



INSTITUTE OF HYGIENE, LITHUANIA



***NOSOCOMIAL INFECTIONS AND  
THEIR RISK FACTORS IN  
PEDIATRIC ICUs IN LITHUANIA***

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# MAIN OBJECTIVE

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- To determine the incidence of nosocomial infections and their risk factors in pediatric ICUs in Lithuania

# METHODS

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- Prospective study in randomly selected ICU
- Modified HELICS protocol and CDC definitions used

# MATERIAL

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- 11 ICU of 9 hospitals
- 1061 patient examined:
  - *male - 59,5%*
  - *mean length of stay - 6,0 days*
  - *mean age - 6,3 years*

# INCIDENCE OF NI

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- 157 patients had total 175 NI
- Incidence of NI in ICU:
  - *17,2 % of patients*
  - *28,7 infections/ 1000 patient days*

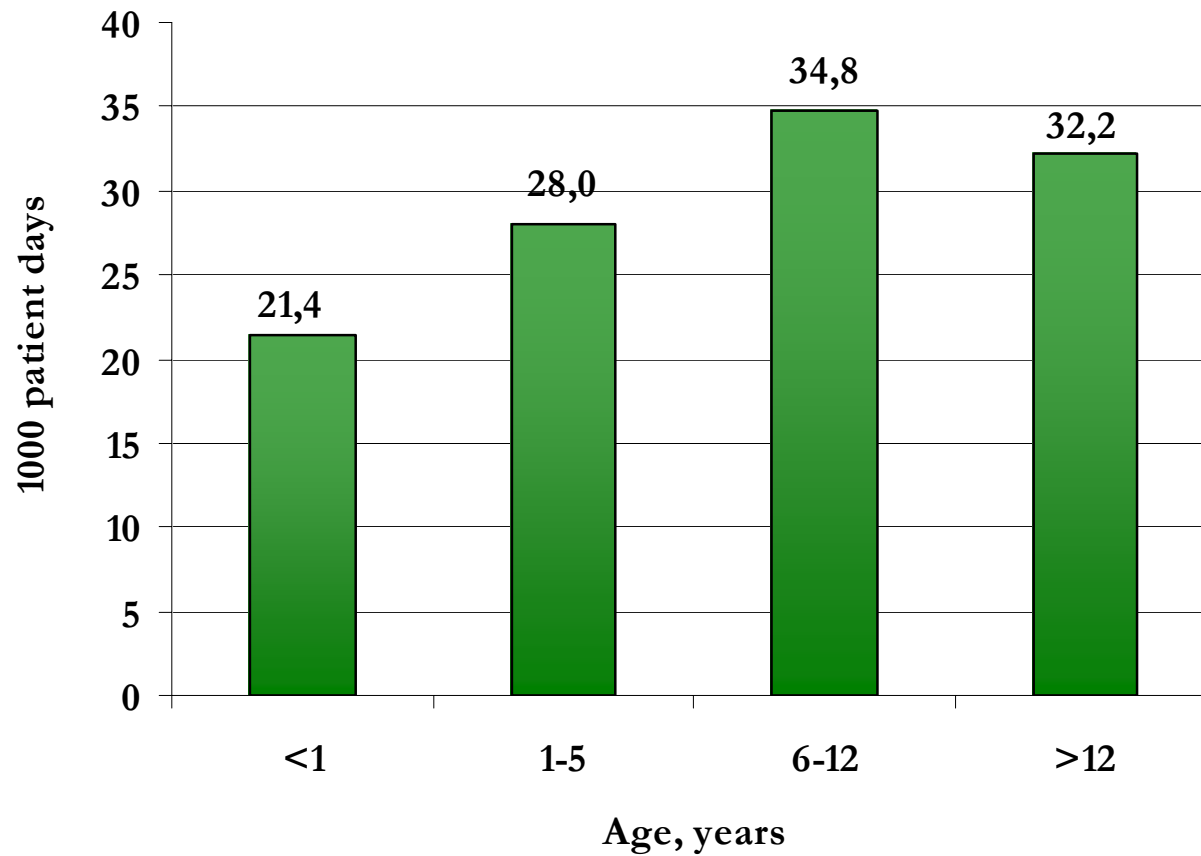
# RISK FACTORS OF NI

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	Exposed patients (%)	Device days	Mean (median)
<b>Mechanical ventilation</b>	30,2	1511	5,0 (4)
<b>Arterial/Central line</b>	24,5	1592	6,4 (5)
<b>Urinary catheter</b>	51,8	2363	4,5 (3)
<b>Peripheral catheter</b>	90,7	4392	4,8 (4)
<b>Intracranial pressure monitoring</b>	21,1	76	3,5 (3)

