

## Regulatory perspective on national guidelines and compliance

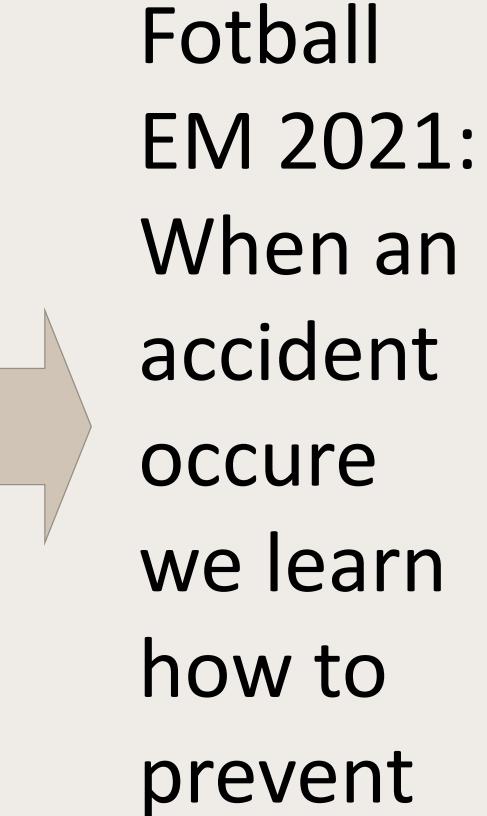
Line Ø. Angeloff, senior advisor, Norwegian Public Health Institute Healthy buildings 2021 – Europe, 22.06.2021

