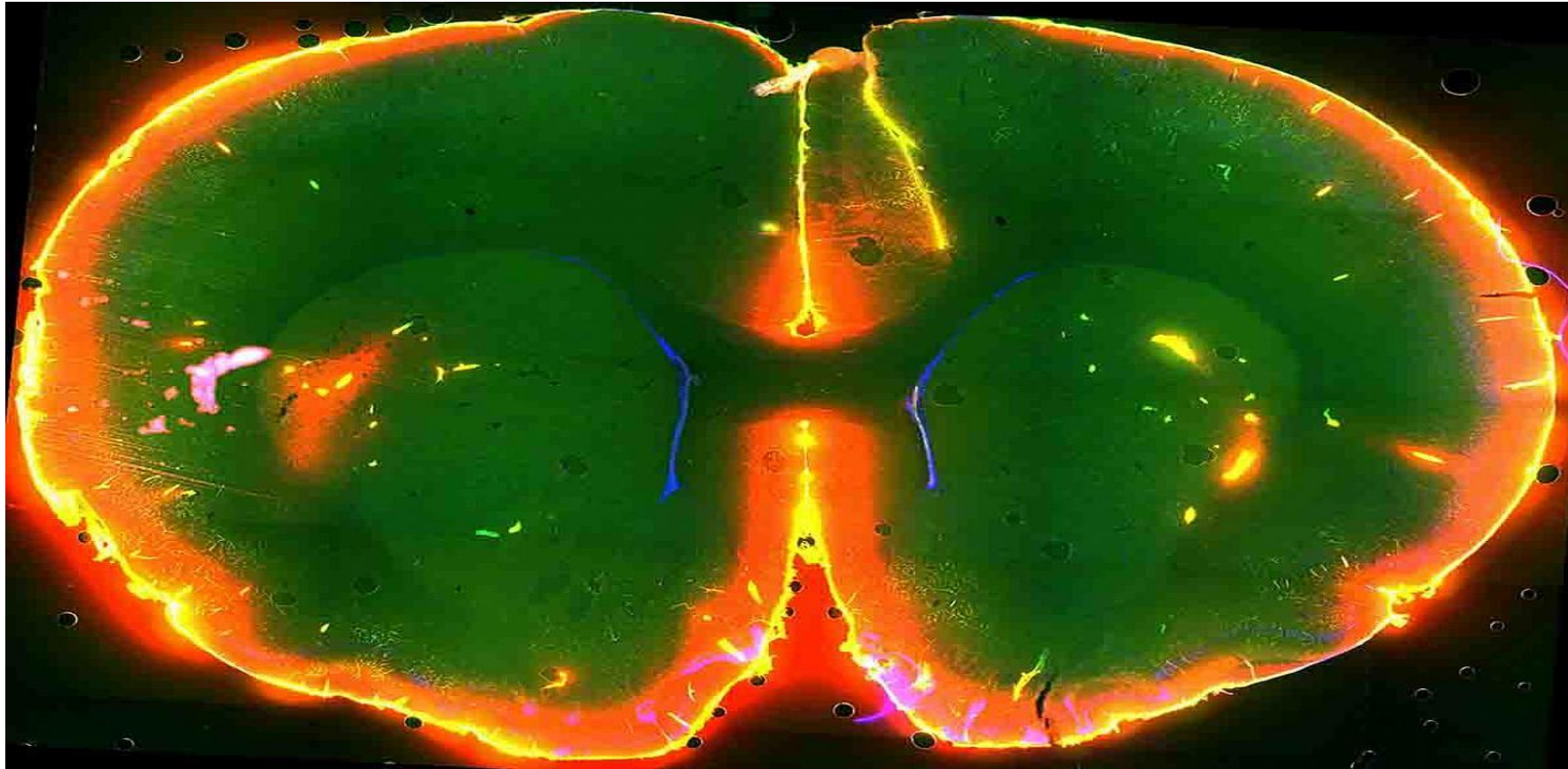
Problem?



Daylight and melatonin



Sleep is cleaning the brain!



Scientists watched dye flow through the brain of a sleeping mouse. Nedergaard Lab, University of Rochester Medical Center.

Health effects of shift work

- Reduction in quality and quantity of sleep
- Widespread complaints of “fatigue”
- Anxiety, depression, and increased neuroticism
- Increasing evidence of adverse cardiovascular effects
- Possible increase in gastrointestinal disorders
- Cancer? (nightwork and breastcancer)
- Increased risk of spontaneous abortion, low birth weight, and prematurity.

