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Function: Statistician

Main expertise (1-2 lines):

Register-based research



UNIVERSITÀ
DEGLI STUDI
FIRENZE
DSS
DIPARTIMENTO DI
SCIENZE DELLA SALUTE





National surveillance of RSV in Finland

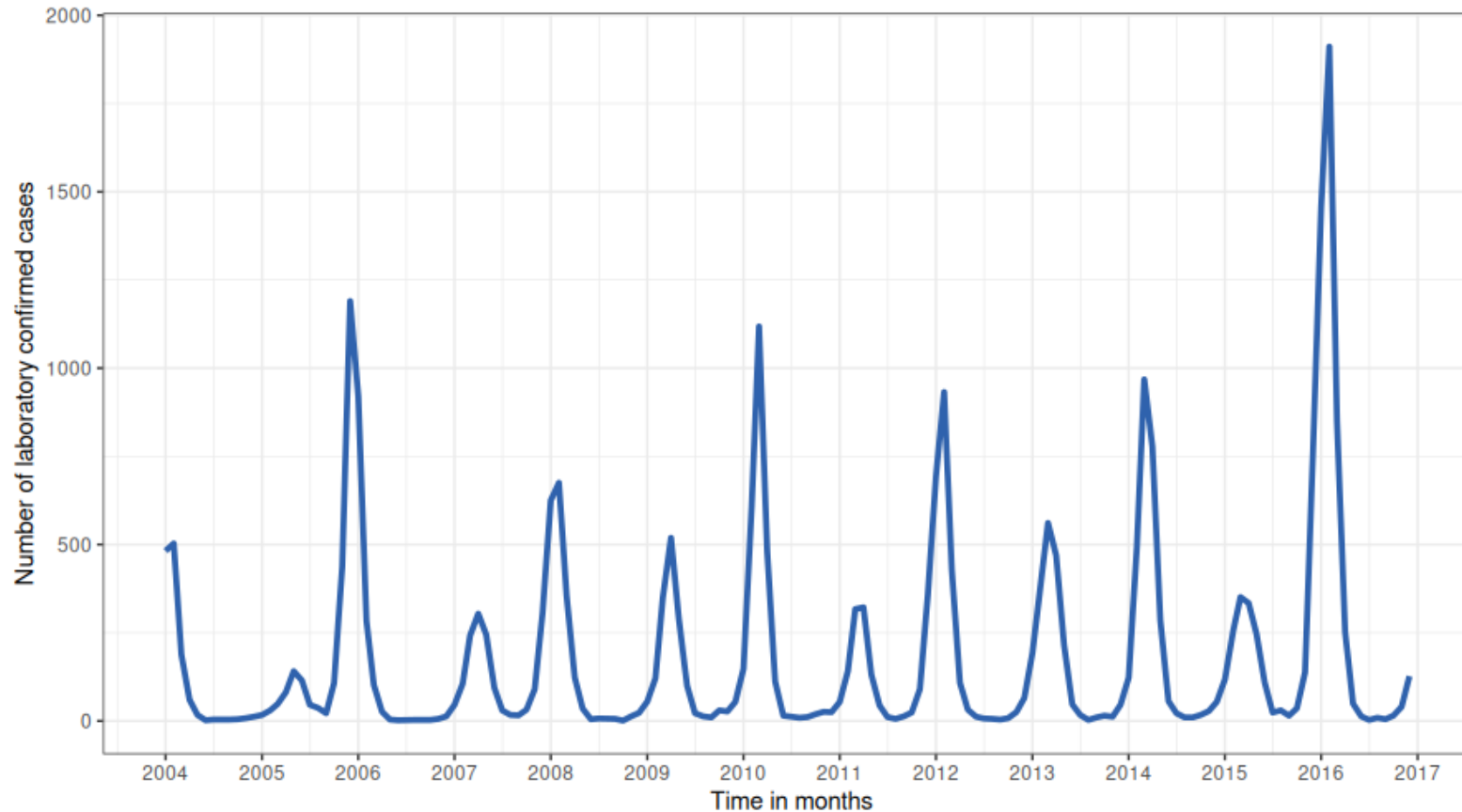
Terveyden ja hyvinvoinnin laitos

4.12.2024

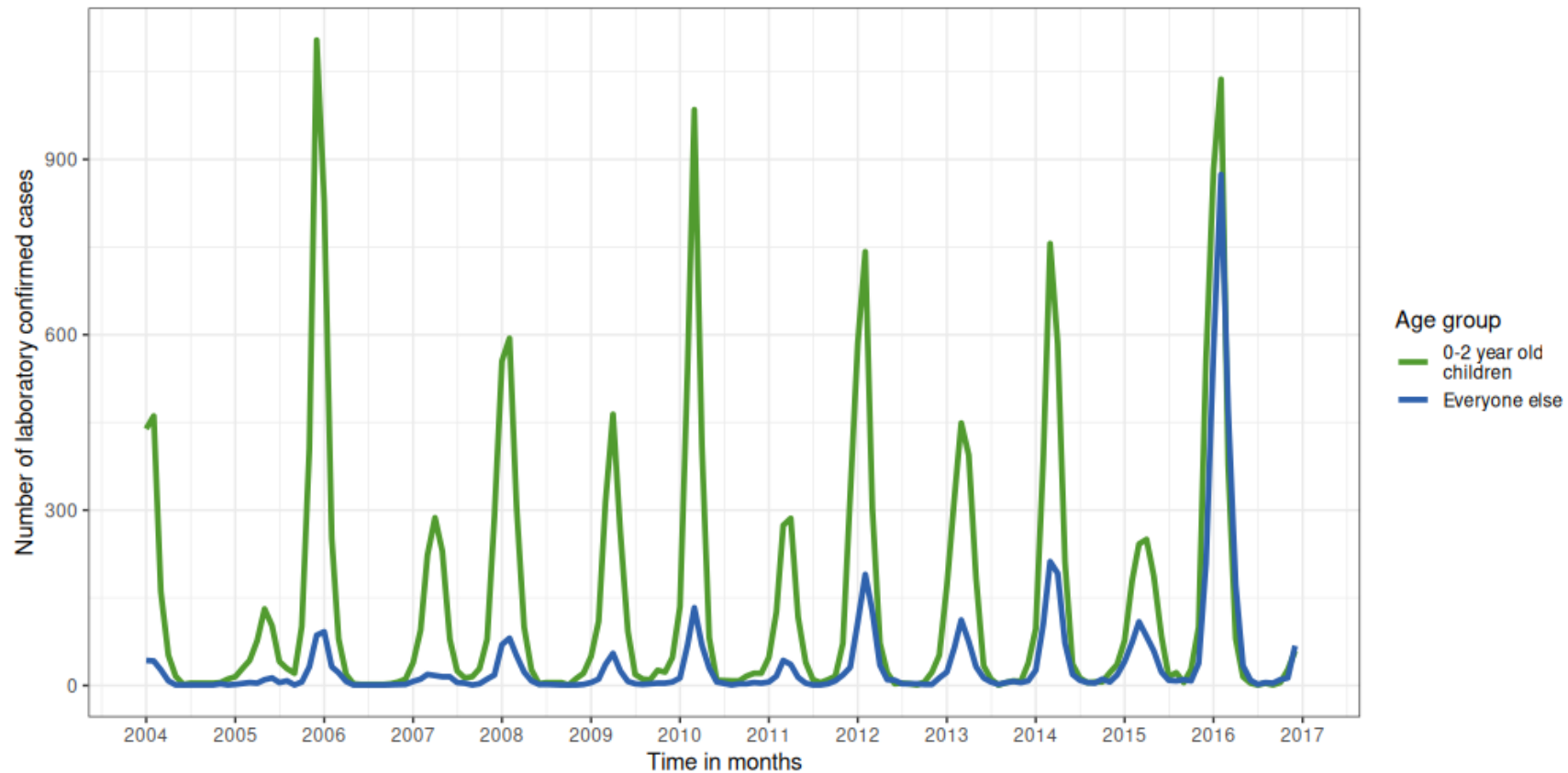
Respiratory syncytial virus (RSV)

- Common respiratory virus
- Symptoms ranging from mild cold to severe lower respiratory infections
- Major cause of hospital burden in infants
- Adults with pre-existing conditions and elderly also at risk

RSV in Finnish National Infectious Diseases Register (2004-2016)



RSV in Finnish National Infectious Diseases Register (2004-2016)



RESCEU (2017-2022) & PROMISE (2021-2024)

- European initiatives focusing on RSV (funded by IMI & IHI)
- Goals include generating evidence on burden of RSV and preparative work for vaccines and therapeutics
- Multitude of participants across Europe
 - Finnish participants Varha and THL



4.12.2024



PROMISE
Preparing for RSV Immunisation
and Surveillance in Europe

Estimating burden of RSV from routine electronic health records

Datasets:

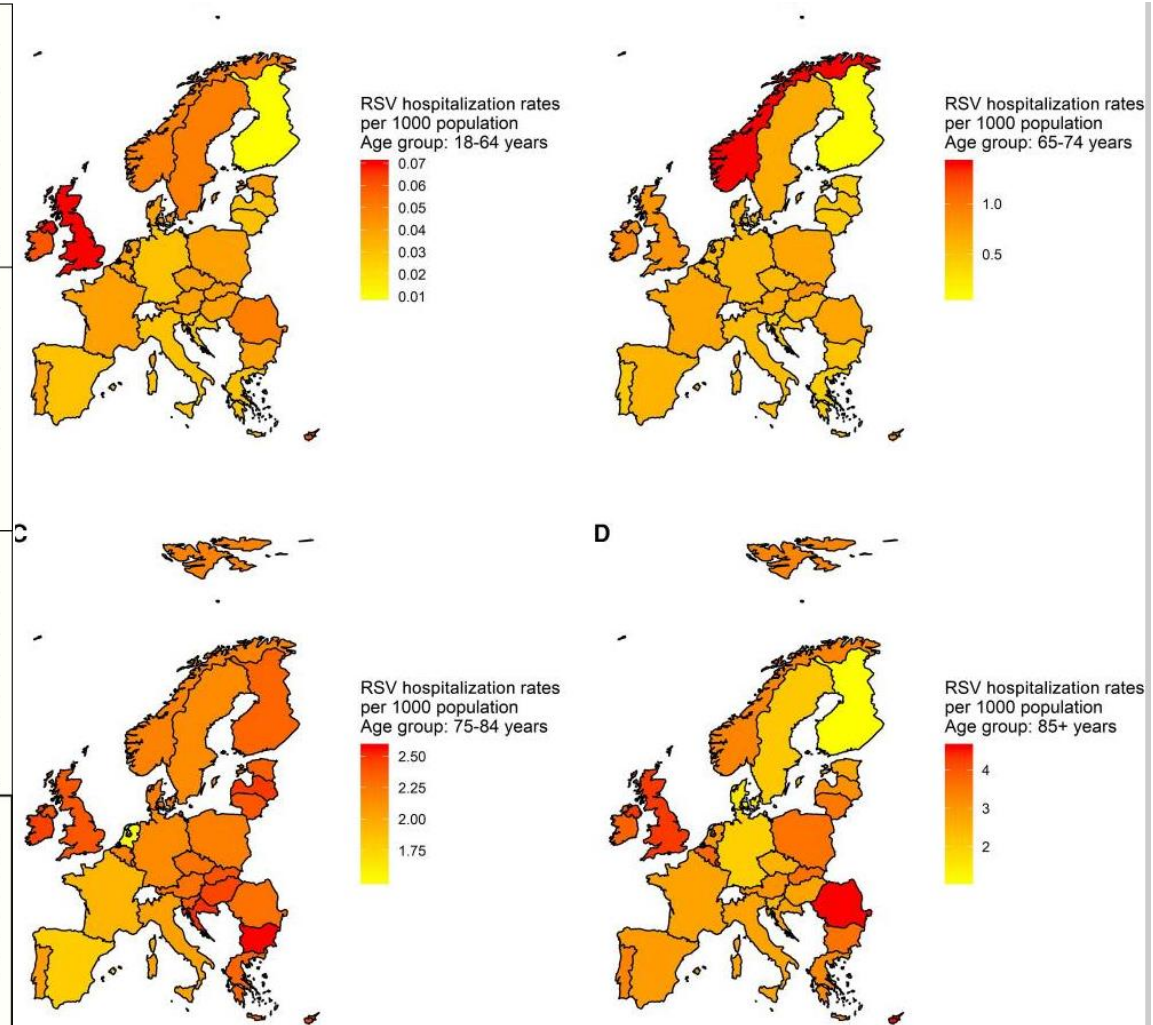
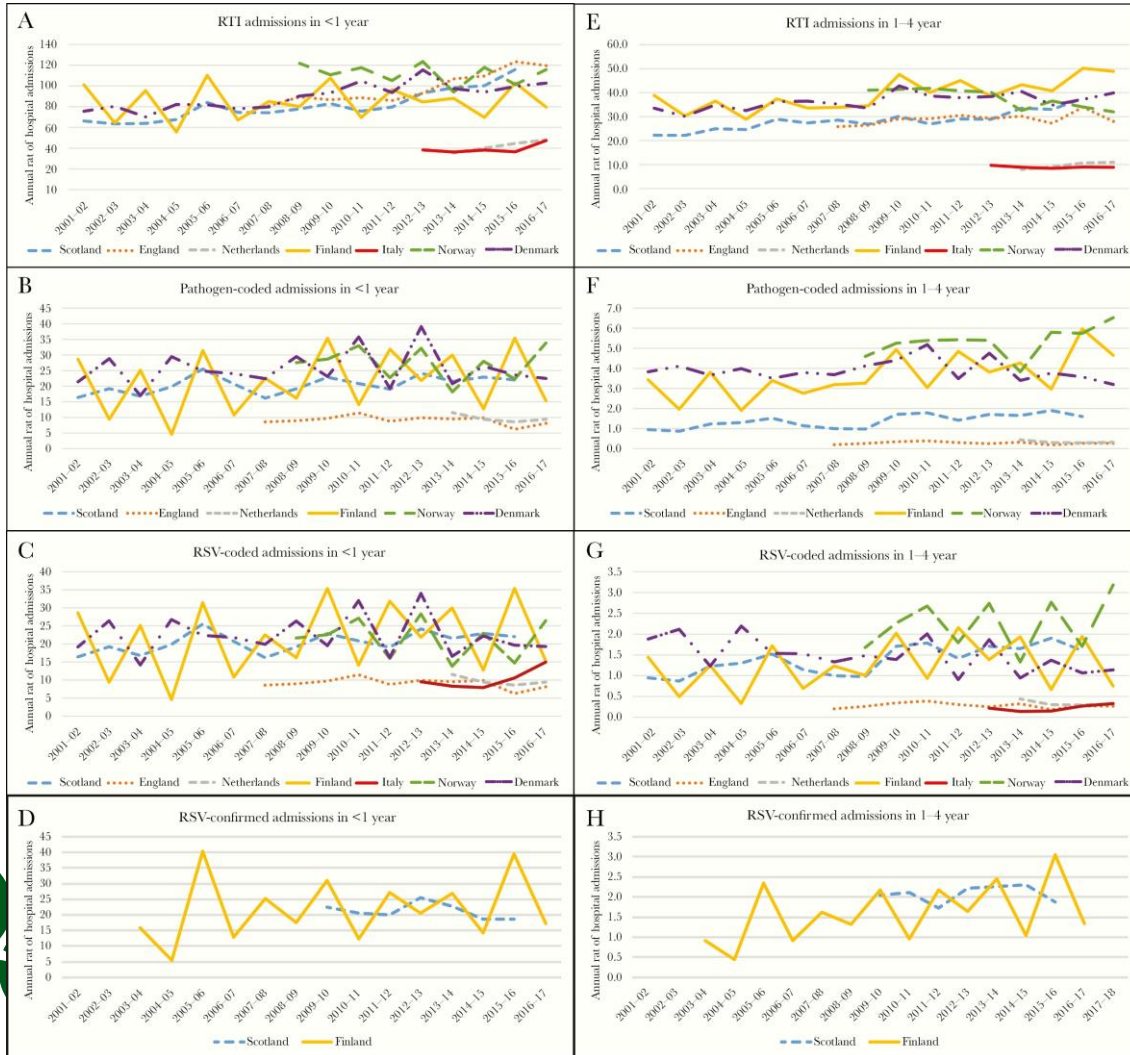
- Hospital admissions
- Laboratory confirmations
- General practitioner visits
- General population and death records
- Birth records