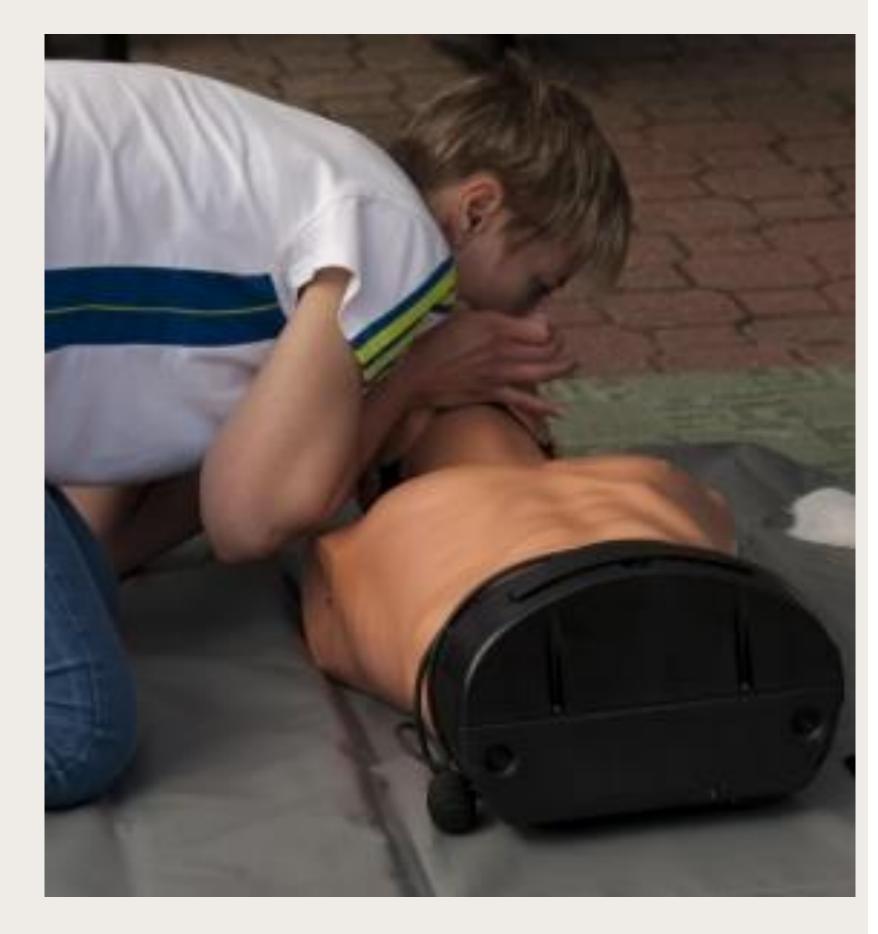
#### The dilemma of preventive work

# AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE.

QUOTEHD.COM

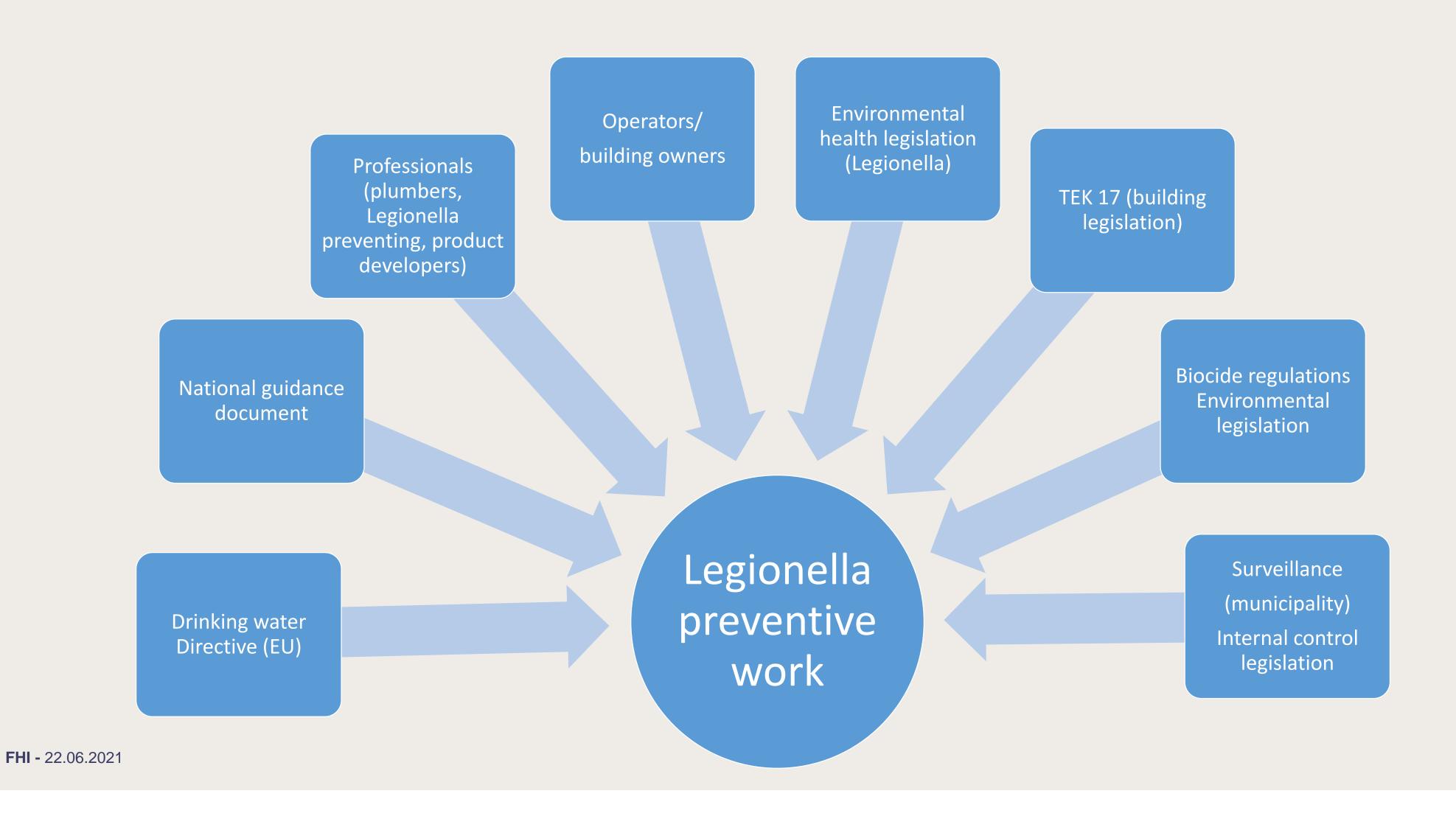
Henry de Bracton



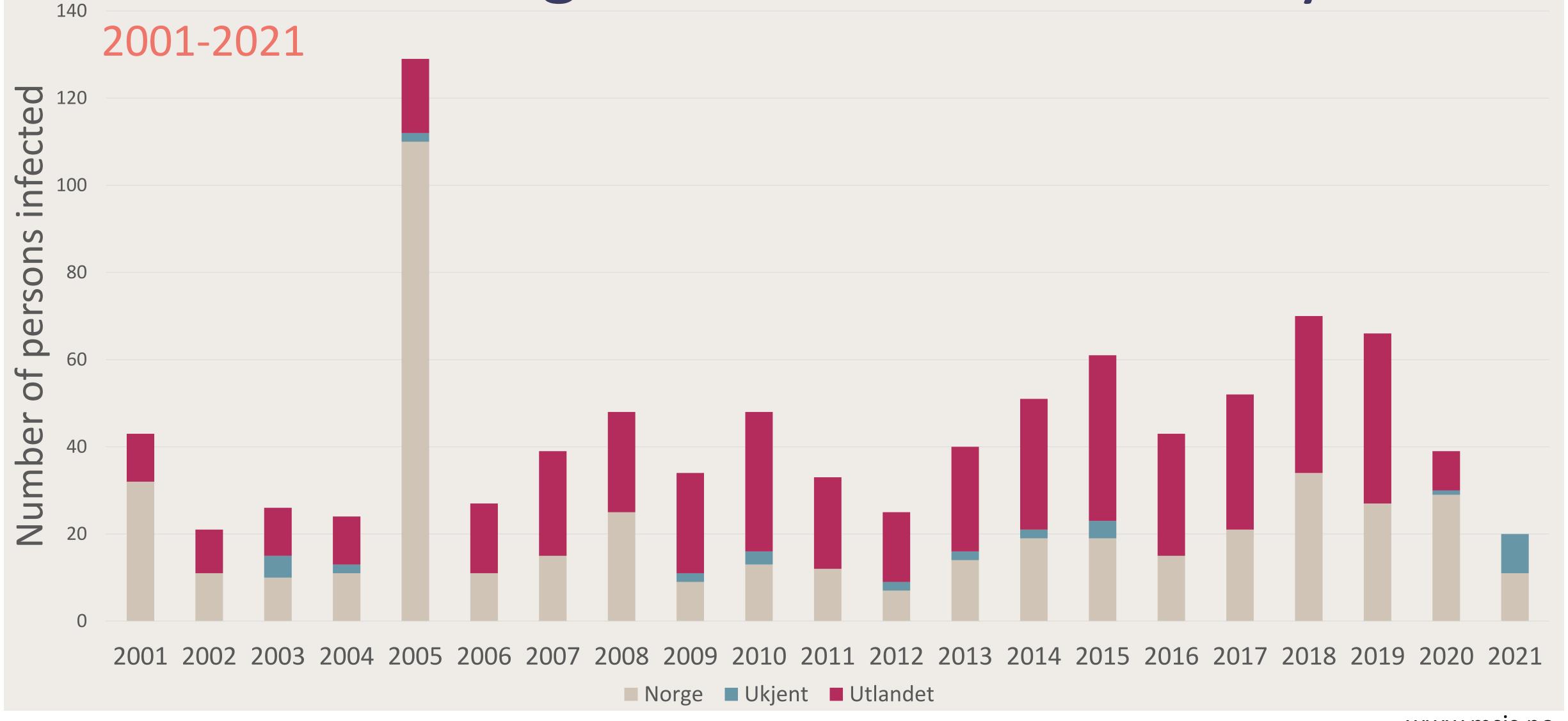


www.morguefile.com

#### The complexity of legionella preventive work



### Number of Legionella cases in Norway



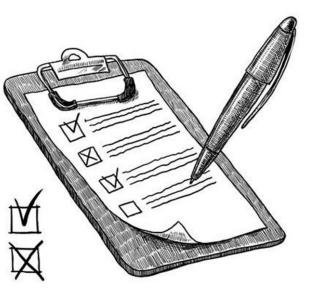
## A study of Legionella preventive work in public hospitals and nursing homes in Norway

#Line Ø. Angeloff, Vidar Lund, Fredrik Jordhøy, Horst Bentele, Susanne Hyllestad, Norwegian Public Health Institute

- A cross-sectional study (questionnaire) among public hospitals and nursing homes in Norway to:
- map the hospitals and nursing homes' practices around legionella prevention, and
- 2) map the need for more knowledge / guidance on how legionella in buildings can be prevented and treated.

