



<b>InsSciDE Work Package 5:</b>	
<b>Health Diplomacy as a Tool for a Strengthened and Innovative Europe</b>	
<b>Case Study n°5.4</b>	<b>Europeanizing Vaccination Policy: Towards a better understanding of “Health Data Diplomacy” in Europe</b>
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### Abstract

Infectious diseases are transnational matters, yet the development of the related policies remains largely within the remit of individual countries. Immunization is a case in point (Paul & Loer 2018): financing, definition of target groups, and implementation are not just national, but at times even regional matters. The large variety of delivery systems and vaccination schedules within the EU makes comparison and benchmarking challenging, as well as a potential issue for health and science diplomacy (Lopalco and Santistevé, 2013; Hotez, 2013).

Given increased mobility and technological advances, the relevance and shape of infectious disease control, prevention and monitoring have changed (Davies et al., 2015; Elbe, 2018). In recent years, vaccination has become a foreign policy and security concern. The European Union (EU) has reinforced its efforts to foster collaboration on vaccine-preventable diseases among member states and with global organizations such as the WHO.

Against this background, our InsSciDE case study seeks to shed light on how data production and exchange on vaccination rates are organized and orchestrated, but also resisted in other places. We will provide an analysis of the production and sharing of vaccination data in the European Union (EU) as well as of the different actors and technologies involved. Furthermore, we aim to discuss the numerous challenges to the “Europeanization” of vaccination registries.

### Introduction

In recent years, vaccination has become a key concern in EU public health. Data on immunization coverage/rates is of particular importance in a number of areas including early warning systems, consular affairs, aid work, and possibilities to structure bilateral relations, multilateral resolutions and building trust among nation states. Increasing collaboration among EU member states was fostered to enable data exchange on vaccination rates, leading to the establishment of new EU institutions such as the European Centre for Disease Control (ECDC) and to new surveillance technologies in infectious disease control, prevention and monitoring. Key developments in these area range from the introduction of national immunization programs in the late 1990s (DECISION No 2119/98/EC) and different attempts to achieve global standardization and EU-wide harmonization of the systems of surveillance (Kickbusch et al., 2007) to the vision of a European Vaccination Information Sharing (EVIS) system (Council Recommendation on strengthened cooperation against vaccine-preventable diseases 2018). Vaccination seems to move from an issue that needs management and control to become an issue of health security. This ties into a broader shift of securitizing public health and institutionalizing a health security regime within the EU (Bengtsson and Rhinard 2018)



Our case study examines infectious disease control and surveillance in the European Union as an instance of health diplomacy. The overarching objective of the research is to analyse contemporary policy developments at the EU level. The research team at the University of Vienna specifically explores national and international data exchanges regarding vaccination rates and the possibility of convergence of vaccination guidelines across countries. The case study is firmly rooted in interpretive policy analysis and science and technology studies and focusses on everyday practices of policy officials and administrators but also other actors, such as epidemiologists. It thus complements the historical case studies by exploring contemporary practices of health diplomacy.

### **Fields and disciplines, interfaces with technology**

National immunization programs (NIPs) are divergent and disparate, but we find that niches are created for cross-border strategic collaboration in the form of infrastructures for data exchange. Diverse methods are used to assess vaccination coverage, and through complex “data journeys” (Bates et al., 2016), indicators are made comparable for global, WHO-based, or EU-wide rankings by the European Centre for Disease Control (ECDC). We understand these infrastructures to be sociotechnical tools that connect NIPs and that allow for particular forms of coordination, while they thwart others (Bruun-Jensen and Morita 2015; Larkin 2013).

A number of actors have contributed to the emergence of these infrastructures by pushing for international standards to be shared by member states to improve data quality. Among them were, as our preliminary research indicates, scientists – particularly epidemiologists – who have carved out transnational collaborative niches that can best be understood as a form of “health data diplomacy”. Epidemiologists, we propose, play a key role in facilitating cross-border coordination – if not Europeanization. Studying the role of epidemiologists in pushing for further data integration may offer important insights for science and health diplomacy at both national and a shared European level.

As suggested by Osborn (1997: 185) the concern with vaccination uptake (or coverage: proportion of the population having received a required vaccination) has grown in the Western world with the rise of the modern state. As seen in other policy areas, such as economic and labour market policies, a common approach to measuring uptake is to make states comparable by establishing seemingly quantifiable variables. In the case of vaccination, uptake thus becomes an indicator of state performance and success or failure. According to Dew (1999:392) “if vaccination levels are high the state has achieved its target, no matter what relationship this has to actual level of health of protection from disease”. A focus on vaccination rates and data exchange explicated by different attempts to achieve global standardization and EU-wide harmonization of the systems of surveillance (such as the vision of a European Vaccination Information Sharing (EVIS) system) thus allows to investigate the role of sociotechnical infrastructures in health diplomacy.

### **Actors**

To draw a comprehensive map of actors will be one contribution of our case study. After a period of explorative research, we can already state that in addition to the WHO a variety of EU institutions are involved. We aim to particularly focus on the practices of ECDC. Aside from EU institutions, EU member states and national authorities such as the Robert Koch Institute in Germany or the French Institute for Public Health Surveillance (INVS) play a key role in monitoring and collecting data on the deployment of vaccinations. But it is not only bureaucrats and policy officials who play a role but also scientists, in particular epidemiologists, and medical doctors. Last but not least, our study will shed light onto the constitutive roles of technologies, data and infrastructures in health diplomacy: How do they become central in diplomatic practices? How are they entangled with other actors to contribute to public health and what relationships to these technologies invoke between national, supranational, and global actors, and the public at large?

### **Disciplinary/methodological approach**

Drawing on concepts and methods from political science and science and technology studies (STS), the project employs desk research, literature review, and social-scientific expert interviews to investigate the design, use, and potential future use of so-called vaccination registries and disease surveillance systems at the level of the European Union (EU). We understand these databases to form central infrastructures in shaping immunization



policy, much as railways historically acted in shaping spatial, economic and other policy areas. We hypothesize that these registries can generate new knowledge but also shape relations between the state, society, and science. The study is thus not only an innovative social-scientific endeavour, but also of potential benefit to public health.

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