Topics:

- Measurement of disease burden
 - Direct characterization
 - Estimation for adults
- Profiling patient characteristics e.g. risk groups
- Preparing data for other study tracks



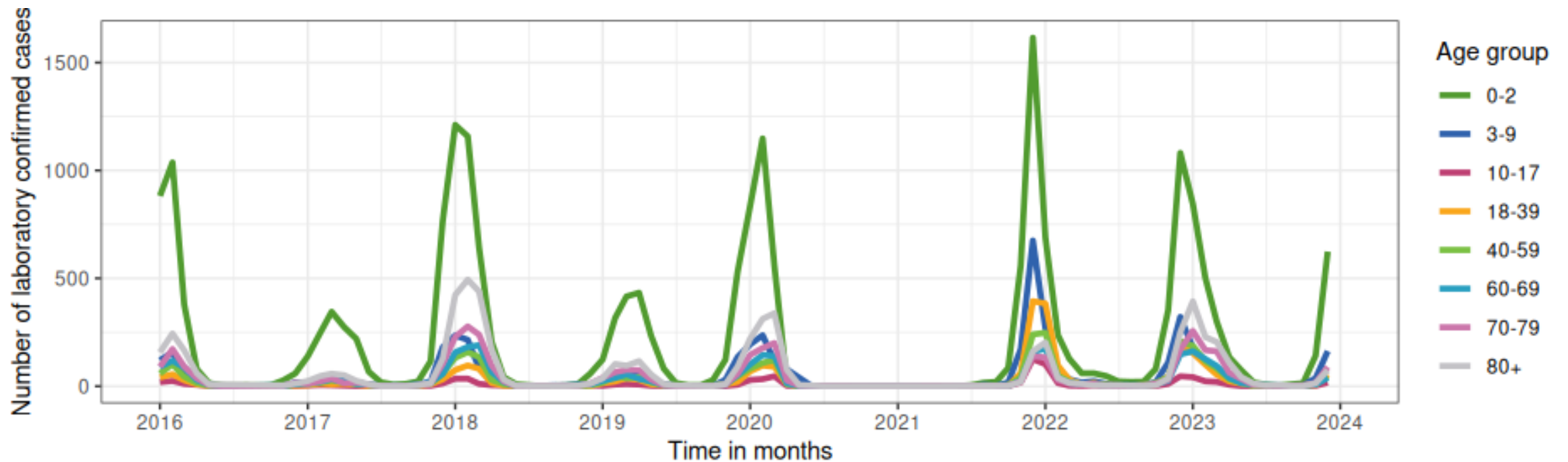
Some results from RESCEU



Changes related to national surveillance since 2017

- Improvements in testing practices for adults