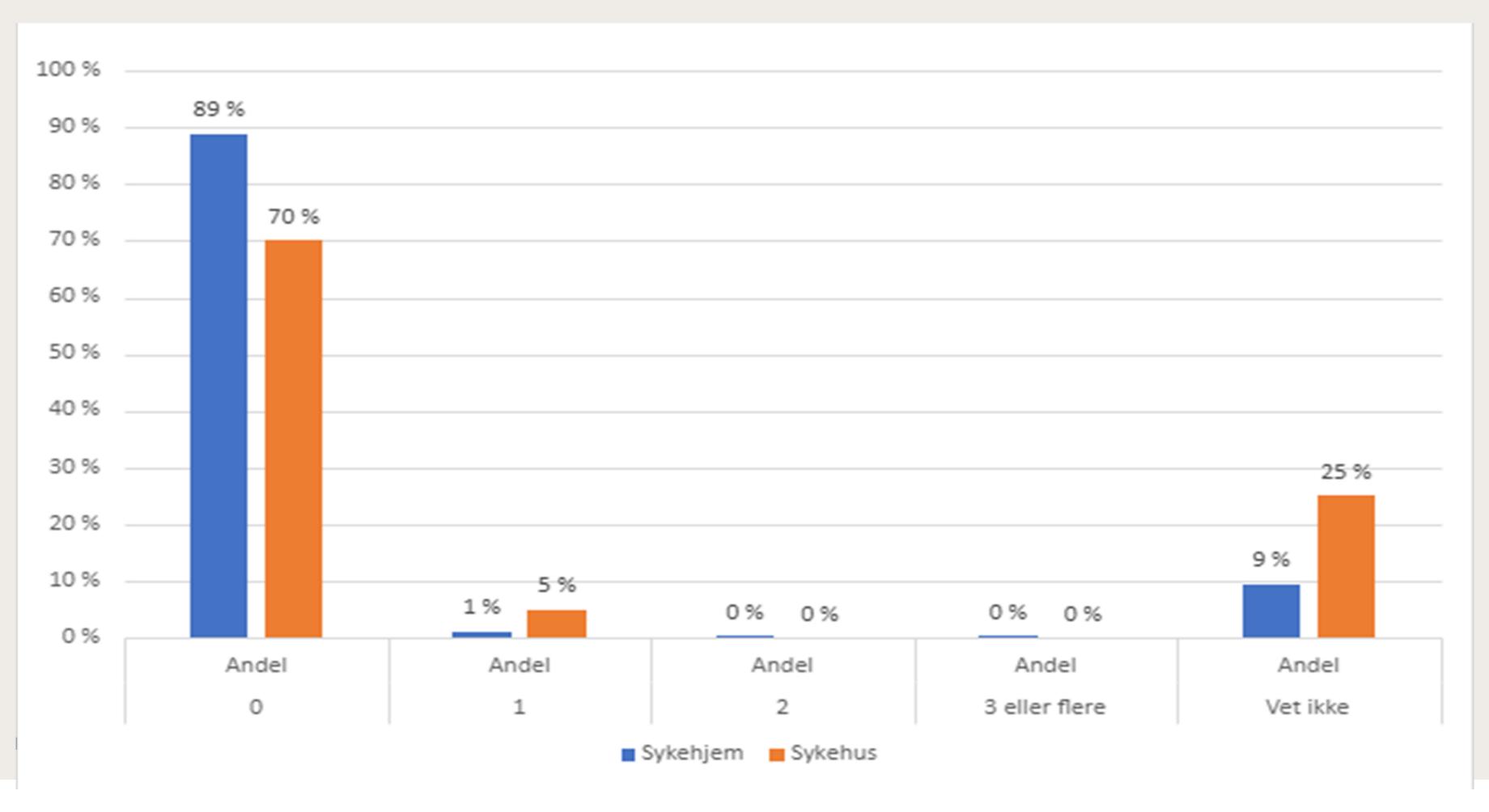
Result: 20 hospitals (=100%)

411 nursing homes (=47%)





## Self-reported cases of Legionellose caused by Legionella in own system, the last 5 years



## Some results («highlights»)

	Nursing homes (N=411)		Public hospitals (N=20)	
	Number	Percent	Number	Percent
Knowledge of national guidlines	322 (n=411)	<mark>78 %</mark>	18 (n=20)	<mark>90 %</mark>
Has performed risk assessment	232 (n=411)	<mark>56 %</mark>	14 (n=20)	<mark>70 %</mark>
Control and preventive routines	334 (n=411)	<mark>81 %</mark>	19 (n=20)	<mark>95 %</mark>
Taking Legionella samples	207 (n=334)	<mark>62 %</mark>	14 (n=19)	<mark>74 %</mark>
Detected Legionella before water treatment	29 (n=210)	14 %	5 (n=10)	<mark>50 %</mark>

#### Some questions arising from the survey

- Why is it that many building owners install water treatment without having risk assessed their water distribution network?
- Why have so many preventive measures without having carried out risk assessment?
- The operators get their knowledge through courses, national guidelines and external companies, but there is still a need for more knowledge and accurate guidance. The hospitals use professional resources to a greater extent, while the municipalities use internal resources to a greater extent. Does this effect the results? How much influence do the professional companies have?

## Other questions concerning legionella in buildings

- How can we balance health considerations and energy saving?
  Hot water flushing has a limited effect over time. Are chemicals the solution for the future? According to technical regulations, it must be 65 degrees on the circulation line, and pipe materials that do not promote the growth of biofilm. Requirements for energy saving indicate that chemical water treatment has emerged as a solution. Newer systems; 30 degree storage tank, can this work with a quick-heater? Is it sufficient to keep the system under control?
- Can the form of ownership/organization have a bearing on how measures are followed up in buildings?
- Is there good enough communication between those with overall responsibility and the operttors/building owners? In order to achieve good routines for operation / protection regardless of system, good communication is needed between the different levels.

## Thank you for your attention

Norwegian Public Health
Institute

lineodegard.angeloff@fhi.no

Mobile: +47 95 11 79 34

