**EUROPE’S ROLE AT A GLANCE**

Though global in nature and contributing to public health worldwide, the majority of Vaccines Europe members’ R&D and manufacturing operations are based in Europe. By supporting a sector that contributes to European social and economic development, Europe will remain at the heart of the global vaccine industry.

**VACCINATION WAS PIONEERED IN EUROPE**

The term vaccine was first coined by Jenner from the Latin ‘vacca’, which means cow, after his experiment to use cowpox inoculation to prevent smallpox.

Vaccines Europe members emerged decades ago primarily from national vaccine producers in Europe to become leading international companies that serve public health worldwide.

**EUROPE IS: A KEY CENTRE OF PRODUCTION**

In 2010 Vaccines Europe members produced more than 4500 million doses worldwide.

Over the period 2008-2010 developing nations such as India and China have captured 8% of the global vaccine production.

- 79% produced in Europe
- 8% produced in Asia
- 13% produced in North America
- 44% Humanitarian Groups
- 26% North America
- 22% Rest of world
- 8% Asia

DISTRIBUTION OF VACCINES EUROPE MEMBERS’ EXPORTS FROM EUROPE

*Vaccines Europe, formerly European Vaccine Manufacturers (EVM), is a specialised group within the European Federation of Pharmaceutical Industries and Associations (EFPIA) representing all the major vaccine companies operating in Europe. Vaccines Europe conducts a biennial survey that provides an insight into the innovation, research and development (R&D), employment and manufacturing undertaken by its members: Abbott Biologicals, AstraZeneca, Baxter, Crucell, GSK Vaccines, MSD, Novartis Vaccines, Pfizer, Sanofi Pasteur and Sanofi Pasteur MSD.*
EUROPE IS: A LEADER IN R&D INVESTING IN EUROPE’S FUTURE

Half of all R&D projects undertaken by Vaccines Europe members are based in Europe.

Vaccines Europe members commit 58% of their total R&D investment to Europe.

OVER THE PERIOD 2002 TO 2010, THE NUMBER OF EUROPE-BASED R&D PROJECTS HAS REMAINED STEADY

Vaccines Europe members are also increasingly investing in projects based in emerging economies such as China, India or Brazil.

EUROPE IS: A HIGH-SKILLED SCIENCE-BASED EMPLOYER

59% of the TOTAL WORKFORCE is based in Europe.

65% of R&D EMPLOYEES are based in Europe.

Vaccines Europe members play an important role in creating employment making a positive impact on Europe’s economy and society.
Global Contribution at a Glance
A highly innovative industry committed to improving access to immunisation worldwide.

Constantly innovating and investing in Research & Development

With 175 R&D projects, Vaccines Europe members have a strong pipeline of new vaccines in development.

- 8% on new process technology that can improve stability, update formulation or focus on new delivery methods.
- 21% on new combinations that can reduce the number of injections, improve compliance and increase convenience.
- 50% on new antigens that target unmet medical needs.
- 21% on other new projects such as new indications.

76 Projects: Pre-clinical, 17 Phase I, 22 Phase II, 26 Phase III, 34 Phase IV.

Basic research | Clinical trials | Marketed products

Growth

2235 million € invested in R&D globally by Vaccines Europe members in 2010.

47% Growth

4% contributed by public funding, 93% contributed by the vaccine industry.

Global Contribution at a Glance

A highly innovative industry committed to improving access to immunisation worldwide.

R&D Initiatives
- For new vaccines, new technologies, unmet needs.
- Access initiatives to make vaccines available throughout the world.
- Private public partnerships to optimise resources and maximise efficiency.
- Capacity building to meet growing demand for vital vaccines.

An Essential Global Public Health Partner

Vaccines Europe members are committed to ensure wide population access to innovative vaccines through several types of initiatives...

- Smallpox vaccination campaigns around the world contributed to the eradication of smallpox.
- The vaccines industry is efforts to eradicate polio and measles.

... and to support programs run by humanitarian groups.

Humanitarian groups account for 44% of European exports but are only responsible for 4% of total revenues.

56% Rest of the world
44% Humanitarian groups

56% Rest of the world
4% Humanitarian groups

Vaccines Europe members' exports
Vaccines Europe members' revenues

44% Humanitarian groups
4% Humanitarian groups
In order for Europe to remain at the heart of the global vaccine industry, action is necessary to continue developing the appropriate framework conditions that can foster a favourable policy climate.

In particular Vaccines Europe calls for:

1. **CREATING A SUPPORTIVE ENVIRONMENT FOR IMPROVED VACCINE PROTECTION, INNOVATIVE VACCINE DEVELOPMENT AND IMPROVED COVERAGE THROUGHOUT LIFE IN THE INTEREST OF INDIVIDUALS AND THE COMMUNITY BY:**

   - **Accelerating access** to new vaccines through an evidence-based and transparent decision-making process
   - **Encouraging streamlined regulatory requirements** while ensuring high quality, safety and efficacy standards
   - **Promoting healthy ageing** by limiting the burden of illness through lifespan immunisation

2. **SUPPORTING VACCINE R&D THROUGH INNOVATIVE VACCINE APPLICATIONS BY:**

   - **Establishing a European strategic research agenda** for vaccines targeting infectious and other types of diseases (e.g. therapeutic vaccines) capable of responding to new societal challenges
   - **Promoting open models of collaboration** across public and private sectors

Survey definitions:
- Vaccines Europe biennial survey maps the vaccine industry’s contribution to Europe’s public health and economy. Surveys have been conducted since 2002.
- Vaccines Europe 2010 survey included: Abbott Biologicals (formerly Solvay Biologicals); Baxter; Crucell; GSK Vaccines; MSD; Novartis Vaccines; Pfizer (formerly Wyeth Vaccines); Sanofi Pasteur and Sanofi Pasteur MSD.
- All data relate to 2010; data do not include pandemic influenza vaccines in order to permit comparisons with previous surveys.
- References to ‘industry’, ‘producers’ and ‘manufacturers’ relate to Vaccines Europe survey participants only.
- Europe = EU27 + EFTA (Iceland, Liechtenstein, Norway, and Switzerland).
- One vaccine dose = one antigen
  - Antigen is the vaccine’s active ingredient that generates an immune response
  - Combination vaccines contain 1 antigen and therefore 1 dose
  - For example: a diphtheria / tetanus / pertussis (DTP) vaccine includes 3 antigens = 3 doses.