

# Regulatory framework of legionellosis prevention in Hungary

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# Regulatory framework for *Legionella* prevention

- Ministerial Decree 49/2015 (XI. 4.) of the Ministry of Human Capacities
- Stand-alone lawpiece, covering all *Legionella* risk environments
- Key concept is risk assessment, monitoring in priority premises
- Complemented by a *Guidance document on risk assessment and risk management of Legionella risk environments*



[https://www.antsz.hu/data/cms89736/2019\\_2\\_Modszer\\_tani\\_level\\_Legionella\\_2019.pdf?query=legionella](https://www.antsz.hu/data/cms89736/2019_2_Modszer_tani_level_Legionella_2019.pdf?query=legionella)



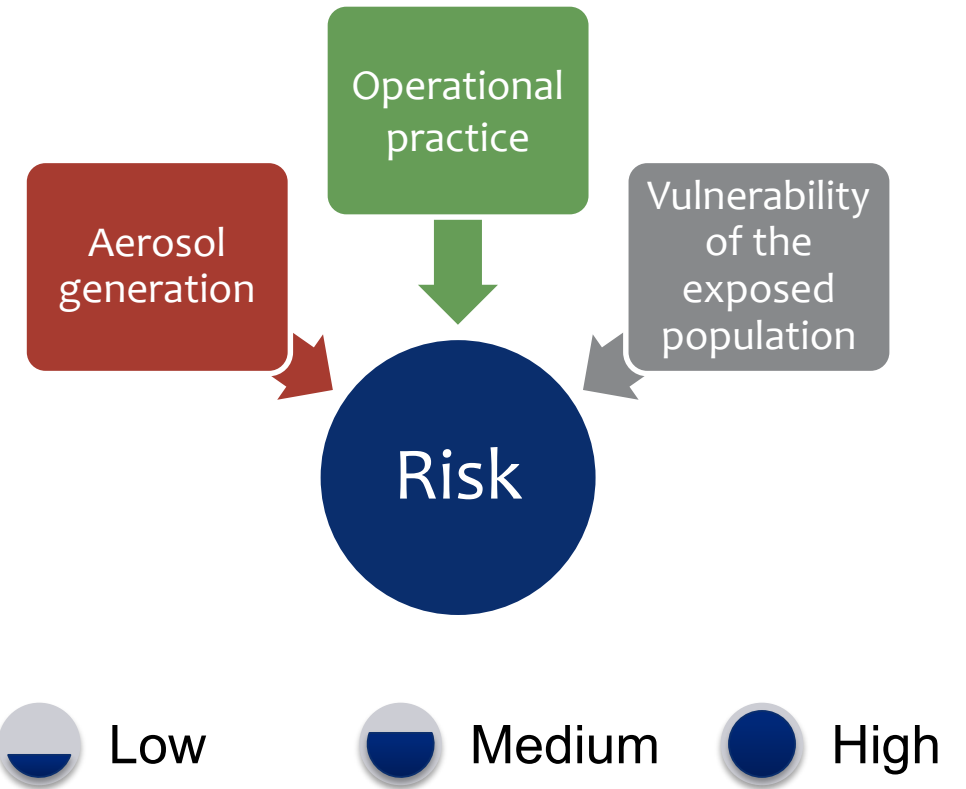
# Scope

- Risk environments: all water systems, where 20-50 °C water is present, stagnation is possible and aerosol is generated
- Risk facilities of *Legionella* exposure: public premises containing at least one risk environment
- Priority risk facilities:
  - hot water system of healthcare facilities and hotels
  - cooling towers
  - aerosol generating warm pools and spas (e.g. whirlpools)

