

# How biobanks could deal with SARS-CoV-2

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The presented approach does not represent an official recommendation  
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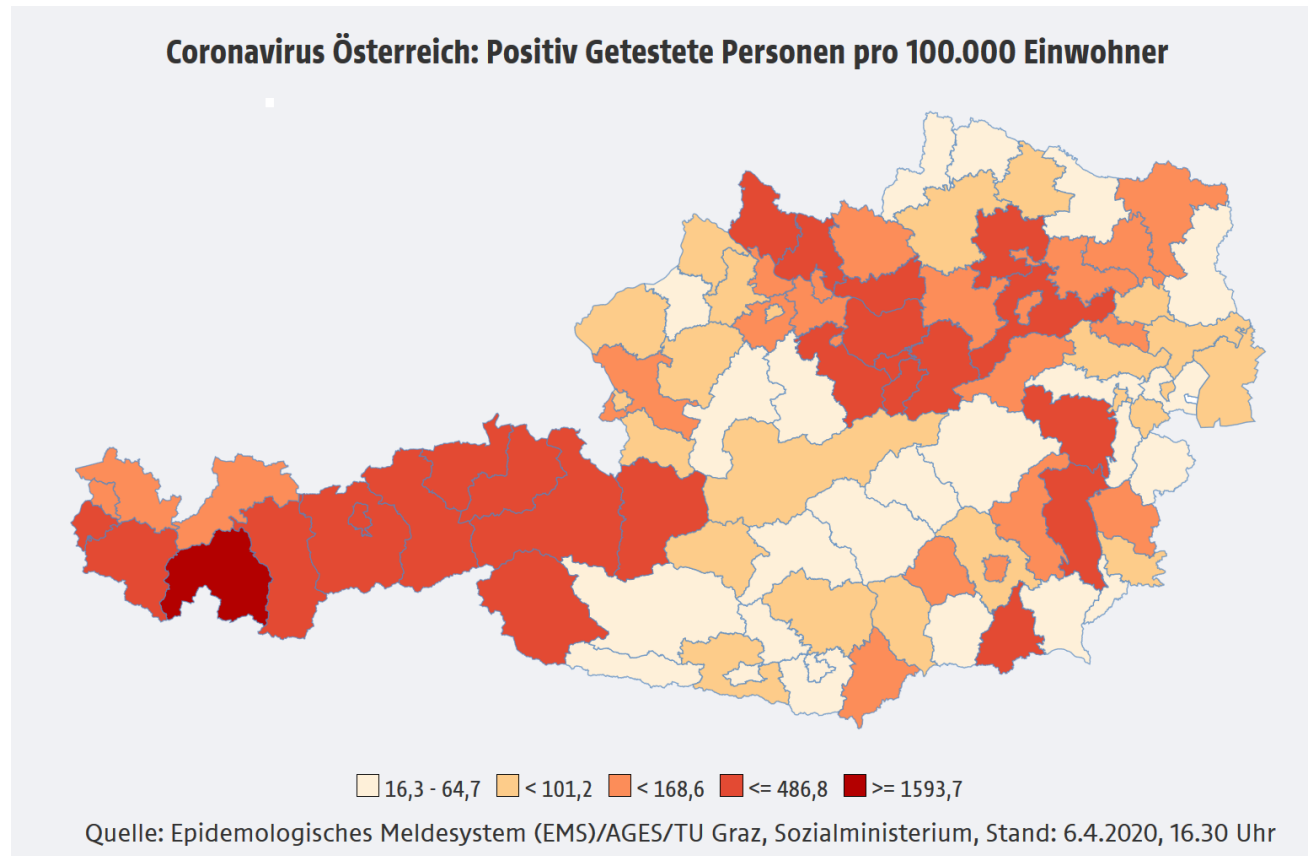
# The Problem

- Who should care about Covid-19?
- What should be taken into account when performing biobanking during the Covid-19 pandemic?
- How could a risk analysis be performed?



# Who should care?

- Confirmed SARS-CoV-2 cases in Austria per 100.000 inhabitants
- In certain areas >1,5%
- Does – of course – not include the „dark figure“
- Do you know for sure that none of them donated to your biobank?
- Therefore → everyone that is actively collecting should care!