Safety effects of shift work

- Poorer performance especially at night
- Increased rate of accidents especially at night

Summary of EC Working Time Directive

- No more than 48 hours a week averaged over a 17 week period
- A minimum daily rest period of 11 consecutive hours
- A minimum weekly rest period of 24 or 48 consecutive hours averaged over 14 days
- A minimum of 20 minutes rest in any work period of more than 6 hours
- A maximum of 8 hours night work every 24 hours averaged over a 17 week period
- Free health assessments for night workers
- Paid annual leave of at least 4 weeks

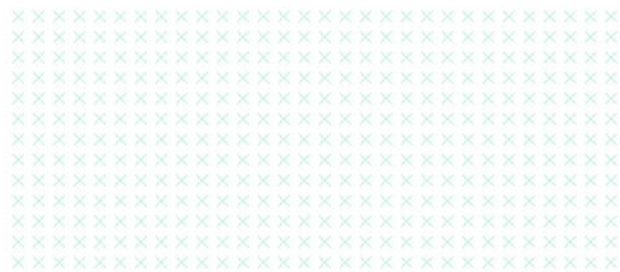
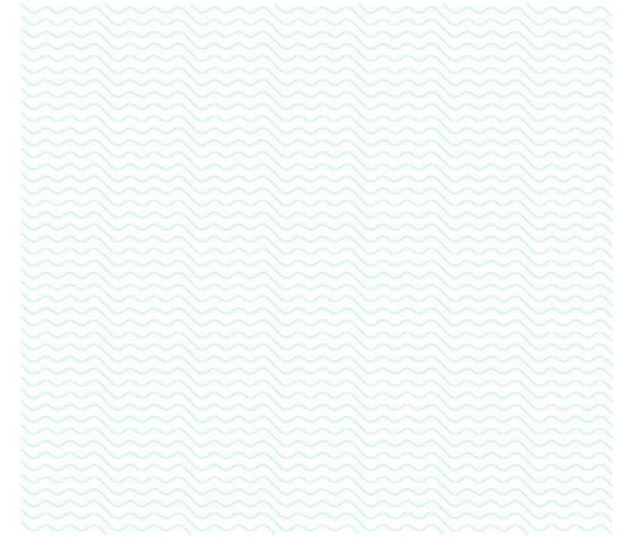


Regulations and actions to prevent occupational diseases and injuries





Other jobs











–ILO Enchylopedia

very detailed information on any
profession

<http://www.iloencyclopaedia.org>

ILO/WHO Committee on **Occupational Health** (1950):

Summarized:

- The adaptation of work to man and of each man to his job.

To do that – we need to:

Promote and maintain wellbeing

Prevent illnesses and injuries caused by work

Protect the worker from risks from factors adverse to health

Adapt the workplace to the worker

- Occupational disease
 - Caused by work
 - Aggrevated by work
 - Related to work

Occupational accidents

Vulnerability of the affected

- Women
 - Pregnant women
 - Children (should be at school)
 - Workers with predisposing illnesses
-
- Personal protection should not be the solution (secondary strategy)

- OHS personnel
 - Works on the systematic level
 - Health check-ups
 - Care and discuss health at work
 - Evaluates exposure at the workplace and notifications of events at the workplace
- Case history could be made by questions or a systematic talk

- Check the worker more than one time – the subclinical development important
 - Examples:
 - Hearing
 - Lung function

Specialist investigations in hospitals

- Investigate workers with potential illnesses after referral from GPs

Case report could be 5 to 8 written pages:

Why referred

Tentative diagnosis

Former medical history

Environmental factors including smoking habits,
medication and hobbies.