- COVID-19 pandemic lead to a greater need for surveillance of ARIs
→ chance to utilize lessons learned from RESCEU
- Real-time availability of hospital discharge records

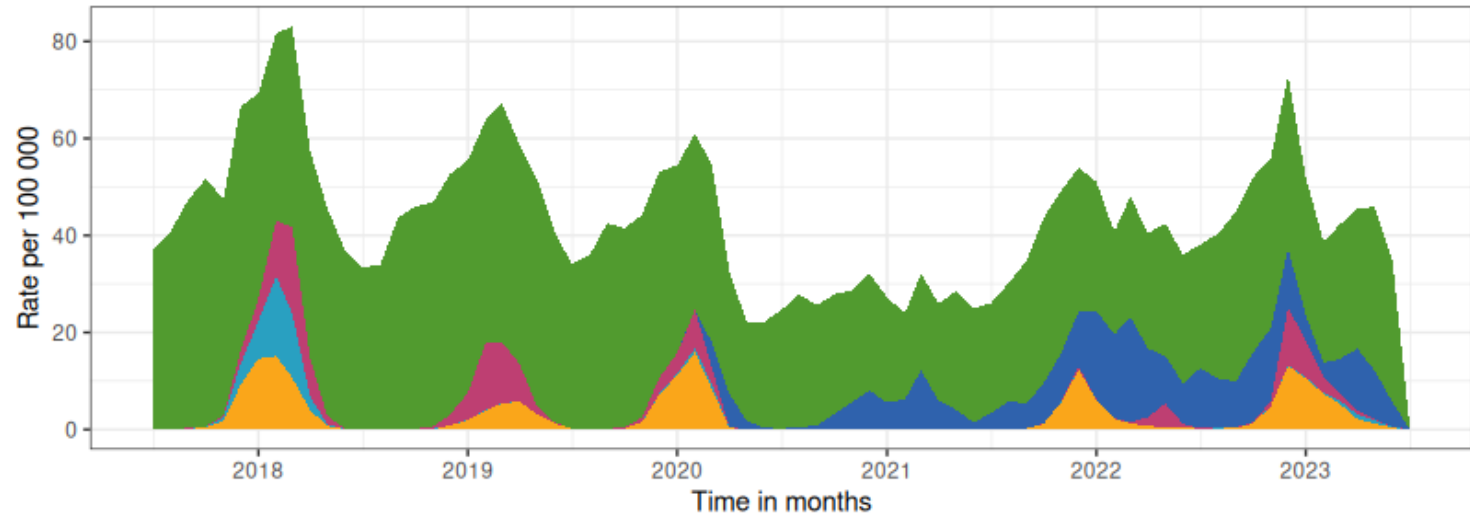
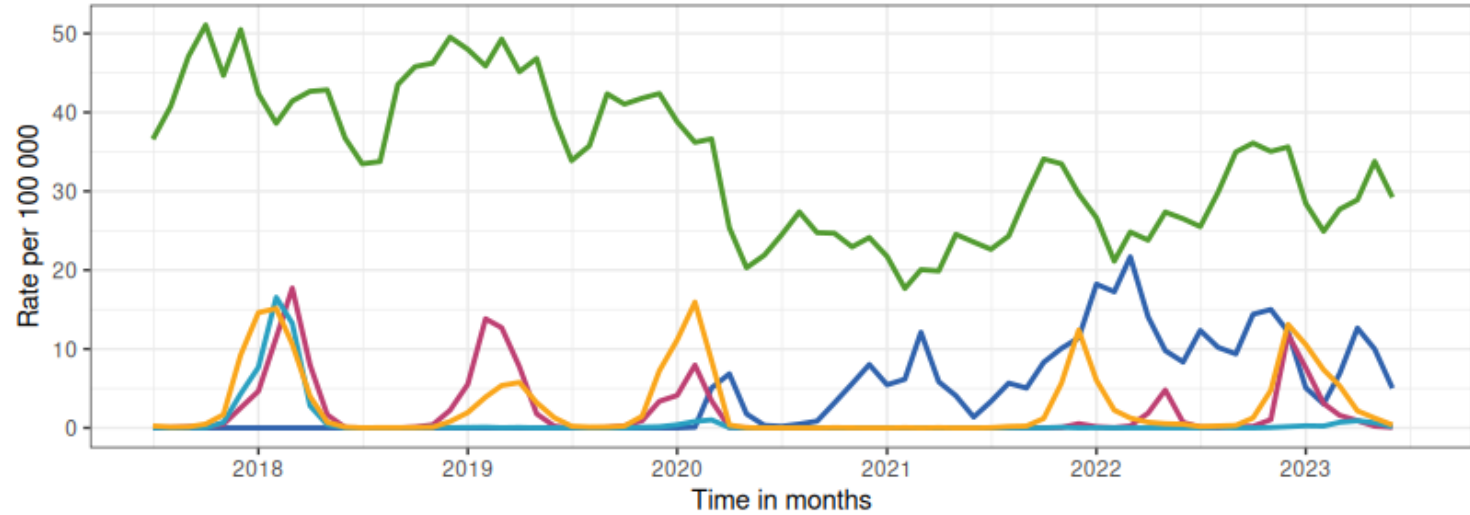
RSV in Finnish National Infectious Diseases Register (2016-2023)