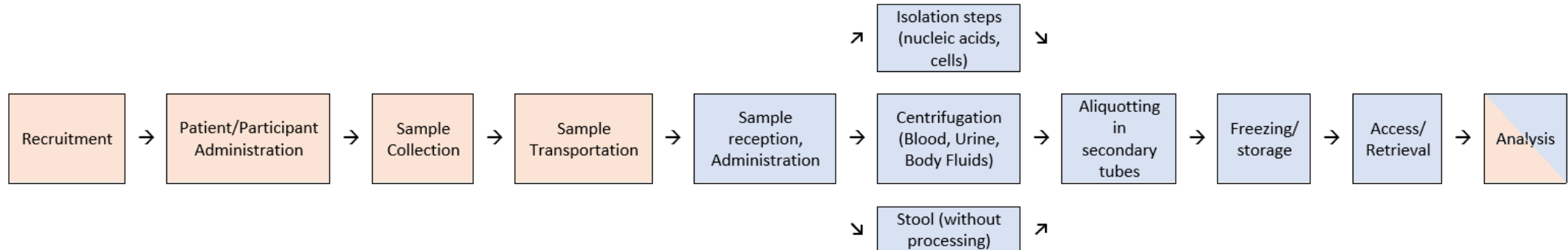


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# What to take into account when preparing for SARS-CoV-2?

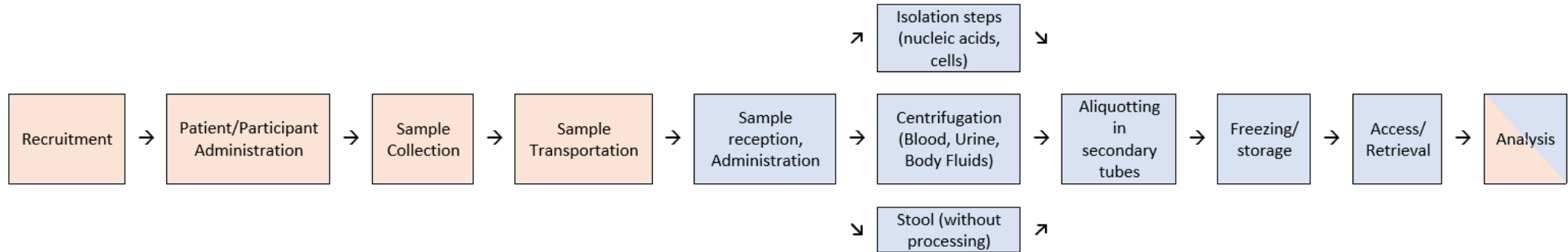
- SARS-CoV-2 is considered as a risk group 3 pathogen
- Intended work with SARS-CoV-2 → at least BSL-3 facility
  - Virus propagation, virus cultures, etc.
- Non-intended work with SARS-CoV-2 → BSL-2, if certain prerequisites are met
  - Diagnostic material (no virus propagation)
  - Risk assessment → which risks can be identified? Look at your process!
  - Different materials might bear different risks (serum, respiratory material, stool,...)
  - Personal protection, protection of environment, protection of devices,...
- THIS HAS TO BE DISCUSSED WITH YOUR LOCAL HYGIENE OFFICERS, LAB MANAGER, OCCUPATIONAL PHYSICIAN,...
- COMPLY WITH NATIONAL LEGISLATION!

# What to take into account when preparing for SARS-CoV-2?



- Know your processes!
- What is the scope of your biobank?
- Where does it start, where does it end?
- Risk identification: which risks could occur? Look at each step of your process!
  - Experience from defect management

# How could risk analysis be performed?



	Risk event	Category	Possible reasons	Remarks	Probability
1	Hazard at sample reception	Preanalytics	Poor hygiene, inadequate handling of contaminated material		<5%
2	Endangerment by contaminated material	Preanalytics	Surface of tubes contaminated; tubes damaged		<10%
3	Aerosol generation during sample opening	Preanalytics	Unavoidable	Risk might depend on sample type (blood < stool < respiratory material)	100%
...	...	...	...	...	...
X	Accidental use of sample with high infection probability	Preanalytics	f.e. sample collected at Covid-19 ward	Possible solution: visual marking of samples	<1%

# How could risk analysis be performed?

- Next steps:
  - Rating of risks (likelihood of occurrence, severity of damage, costs, etc.)
  - Strategies how to deal with risks
    - Measures, based on the risk reasons
      - Personal protection
      - Environmental protection
      - Protection of devices
      - Avoidance of accidental use
      - Protection of biobank users...
  - Risk monitoring!
- Risk management approaches in ISO 9001, ISO 31000
- Risk management tools/matrices



# Thank you for your attendance