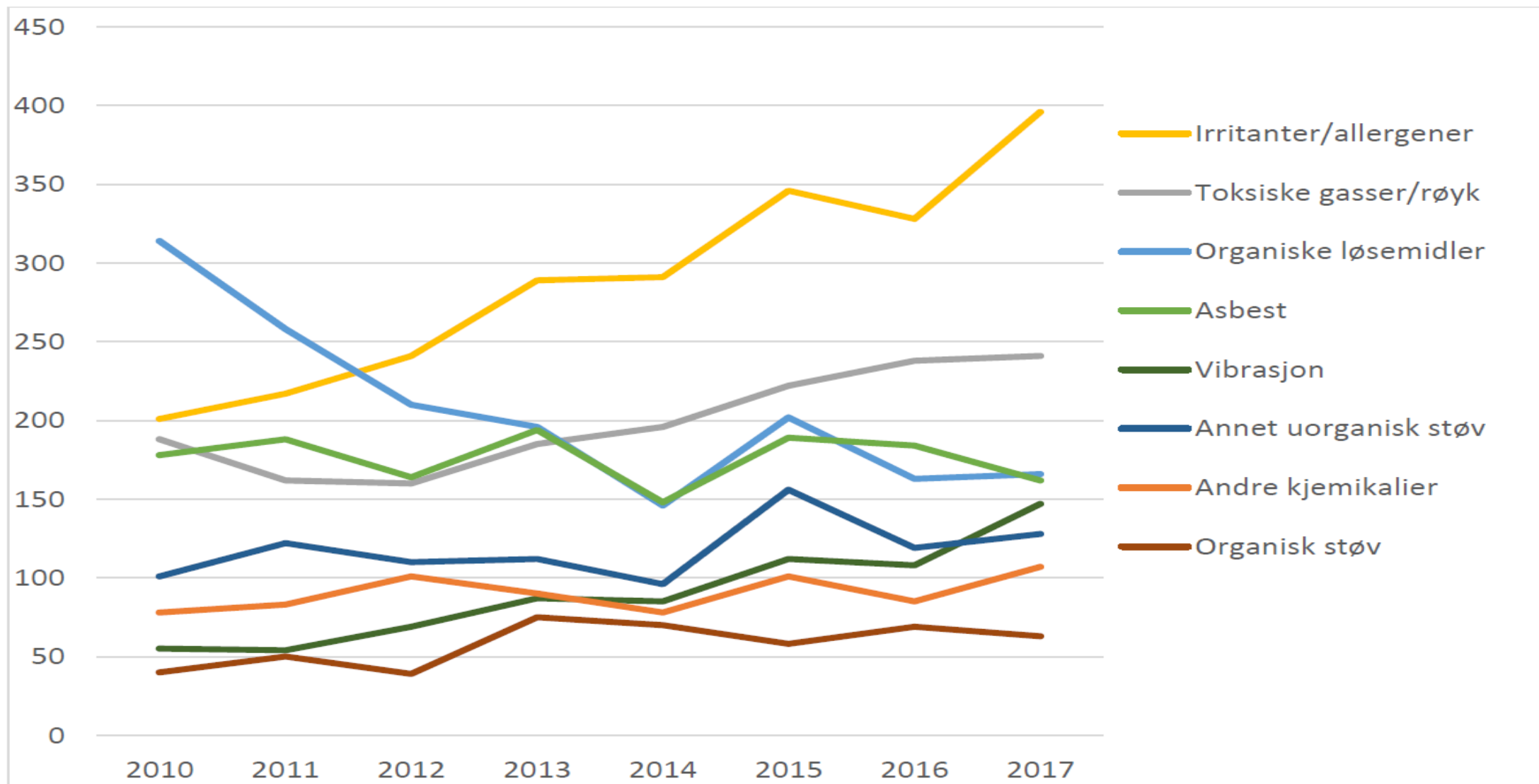
- Systematic overview of education and every job
- Potential exposure
- Measurements or other reports regarding condition
- Diagnostic history
- Referral to other specialists
- Assessment
- Conclusion
- Reporting
- Literature supporting the conclusion

