BUILDING A HEALTHIER EUROPE

Protecting European citizens
against vaccine - preventable diseases

Vaccines Europe
An industry for healthy lives

March 2019, Brussels

Did you know:

- Vaccines are one of the greatest medical achievements in history, saving 2-3 million lives globally every year by preventing infectious diseases[1]
- Vaccination contributes substantially to health, healthcare systems sustainability and society at large by preventing morbidity and mortality
- Vaccines can protect everyone: newborn babies, infants, children, adults and older adults[2]
- Vaccines offer community-wide protection[3]
- Close to 30 diseases today are vaccine-preventable
- It costs less than 4,000 Euro (including administration costs) to protect a person for their entire life against the 17 most relevant vaccine-preventable diseases[4]
- Vaccines play an important role in the fight against antimicrobial resistance[5]
- More than 80% of vaccine doses are produced in Europe by R&D-led pharmaceutical companies[6]

Challenges:

- **Vaccines are a victim of their own success[7]:**
  The absence of severe diseases, due to effective vaccines and vaccination programmes, is leading to the mis-perception that vaccination is not needed anymore
- **European communities are at risk:**
  We see an increase of vaccine-preventable diseases in Europe leading to the recurrence of diseases. Despite the goal of eliminating measles by 2020[8], in the first half of 2018, more than 10,000 cases of measles and 31 deaths were reported in the EU/EEA[9]

YOU HAVE THE OPPORTUNITY & RESPONSIBILITY TO EFFECTIVELY PROTECT EUROPEAN CITIZENS AGAINST VACCINE-PREVENTABLE DISEASES!

- **Fake news making the situation worse:**
  Despite the high-quality standards that apply to vaccine production (> 100 quality checks[10] per product), robust clinical trials and strict pharmacovigilance, vaccine safety and effectiveness are repeatedly challenged
- **Many vaccines are undervalued and underutilised:** Less than 0.5% of health budgets in many European countries are spent on vaccination[11,12]
- **The sustainability of vaccine supply is being challenged:**
  Only a few manufacturers can meet the high-quality standards and handle the high-risk vaccine production processes and development costs. This makes short-term or unexpected changes in vaccine demand difficult to respond to. Finding solutions to this problem requires a concerted effort by all key stakeholders

The WHO considered vaccine hesitancy as one of the 'Ten threats to global health in 2019'.

Croatia **21** TOTAL CASES	Italy **1.716** TOTAL CASES
Czech Republic **149** TOTAL CASES	Romania **4.317** TOTAL CASES
France **2.588** TOTAL CASES	Slovakia **161** TOTAL CASES
Greece **2.238** TOTAL CASES	United Kingdom **1.654** TOTAL CASES

Number of measles cases EU/EEA in the first 6 months of 2018[9]

HARNESS THE 2017-2019 MOMENTUM ON VACCINATION AND PROTECT EUROPEAN CITIZENS AGAINST VACCINE PREVENTABLE DISEASES

DECEMBER 2018
Council of the European Union Recommendation on strengthened cooperation against vaccine preventable diseases[13]

AUGUST 2018
European Union joint action on vaccination[14]

APRIL 2018
European Parliament resolution on vaccine hesitancy and the drop in vaccination rates in Europe[15]

VISION 1:

HEALTH FOR ALL

VACCINES PROTECT EVERYONE: NEW-BORNS, INFANTS, CHILDREN, ADULTS AND OLDER ADULTS

The impact of childhood vaccines: Mortality rates have dropped significantly; smallpox was eradicated globally in the 1970s; and Europe has been declared "polio-free" since 2002[17]

Vaccination prevents certain cancers: Hepatitis B vaccination reduces the risk of liver cancer; human papillomavirus (HPV) vaccine prevents HPV-related abnormalities which could later become cancer

Maternal immunisation has the potential to protect newborns from dangerous infectious diseases (e.g. influenza, pertussis)[18]

Vaccines protect patients with chronic diseases from serious infections and their complications (e.g. influenza and pneumococcal vaccinations are specifically recommended for people with diabetes[19], heart failure or chronic lung diseases[21])

Vaccination helps protect the ageing population and can slow down their physical decline[22]

Safe travels: Travel vaccinations protect people against infections that are indigenous to certain parts of the world

Vaccination of healthcare professionals (HCPs): HCPs need to be vaccinated to protect not only themselves, but also their patients and their friends and families

Vaccinating contributes to creating a healthier community: By getting vaccinated, we protect those who cannot be fully immunised (e.g. immunocompromised patients), as well as those who have not yet been vaccinated (e.g. newborns)

Adopting a life-course approach to vaccination will help maximise the benefits of vaccination for individuals, public health and society.