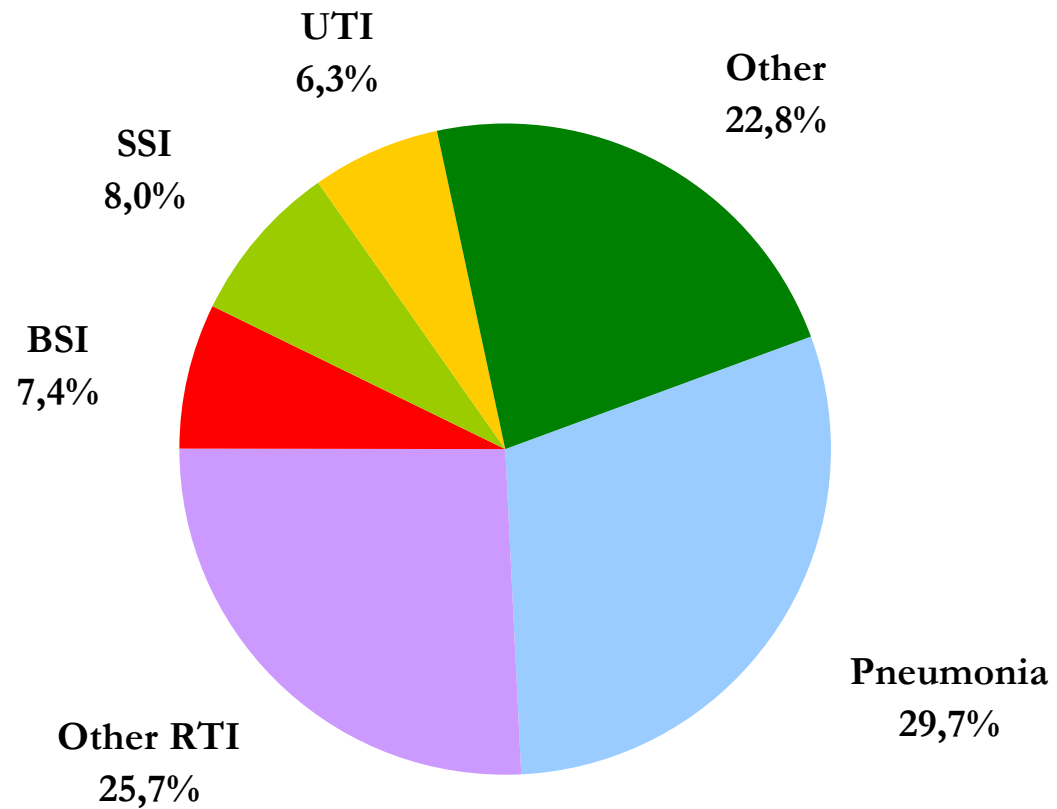
# NI INCIDENCE BY AGE

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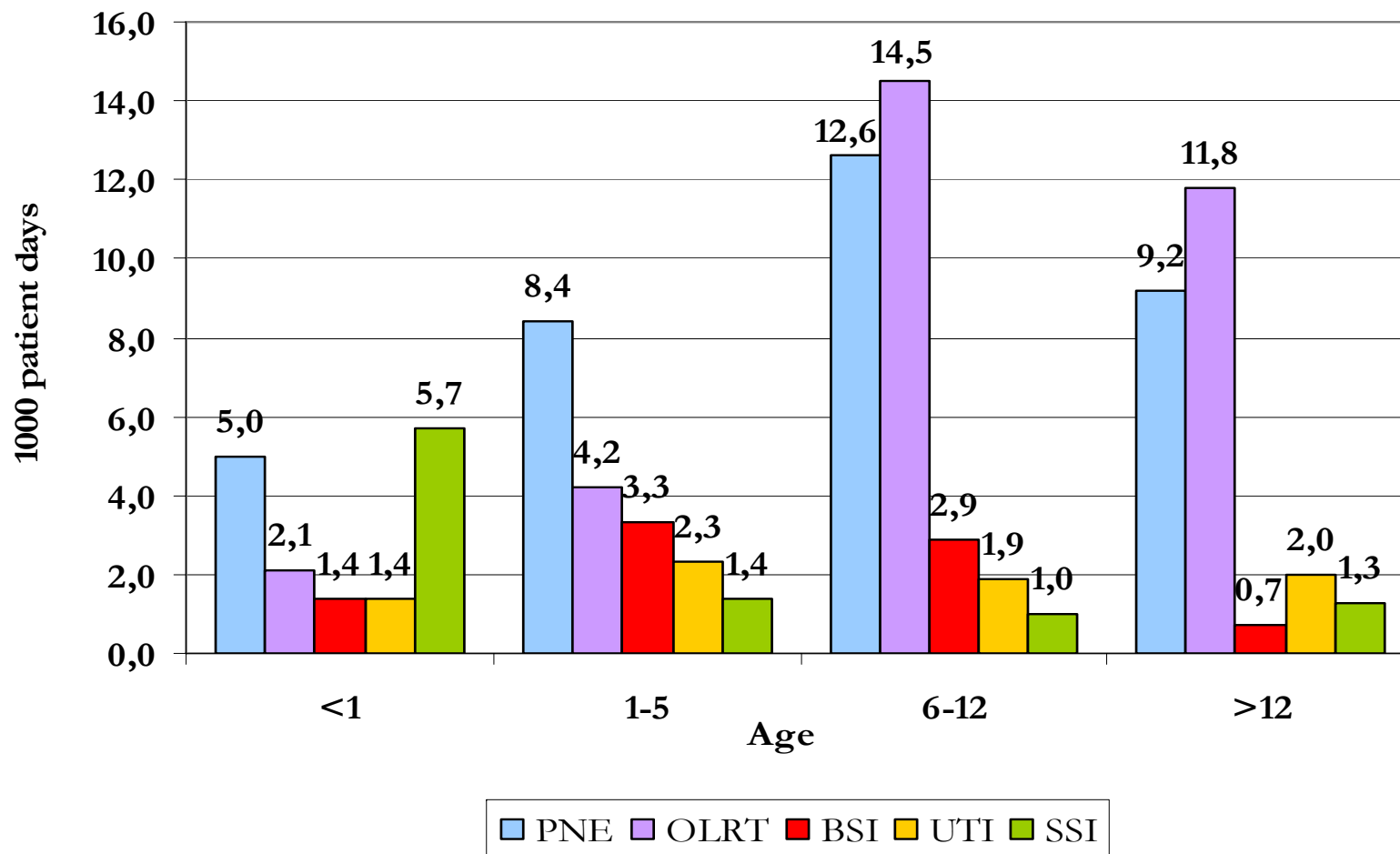