Total

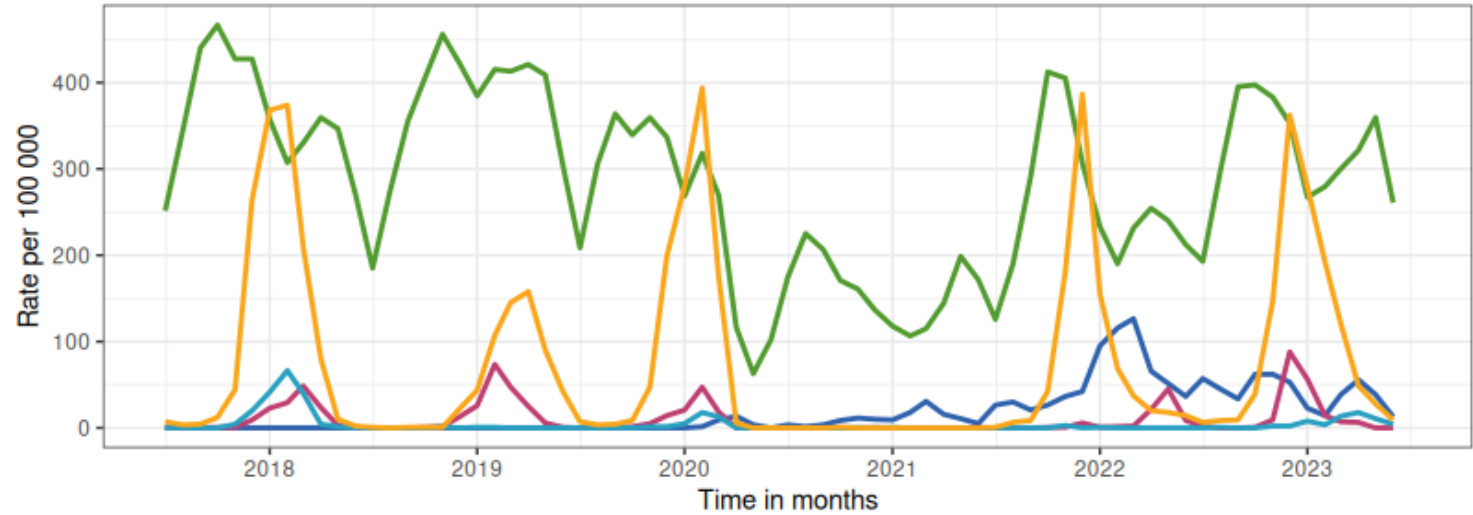
Secondary care ARI inpatient episodes in Finland, 07/17-06/23