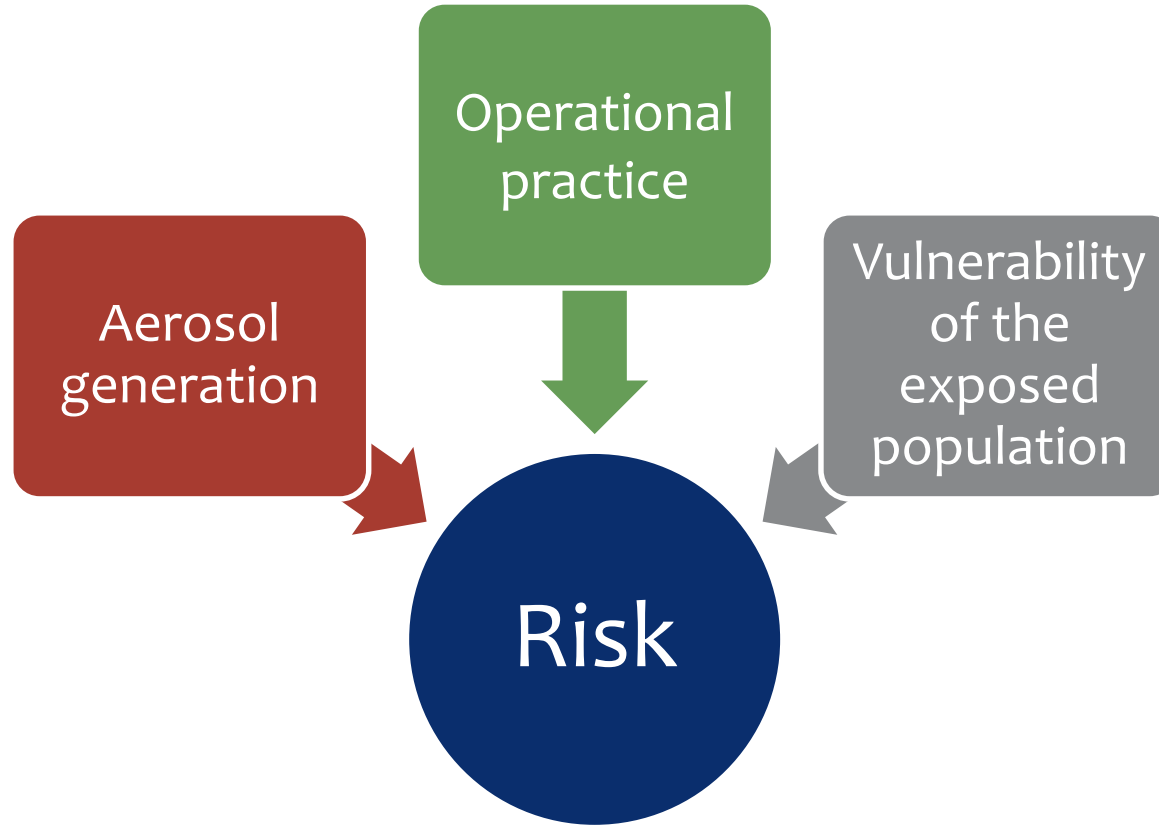


# Risk assessment

- Obligatory for all risk facilities
- Responsibility of the operator/owner
- Methodology is described in the guidance document
- Key elements
  - System description (all risk environments of the facility)
  - Assessment of *Legionella* proliferation potential
  - Exposure assessment
  - Risk management interventions