What Europe can do:

- Support immunisation at all stages of life: ensure vaccination policies that contribute to the sustainability of our healthcare systems and the productivity of our societies
- Set vaccination goals and deliver their implementation throughout Europe, such as achieving the 95% target of measles vaccination coverage by 2020[13]

EU Manifesto ON INFLUENZA VACCINATION

Stakeholders expressed their commitment to raising the seasonal influenza vaccine **uptake rate to 75%** for older adults[25]]

75%

- Improve confidence in vaccination by establishing a European vaccination information portal to provide online, objective, transparent and updated evidence on vaccines, as already proposed by the EC

ALL HEALTHCARE PROFESSIONALS CAN MAKE A DIFFERENCE

Did you know:

- Healthcare professionals play a crucial role in informing their patients on the importance of vaccination and strengthen community protection
- Certain EU countries support vaccine administration by healthcare providers (HCPs) who are in contact with the wider public (e.g. pharmacists), but also with vulnerable communities (e.g. migrants)
- Providing vaccination through non-healthcare settings, such as schools and the workplace, could encourage uptake across all stages in life (e.g. UK offers flu, HPV and meningitis vaccination to children in schools[26])

Expanding access to vaccine administration reflects HCPs' shared responsibility to vaccinate (Doctors/GPs, nurses, midwives, pharmacists etc.).[27]

Countries in yellow allow pharmacist vaccination. Countries in green allow vaccination in pharmacies.

What Europe can do:

- Provide guidance for EU countries on how to expand access to vaccination in healthcare and non-healthcare settings
- Strengthen education and training on vaccine-preventable diseases, vaccinology, and immunisation in medical curricula for healthcare providers across all sectors
- Improve confidence in vaccination by convening a coalition for vaccination bringing together European associations of healthcare providers to promote vaccination, and strengthening partnerships and collaboration on vaccination with international partners, as already proposed by the EC

VISION 2:

EUROPEAN EXCELLENCE

VACCINE SCIENCE AND INDUSTRY NEED TO REMAIN STRONG IN EUROPE

Did you know:

- A wealth of expertise is needed and should be maintained in Europe to innovate, develop and produce highly technical and complex vaccines
- More than 80% of vaccine doses produced by the major R&D-led pharmaceutical companies are produced in Europe[6]. These are vaccines of the highest quality which can protect people worldwide
- EU-based vaccine manufacturers cooperate with a wide range of stakeholders, through health-focused public-private partnerships (PPPs) to contribute to the development of novel vaccines

The European vaccine industry is working with stakeholders to ensure that safe, effective and innovative vaccines are available to European citizens. Maintaining and protecting its European home is of utmost importance to all European citizens and their wellbeing. Through investments into new manufacturing plants in numerous EU Member States, vaccine companies continue to show their strong commitment to Europe.

What Europe can do:

- Increase investment in primary prevention in order to keep people healthy for longer periods of time
- Promote reward-mechanisms for industry R&D to enable long-term investments for vaccines of the future
- Develop new incentives for unmet medical needs, such as AMR and vaccines for global health since vaccines have the potential to stop severe epidemic outbreaks of diseases in public health emergency situations
- Foster the creation of National Immunization Technical Advisory Groups' (NITAGs) network and collaboration to increase transparency, reduce duplications and minimise inefficient resources spending on vaccines development to encourage innovation and positively impact citizens' access
- Leverage the IPROVE roadmap[28], the first strategic European roadmap outlining the science and technology investments required for vaccines innovation, and launch a multi-stakeholder reflection to implement the priorities agreed and define the research agenda for vaccines and vaccine technologies of the future[29]

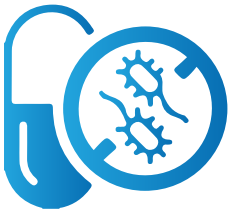
VACCINES ARE AN IMPORTANT TOOL IN THE FIGHT AGAINST ANTIMICROBIAL RESISTANCE

Did you know:

It is estimated that
33,000 **deaths in Europe every year**

are attributed to antibiotic resistant bacteria[30], raising the risk of even more people dying from diseases which we thought were curable

- Vaccines can reduce the need for using antimicrobials by reducing:
  - the incidence rate of infectious disease and illnesses caused by AMR bacteria in particular
  - the utilisation of antimicrobials to treat bacterial complications of viral infections, and
  - the rate of antibiotics misuse for viral infections[31]



What Europe can do:

- Foster the use of existing vaccines by integrating life-course vaccination planning into national action plans and secure the appropriate vaccination uptake for the fight against AMR
- Support development of innovative vaccines against emerging health threats and AMR pathogens

The 2017 Commission Action Plan on antimicrobial resistance (AMR) and the Joint Action on AMR and Healthcare-Associated Infections highlight the important role vaccines have in the fight against AMR. Both need strong political support to keep them on the forefront of EU-wide action.