- Cases concerning compensation to Social Security

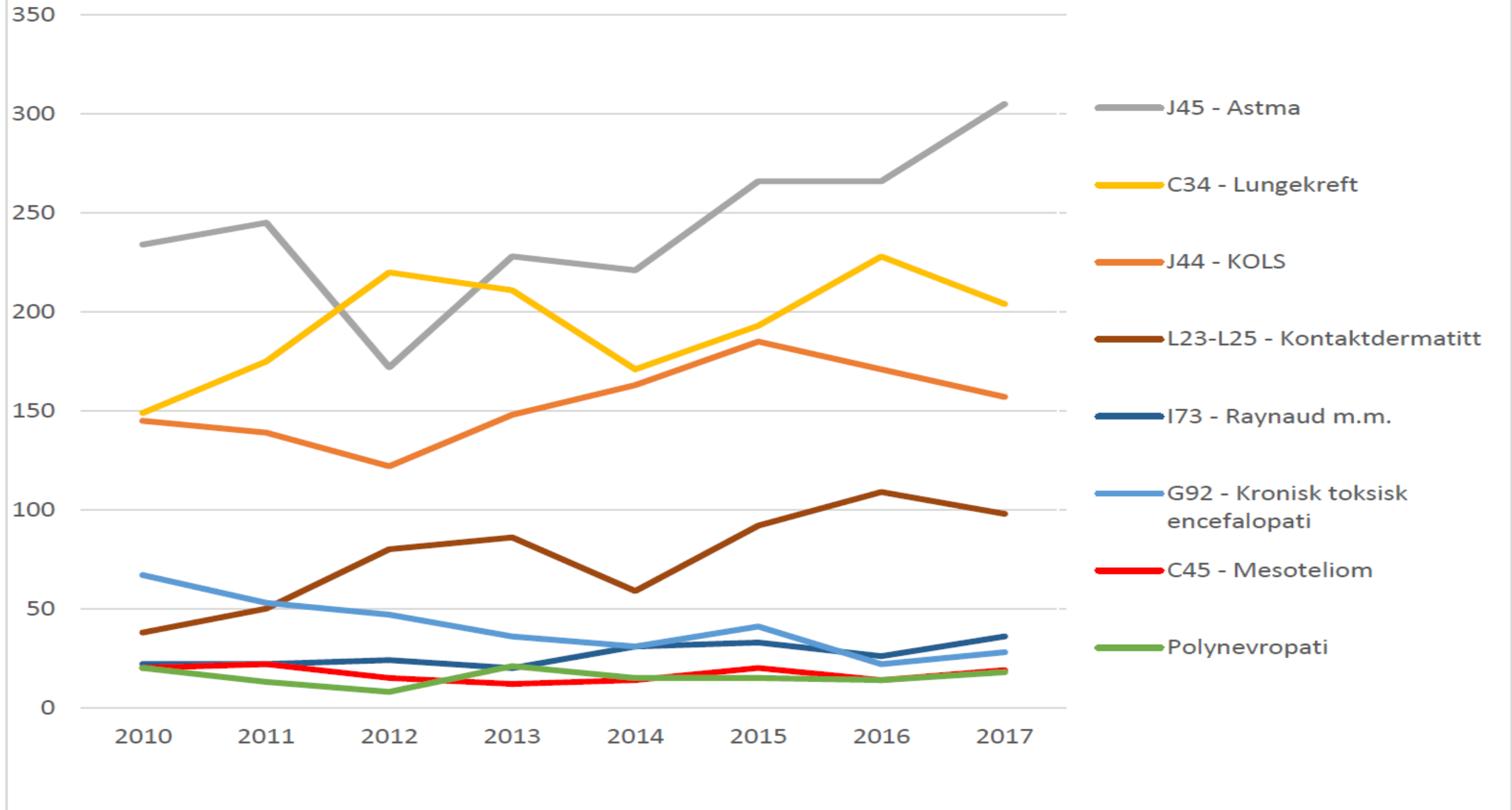
General examples (Norway):

- Lungs
 - Cancer, COPD, asthma
 - Dust, smoke, particles, aerosol cleaning products
- Skin
 - Toxic effects or allergy
 - Allergens, latex
- Internal organs
 - Hepatotoxic effects, renal effects
 - Solvents
- ENT
 - Hearing loss, tinnitus, rhinitis
 - Noise, dust
- CNS
 - Encefalopathi
 - Solvents, mercury, metals, pesticides
- Allergies
 - Isocyanates
- Hyperreactivity
 - EMF, solvents, smells

Risk= hazard x dose



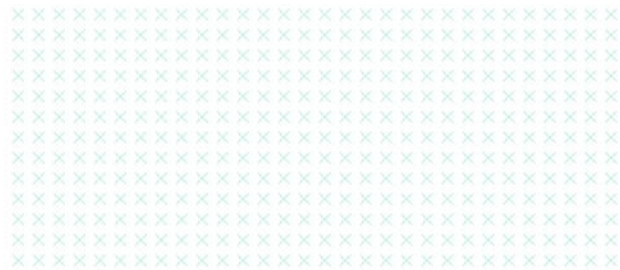
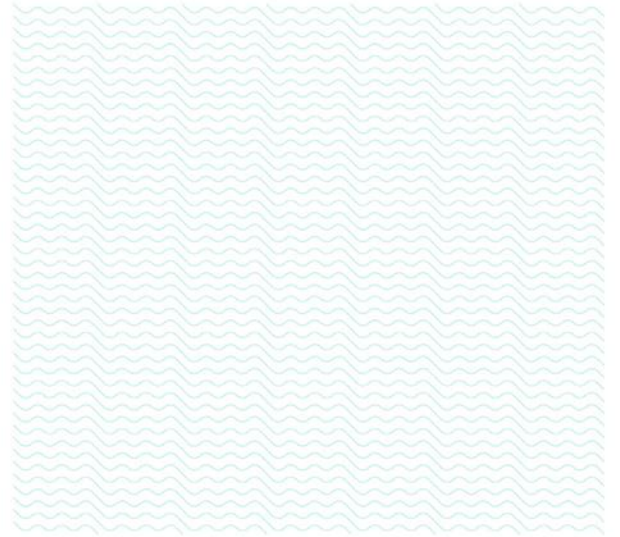
Figur 7. Trender for utvalgte eksponeringer, 2010-2017.



