

# The use of big data and algorithms for governmental decision-making for healthcare and public health

EAHL Seminar – 9-10 December 2020

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# PhD project: overview

- Evaluation of the Belgian legal framework applicable to the governmental use of big data and algorithms for healthcare and public health purposes
- 3 research parts:
  - I. Governmental access to and re-use of (big) data of healthcare actors
  - II. Use of big data and algorithms for governmental decision-making for healthcare and public health purposes
  - III. Access to and re-use of governmental (big) data for healthcare or public health purposes

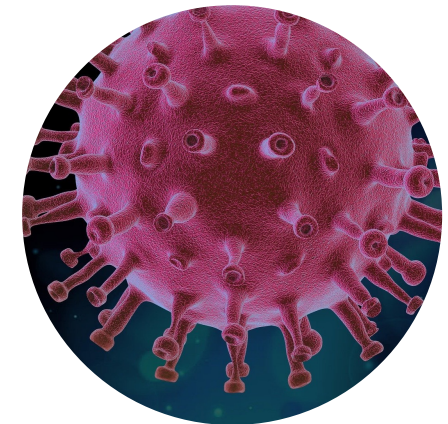
# Governmental decision-making for healthcare and public health purposes

- Risks and opportunities of the use of big data and algorithms?
- Impact of the principles of good administration? Interaction with data protection law?
- Modification of the applicable administrative law framework?

# Big data, algorithms and the COVID-19 crisis

Governmental COVID-19 decisions based on big data and/or algorithms:

- Individual quarantine measures
  - High risk contact
  - Travelling from 'high risk' countries
- General binding COVID-19 measures based on a 'risk barometer'
  - E.g. closing of shops/restaurants/bars, curfew
  - Each risk level → different measures



# Risks and opportunities of the use of big data and algorithms



## Risks

- Right of legal protection against the government
- Discrimination
- Right to health
- Right to privacy and the protection of personal data



## Opportunities

- Administrative effectiveness and efficiency
- Discrimination
- Right to health

# Principles of good administration

- As developed in Belgian and Dutch jurisprudence and legislation
  - Relevant principles for the use of big data and algorithms
    - Obligation to state the grounds for a decision
    - Due care principle
    - Right to be heard
    - Equality and non-discrimination principle
- ➡ Legal protection against the government, prohibition of discrimination

# Problematic big data and algorithm use in light of the principles of administration

- Big data
  - Incorrect or incomplete datasets, incorrect data interpretation
  - Lack of data transparency
- Algorithms
  - Problematic selection of data, badly designed algorithms, incorrect interpretation of results
  - Lack of algorithm transparency
  - Selflearning/inexplicable algorithms
  - Automated decision-making

# Interaction with data protection law

Overlap/similarities with the following GDPR principles/rights:

- Right to explanation of automated decisions (article 13, 2, f) and 14, 2, g) GDPR)
- Right to rectify data (article 16 GDPR); right to restrict the processing of incorrect data (article 18, 1 GDPR)
- Limitations on the re-use of data (article 23 GDPR)
- Right to object to data processing in specific circumstances (article 21 GDPR)
- Right to object to automated decision-making (article 22, 1 GDPR)  
➡ Respect of the right to privacy and personal data protection



# Modification of the administrative law framework?

- Administrative transparency duty
  - A component of the principles of administration
  - How to comply? Specific administrative legislation
    - France: *Le code des relations entre le public et l'administration*: rules for algorithmic governmental individual decision-making
    - AlgorithmWatch: EU legislation imposing the establishment of public registers for automated decision-making within the public sector
- Right to request human intervention in case of automated individual decision-making (+ obligatory and explicit mention of the automation)

# Thank you for your attention!

Suggestions, remarks, questions?

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