# STRUCTURE OF NI

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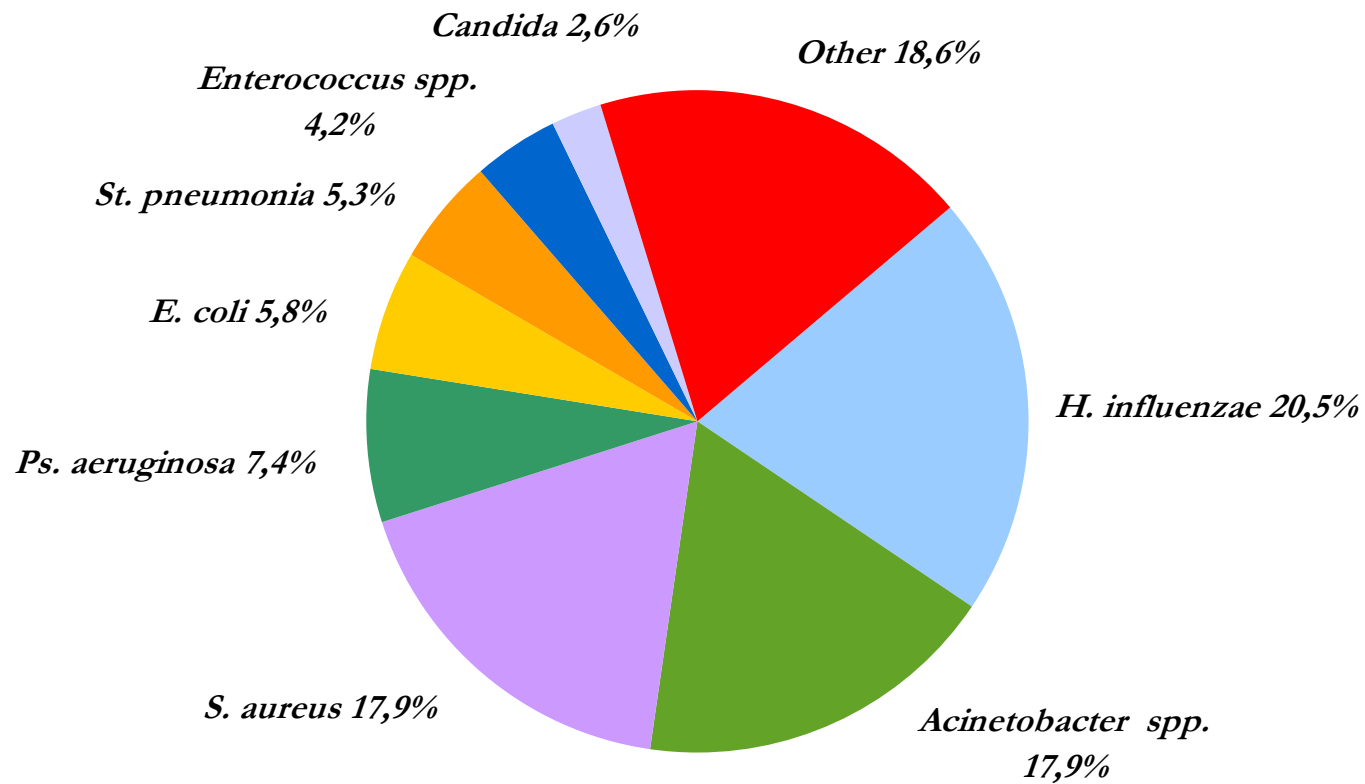


# INCIDENCE OF MAIN NI BY AGE



# ETHIOLOGY OF NI

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# CONCLUSIONS

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- ❑ Our study revealed the highest nosocomial infections rates among 6-12 years old children
- ❑ Pneumonia and other respiratory tract infections are the most common nosocomial infections
- ❑ Gram-negative bacteria are main pathogens of nosocomial infections