

# The Registry for Work-related Diseases (RAS), Norway, its contribution to prevention and policy

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# Registry for Work-related Diseases

- Sentinel Health Event framework
- The Norwegian Labour Inspection Authority (NLI)
- purpose to provide information to the NLI to enable workplace interventions and the prevention of hazardous exposures
- about 2 500 reports annually

# Sentinel Health Event

- a preventable disease, disability or untimely death which is occupationally related and whose occurrence
- provides the impetus for epidemiologic or industrial hygiene studies
- serves as a warning signal that initiates
  - materials substitution,
  - engineering controls,
  - personal protection or
  - mandates medical care

# The Norwegian Labour Inspection Authority

- governmental agency under the Ministry of Labour and Social Affairs
- one central office – the Directorate
- seven regional offices
- 6 occupational medicine physicians
  
- covers all land-based enterprises
- 250 000 businesses
- 2.6 million workers



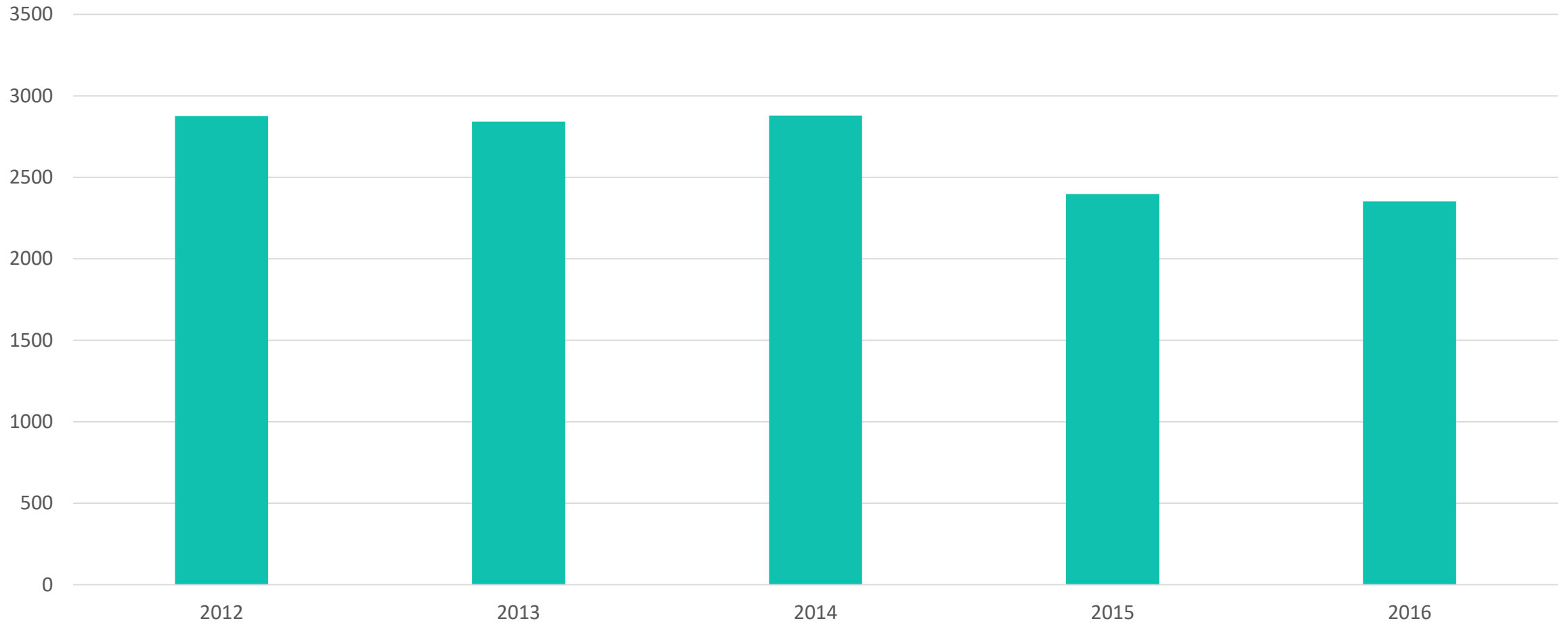
# Working Environmental Act

- mandatory for all physicians to report cases of work-related disease
- suspected or confirmed work-related disease

# Procedure of reporting, registration and intervention

- Standardized report form for work-related disease
- Incoming by regular mail to The Labour Inspection Authority (Directorate)
- Electronic database
- Registration of
  - Personal information of the reported person
  - Information of the employer where the exposure occurred
  - Diagnosis (ICD-10)
  - Exposure (EODS)
  - Need for intervention
  - Physician details
- All reports are reviewed by an occupational physician at The Labour Inspection Authority
- Regional assessment and optional intervention
- In cases that are followed up by an inspection The Labour Inspection Authority reports back to the reporting physician

