THE ORGANIZATION AND DELIVERY OF
VACCINATION SERVICES IN THE EUROPEAN UNION

SPAIN

This country fiche formed part of the volume *The organization and delivery of vaccination services in the European Union* which was prepared for the European Commission by the European Observatory on Health Systems and Policies.

© World Health Organization 2018 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies). All rights reserved.

Spain

Andreu Segura Benedicto[1]

Governance

The vaccination policy in Spain is determined by the laws that regulate health interventions, although the decentralized model of public administrations (general or central, regional and local) modulates its application in practice.

The responsibility for establishing the basic lines of health and health care policies falls to the Ministry of Health, Consumption and Social Welfare of the General Administration. The General Directorate of Public Health, Quality and Innovation of this Ministry is the body directly in charge of vaccination policies.

The Spanish Agency for Medicines and Health Products, an autonomous body attached to the Ministry, is responsible for the authorization of medicines, including vaccines, and their distribution, as well as the coordination of the pharmacovigilance network in the country.

The responsibility for implementation of vaccination policies, and for reaching the established objectives, lies with the 17 regions, known as autonomous communities (CCAA), and, where appropriate, the autonomous cities of Ceuta and Melilla.

---

1 Thanks are expressed for suggestions and comments on the Spanish country fiche by Aurora Limia (Spanish Ministry of Health, Consumption and Social Welfare); Amós García (Spanish Vaccines Society); Montse Martinez; Carmen Cabezas and Luís Urbiztondo (Catalan Department of Health); and the data from Angel Plans (Catalan Society of Occupational Health). The responsibility for possible errors is exclusively that of the author.

The coordination between central and regional levels is done by the Inter-territorial Council of the National Health System (CISNS), which has various commissions. The Commission of Public Health is the one in charge of public health matters. The Immunization Programme and Registry Committee and the Surveillance Committee are technical advisory groups of the Commission of Public Health on immunization and vaccines, and surveillance of diseases respectively. All the regions and autonomous cities and the Ministry of Health, Consumption and Social Welfare are represented in the Inter-territorial Council of the National Health System. The Council, the commissions and the working groups are coordinated by the Ministry of Health, Consumption and Social Welfare. There is also an Influenza Surveillance Working Group coordinated by the National Centre for Epidemiology (Institute of Health Carlos III).

The Public Health Commission of the Inter-territorial Council of the National Health System, coordinated by the General Directorate of Public Health, Quality and Innovation, is the key body in the development of vaccination policies in Spain.

In summary, the role of the Inter-territorial Council of the National Health System includes:

a) Agreeing on the diseases that should be prevented by immunization, and the common schedule for systematic immunization.

Currently there are thirteen diseases subject to vaccination in addition to influenza vaccination. Vaccination against influenza is not part of the systematic childhood immunization schedule, but is formally recommended for those aged over 65 years and other groups of the population (risk groups, health care professionals, pregnant women, etc.). However, this is going to change as a new lifelong schedule has been recently approved.

b) Designing a common official vaccination schedule for Spain.

Although the regions are responsible for establishing the vaccination schedule and the management of the programme in their territory, the current trend is towards homogenization for the entire National Health System.

c) Establishing the risk indications for annual vaccines (influenza) or for vaccines not recommended systematically (e.g. meningitis B).

d) Determining, where appropriate, specific objectives for immunization programmes, such as the elimination of measles.

e) Evaluating the immunization programme, including the collection and analysis of data on vaccination coverage provided by the regions.

f) Other initiatives to promote vaccination (improvement of transparency in the operation of the presentation of vaccines, collaboration in vaccination campaigns, coordination of joint procurement of vaccines at a better price, etc.).

g) Coordination of travel health, including International Immunization Centres. Some of them depend on the Ministry of Health, Consumption and Social Welfare, and are distributed across the country, while others are the responsibility of the regions.

The **public health authorities of the regions** are responsible for:

a) Establishing the vaccination schedule for their territory.

In general, the schedule is the one recommended by the Inter-territorial Council of the National Health System. However, some differences persist in some regions (e.g. vaccination against Hepatitis A in Catalonia and Ceuta and Melilla cities).

b) Organizing the implementation of the vaccination schedule for the population of their territory.

In some regions advisory bodies have been created, involving scientific societies in vaccination strategies (in Catalonia, for instance: El Consell Assessor de Vacunes).

c) Buying the recommended vaccines.

In general, the vaccines are bought by the regional health services. The regions can benefit from a joint procurement framework to select the supplies of vaccines, signed by the Ministry of Health, Consumption and Social Welfare and the regions that want to participate.

d) Accrediting the vaccination centres from where the recommended vaccines are administered to the population.