# Risk assessment in practice



 Low

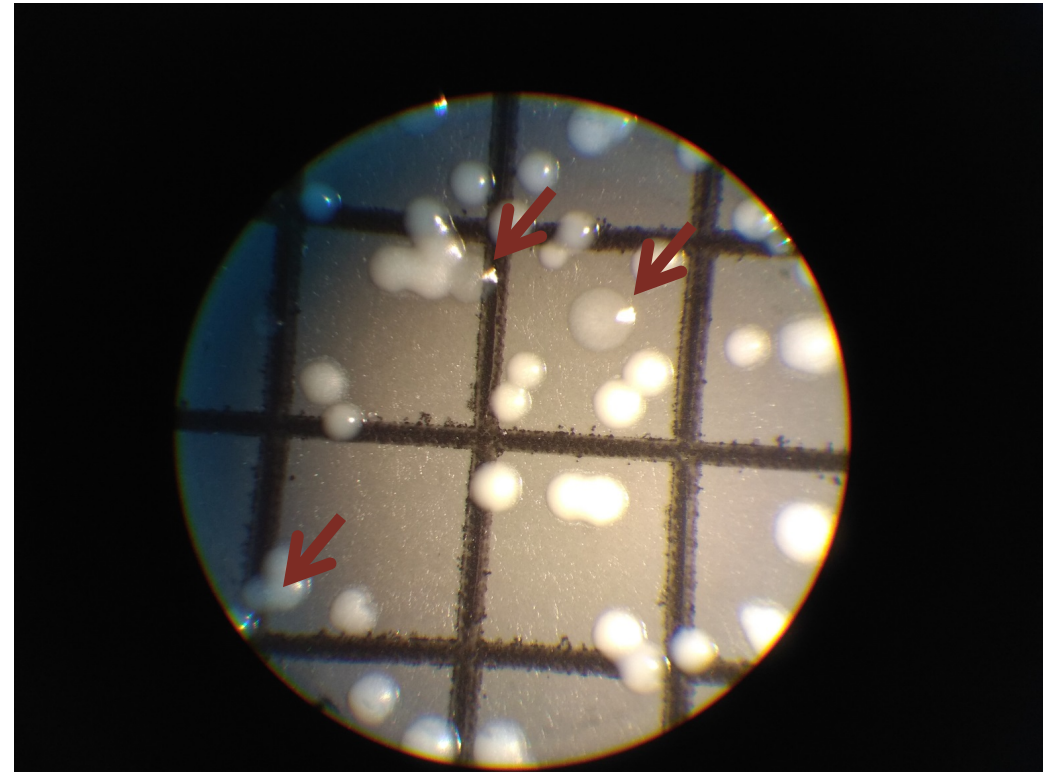
 Medium

 High



# Monitoring

- Obligatory in priority risk facilities
  - **Hot water** system of hotels and healthcare facilities: **yearly** (but temperature measurements monthly)
  - **Cooling towers: monthly**, reduced to once in every 3 months after 3 good results
  - Aerosol generating **pools: monthly**, reduced to once in every 3 months after 3 good results
- If risk assessment indicates high risk
  - Frequency depends on the type of facility



# Intervention levels

Environment	Alert level	Intervention level	Immediate intervention level
Hot water system	>1000 CFU/L in less than 50 % of the samples, and none above 10,000 CFU/L	>1000 CFU/L in more than 50 % of the samples, or >10,000 CFU/L in at least one sample	>10,000 CFU/L in more than 50 % of the samples
Sensitive units in healthcare facilities	>100 CFU/L in less than 50 % of the samples	>100 CFU/L in more than 50 % of the samples, or >1000 CFU/L in at least one sample	>1000 CFU/L in more than 50 % of the samples
Cooling towers	>1000 CFU/L <i>Legionella</i> or too high background	>10,000 CFU/L <i>Legionella</i> >500,000 CFU/mL colony count 22 °C	>10,000 CFU/L <i>Legionella</i> >500,000 CFU/mL colony count 22 °C
Aerosol generating pools	>100 CFU/L once	>100 CFU/L repeatedly or >1000 CFU/L once	>1000 CFU/L repeatedly
Other	Same as hot water systems		



# Risk management and other obligations

- Risk management
  - Some measures are listed in the ministerial decree
  - More detailed instructions in the guidance document
- Cooling tower inventory
  - All cooling towers must register into a national database
- Investigation of incidents and outbreaks
  - Legionellosis is a mandatory reportable disease
  - On site epidemiological investigation is necessary in case of clusters (>2 related cases) or confirmed nosocomial cases





# Thank you for your attention