Figur 8. Trender i perioden 2010-2017: Noen utvalgte hoveddiagnoser.



Actions



- Legislation
- Information
- Public awareness
- Cooperation in industries and between employers/employees
- Inspections by the authorities (capacity)
- Public social security systems
- Private insurance



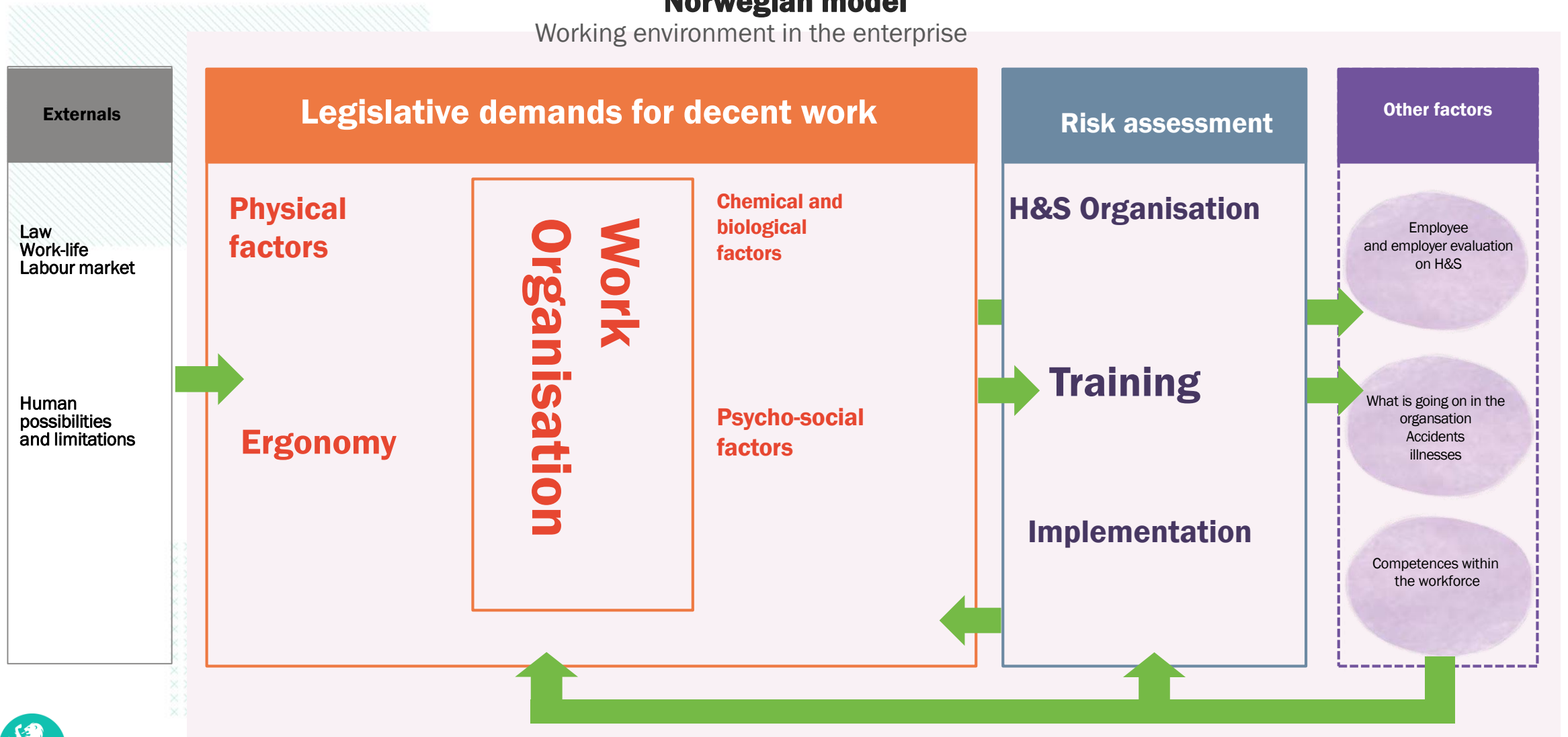
Comprehensive model



Assessment of working environment

Norwegian model

Working environment in the enterprise



Reducing risks for the benefit of the workers

based on **knowledge**
and **sustainability**



08.11.2018