# Total number of reported work-related diseases 2012-2016



# Total number of work-related diseases reported in 2016 by ICD-10 diagnosis chapter

Diagnosis chapter (ICD-10)	Total number of cases Reported	%
Diseases of the ear	1 151	49 %
Diseases of the respiratory system	270	11 %
Diseases of the musculoskeletal system	190	8 %
Symptoms, signs and abnormal clinical and laboratory findings	186	8 %
Mental and behavioural disorders	145	6 %
Diseases of the skin and subcutaneous tissue	142	6 %
Neoplasms	81	3 %
Injury, poisoning and certain other consequences of external causes	76	3 %
Certain infectious and parasitic diseases	37	2 %
Diseases of the circulatory system	30	1 %
Diseases of the nervous system	29	1 %
Diseases of the digestive system	6	< 1 %
Diseases of the eye and adnexa	5	< 1 %
Factors influencing health status and contact with health services	3	< 1 %
Missing	1	< 1 %
<b>Total</b>	<b>2 352</b>	<b>100 %</b>



# Exposures reported in 2016

Occupational exposure	N (It is possible to report more than one exposure for each case)	%
Physical agents	1 305	55 %
Industrial factors, materials and products	456	19 %
Psychosocial factors	318	14 %
Biomechanical factors	197	8 %
Biological agents	124	5 %
Chemical agents	80	3 %
Other	23	1 %
Missing	1	<1 %
Total	2 504	100 %

# Cases reported by type of physician in 2016

Type of physician	%
Occupational Health Service	62 %
Hospital	18 %
Primary care (GP)	13 %
Municipal	2 %
Private practitioners	2 %

# Number of cases recommended for intervention in 2016

Diagnosis chapter (ICD-10)	Total number of cases	Number of cases recommended for intervention	% of all cases recommended for intervention (all diagnoses)
Diseases of the ear	1 151	23	10 %
Diseases of the respiratory system	270	25	11 %
Diseases of the musculoskeletal system	190	20	9 %
Symptoms, signs and abnormal clinical and laboratory findings	186	66	29 %
Mental and behavioural disorders	145	64	28 %
Diseases of the skin and subcutaneous tissue	142	4	2 %
Neoplasms	81	-	-
Injury, poisoning and certain other consequences of external causes	76	15	6 %
Certain infectious and parasitic diseases	37	1	< 1 %
Diseases of the circulatory system	30	3	1 %
Diseases of the nervous system	29	5	2 %
Diseases of the digestive system	6	3	< 1 %
Diseases of the eye and adnexa	5	1	< 1 %
Factors influencing health status and contact with health services	3	1	< 1%
Missing	1	-	-
<b>Total</b>	<b>2 352</b>	<b>231</b>	

# The Registry's contribution to prevention and policy

- about 100 – 150 cases per year are followed up by specific inspections (workplace level)
- in addition the information from a report can be followed up by a general inspection (workplace level)
- information from the reports can also be used in general inspections at other levels (sector, occupational)
- prevention may be primary/secondary/tertiary
- follows the principles of prevention (elimination – substitution - personal protective devices)

- strategic decision making at The Labour Inspection Authority
- epidemiological studies
- data are used to support policy development (e.g. diving, lead poisoning, etc )
- greater awareness of occupational exposures/ emerging exposures (e.g. theatrical fog, fish protein/allergens)

# Examples

## 1. Report of lead poisoning in cleaner at indoor shooting range

- Inspection at the workplace found missing ventilation system and missing cleaning routines
- Information to the organization for indoor shooting ranges to implement findings in order to prevent new cases of lead poisoning
- Information used in following building permission cases to prevent the building of indoor shooting ranges together with athletic arenas



## 2. Report of tinnitus in professional sound editor

- Due to sound editing of multiple soundtracks at laptop
- >130 dB
- The broadcasting company investigated and found that about 400 workers were exposed
- Updated editing program and laptop
- Health controls of workers



# Challenges with the system

- Underreporting

- Only 2 - 3 % of doctors report annually (25 000 doctors in Norway in 2016)

Due to

- lack of awareness concerning exposure recognition?
- lack of awareness concerning regulation?
- cumbersome procedure of sending reports by regular mail?
- missing acknowledgement of usefulness?

- Skewed reporting

- 49 % are noise induced hearing loss and 8 % are musculoskeletal disorders in 2016

- Not functioning as a Sentinel Health Event system

- in 29 % of the cases in 2016 the exposure was historical



# Observations

- No clear effect of payment for reporting
- No policy for enforcement of the law
- Intend to establish electronic reporting
- Strive to improve the reporting by collaborative efforts

# Conclusions

Despite its limitations The Registry for Work-related Diseases serves as a Sentinel Health Event reporting system and provides information for prevention and policymaking.



**Thank you for your attention**