Revisit the 2004 EU Regulation establishing a European Centre for disease prevention and control in order to enhance the role of the ECDC".

VISION 3:

STRONGER TOGETHER

MAINTAIN A HEALTHY VACCINE DEMAND AND SUPPLY ECOSYSTEM

Did you know:

- Shortages of vaccines are of increasing concern in the EU and globally. The reasons are multiple:
  - Changes in the demand for vaccines depend on the epidemiological situation in different regions
  - Vaccines are highly technical biological products with complex and lengthy (often > 1 year) manufacturing, control and release processes, where over 100 quality controls may take more than 70% of the production time[6]
  - Labelling and packaging requirements for vaccines differ per country, which significantly reduces supply flexibility across the EU
  - Vaccine tenders across the EU often do not recognise the long lead times required for proper planning, production and release of vaccines

What Europe can do:

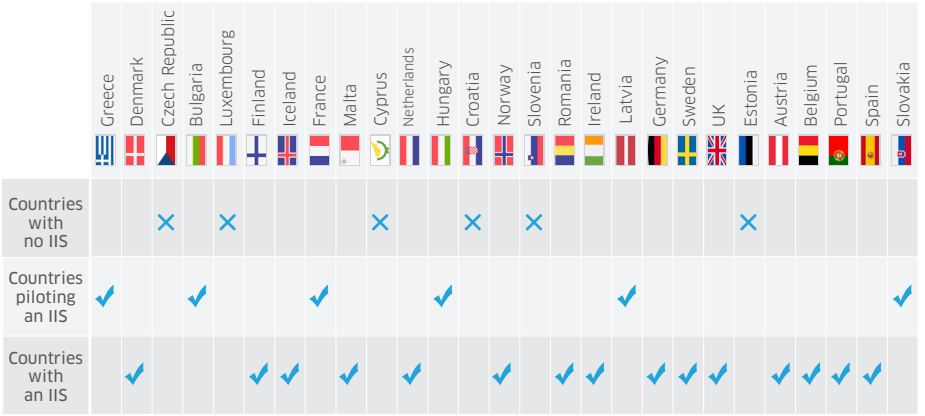
- Foster early and continuous dialogue between individual manufacturers and health authorities that allows both sides to better anticipate the evolution of vaccine recommendations and more accurately forecast vaccine demand
- Reduce the number of labelling & packaging requirements by evaluating the feasibility of introducing simplified, multi-lingual packs and e-leaflets
- Ensure Europe-wide recognition of the Most Economically Advantageous Tender (MEAT) criteria in the scope of tender procurement to encourage continued innovation and incentivise more manufacturers and suppliers to establish sustainable business models
- Develop a mechanism for exchanging vaccine supplies from one Member State to another to address outbreaks

E-HEALTH CAN IMPROVE THE IMPLEMENTATION OF NATIONAL VACCINATION PROGRAMMES

Did you know:

- Immunisation Information Systems (IIS) are proven as an integral part of well-functioning health systems and are now being implemented (or piloted) throughout the EU[36]
- IIS promote patient engagement and citizen empowerment through the use of automatic reminders, provider assessments, and online access to official immunisation records[37]
- Vaccine registries can identify gaps in vaccine uptake in the population, and facilitate communication to at-risk groups

\+ The 2018 EU Council Recommendation asks that EU countries develop the capacity of healthcare institutions to have electronic information on the vaccination status of European citizens and align ways of collecting and processing the data[13]



What Europe can do:

- Strengthen European disease surveillance capabilities to better assess infectious disease patterns, vaccines benefit/risks and the impact of vaccination across all ages
- Support Member States willing to implement IIS to monitor vaccination uptake rates (e.g. through European Structural Funds)
- Develop a common EU citizen vaccination card with standardised information on vaccination history, which could also greatly contribute to facilitating the interpretation of vaccination records and ensuring continuity of immunisation across borders
- Ensure coordination between health and digital policies and other initiatives, in particular IIS should be considered as a format for exchange of electronic health records

Conclusion

EU leaders have a critical role to play by building on the 2017-2019 momentum on vaccination and supporting the implementation of the goals laid out in the Council Recommendation in the EU Member States. Vaccines Europe welcomes the EU vaccination initiatives and encourages public authorities together with all stakeholders to implement them. This will ensure vaccination remains the cornerstone of a successful prevention policy in Europe, which can protect all European citizens against vaccine-preventable diseases.

About Vaccines Europe

Vaccines Europe represents major innovative research-based vaccine companies as well as small and medium sized enterprises operating in Europe, which account for a large share of human vaccines used worldwide.

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