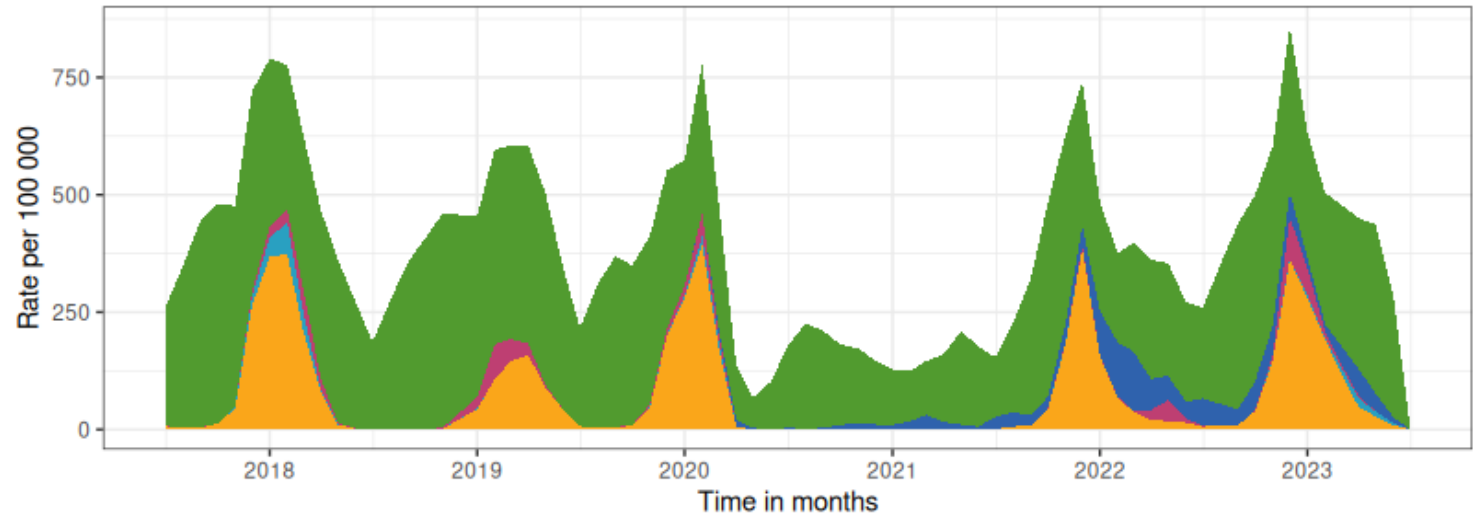


0-2
y/o

Secondary
care ARI
inpatient
episodes in
Finland,
07/17-06/23



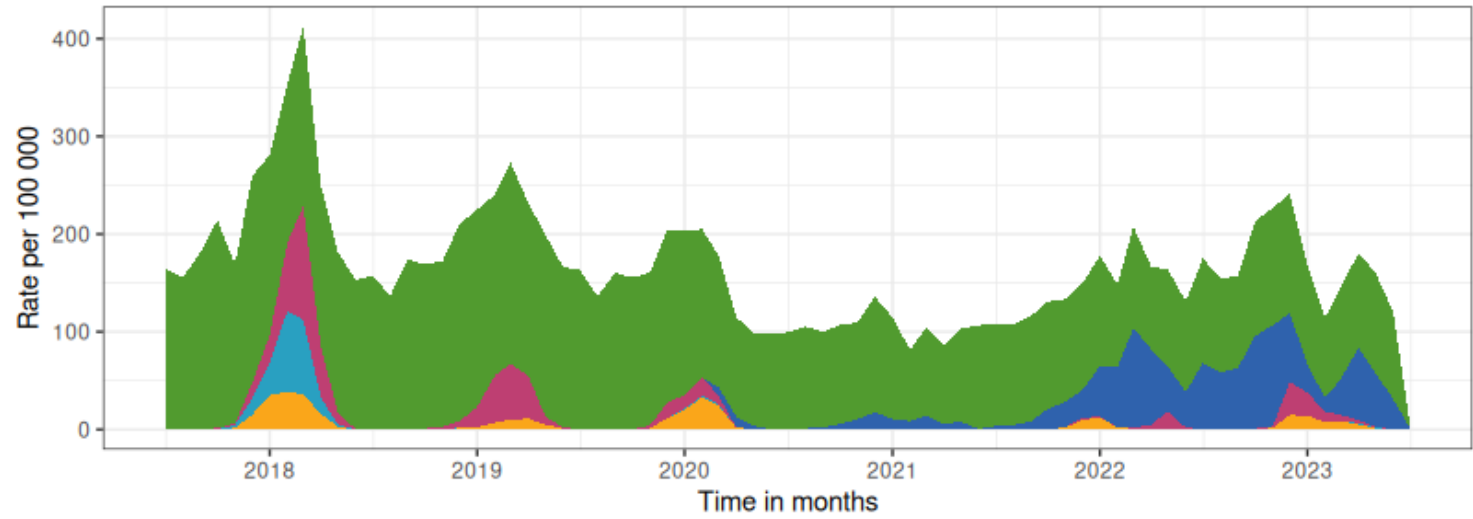
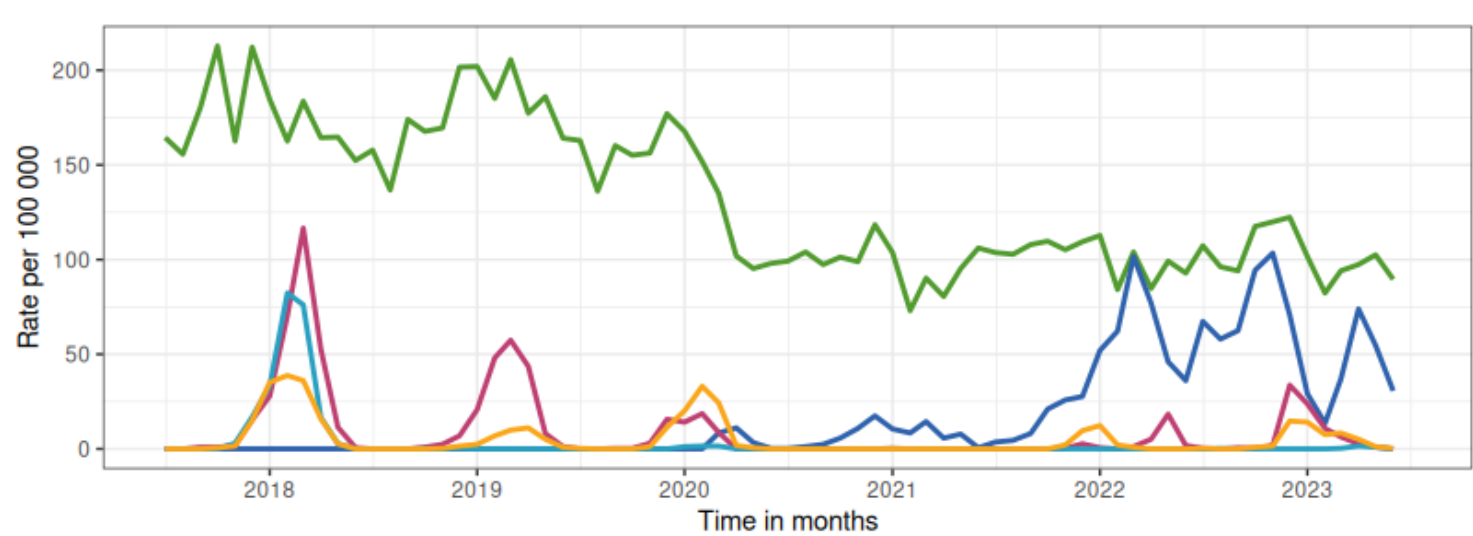
- Laboratory confirmation
- Pathogen other/unknown
 - Coronavirus
 - Influenza virus A
 - Influenza virus B
 - RSV





80+
y/o

Secondary
care ARI
inpatient
episodes in
Finland,
07/17-06/23



Open data publication

- Time
- Pathogen and role in the need for treatment
 - All respiratory tract infections
- Age
- Area
- Measure

Number of new inpatient episodes in secondary care ⓘ	⚙	Due to RSV ▾	With RSV ▾
⚙			
January 2022 ▾		332	25
February 2022 ▾		104	7
March 2022 ▾		61	7
April 2022 ▾		34	2
May 2022 ▾		35	0
June 2022 ▾		22	2
July 2022 ▾		8	2
August 2022 ▾		14	0
September 2022 ▾		18	1
October 2022 ▾		101	6
November 2022 ▾		295	19
December 2022 ▾		705	53
January 2023 ▾		634	75
February 2023 ▾		392	47
March 2023 ▾		250	21
April 2023 ▾		106	11
May 2023 ▾		72	19
June 2023 ▾		17	2
July 2023 ▾		8	0

Things to come

- Further refinement of inpatient and other hospital care definitions
- Primary care
 - Different types of healthcare contacts
 - Private healthcare
 - Sick leaves
- Cost-effectiveness assessment of interventions



Thank you