In general, the accredited vaccination centres are the primary care centres of the public health care network,

including paediatric services, family health care, and family and community nursing, as well as hospitals in the public network, but private centres are also accredited.

e) Distributing the recommended vaccines to the accredited centres so they can be administered.

f) Designing the procedures for calculating the vaccination coverage of the recommended vaccines, including the indicators agreed by the Inter-territorial Council of the National Health System, collecting the data, analysing the information, using it where appropriate to modify strategies and programmes and sending it to the General Directorate of Public Health of the Ministry of Health, Consumption and Social Welfare.

g) Other activities include: collaboration with surveillance services for pharmacovigilance for the detection of possible adverse effects; vaccination campaigns for the population; awareness campaigns for health professionals; sero-epidemiological studies.

Local administrations collaborate with regional administrations and health services. Although some municipal school health programmes continue to exist in some Autonomous Communities, in most cases the general health services (basically the staff of the primary care centres and particularly the community nurses) carry out health promotion activities and disease prevention at schools. This includes the administration of some vaccines such as HPV and Hepatitis B and varicella. However, immunization programmes in schools do not exist in every region in Spain and there is also variability in the programmes and their coordination.

Other relevant agents could include the occupational risk prevention services (see the section on barriers and facilitators).

Scheduled vaccination is recommended and not mandatory. The current schedule is available at: http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/docs/CalendarioVacunacion2018.pdf, and also at https://vaccine-schedule.ecdc.europa.eu. However, the competent health authorities can order the mandatory administration of vaccines if there is risk of epidemic spread. The judicial authority can also order it.

The official vaccination programmes usually use the population records of the public assistance services based on the individual health cards whose management and maintenance corresponds to the regional health services. However, this is variable across regions, with some having registries or immunization information systems in place. Most of them are linked to health care records. In general, people are not systematically called when they should be vaccinated.

There are some protocols from the Ministry of Labour, Migration and Social Security directed at specific groups of the population such as refugees. The regions are responsible for immunization programmes for these groups of the population.

Although the authorities are obliged to respect the decisions of parents who do not authorize the vaccination of their children, in some regions these parents are asked to sign an official document stating their refusal. There is an agreement at the Inter-territorial Council of the National Health System to register vaccine hesitancy and this is implemented in most registries at the regional level.

The parents of vaccinated children have documents that certify the immunization status of their children. These documents can be requested in day care centres, schools and other children's facilities, but schools cannot refuse to admit children who are not vaccinated.

The doses of vaccines administered in the official vaccination services are used to calculate vaccination coverage. The small proportion of vaccines acquired in pharmacies and administered through the private health sector is generally not included, although some regions do collect this information. The Autonomous Communities provide the information to the General Directorate of Public Health, Quality and Innovation of the Ministry of Health, Consumption and Social Welfare, as agreed by the Inter-territorial Council of the National Health System.

While the numerator used to calculate vaccination coverage is the number of administered doses of vaccines (i.e. the number of vaccinated persons), the sources used to determine the denominators (i.e. the populations of the corresponding population groups) vary between the different regions. In some cases they come from the official statistical bodies, in others from the population health registers or even from the registers of the vaccination services.

To diminish the possible differences in the procedures for calculating vaccination coverage between the regions,

a working group has been created that is preparing a proposal for new indicators of vaccine coverage.

Provision

The recommended vaccines are usually administered in primary care centres in the public network. These centres include paediatric and family medicine units and some other medical specialties. The nursing staff administer the vaccines to the people who request vaccination according to the official schedule.

The nursing or medical staff of provider entities that have authorized vaccination centres can also administer the influenza vaccine to the indicated population groups (risk groups, people aged over 65 years and public service personnel).

The nursing staff of the occupational risk prevention services of companies – including health care providers, such as hospitals – can administer influenza vaccines to the workers as and when recommended. In the case of health professionals working in hospitals, this is frequent.

Pharmacy offices can sell vaccines with prescription for sale in community pharmacies.

The official councils – of medicine, pharmacy and nursing – have an obligation to guarantee adequate conduct from their members.

The quality control bodies of the health service providers, as well as the inspection units of the autonomous health services and the public health authorities, are responsible for the proper functioning of the official vaccination centres.

Financing

The recommended vaccines – including measles and influenza vaccines – that are administered in officially accredited centres – mostly public primary care centres – by the nursing staff of the paediatric and family medicine services are fully funded by the regional health administrations (the majority of the public health budget is independent of the health care services but they both come from the same source: general taxes).

A small part of the Spanish population – the group of civil servants of the general administration, the armed forces and the administration of justice – is affiliated with public insurers other than the National Health System. There are some 2.2 million people who have the right to choose a publicly reimbursed private health care provider. These providers also have accredited vaccination centres that can administer free of charge the recommended vaccines, which are also provided free of charge by the public health services of the respective Autonomous Communities.

In any case, measles and influenza vaccines can be purchased at the community pharmacies at the publicly authorized price. There is no co-payment for these vaccines. Either they are received for free or they are paid for in full.

Key barriers and facilitators

Measles

There is no monovalent vaccine authorized in Spain, but the combined product with rubella and mumps (MMR) is used. Current vaccination coverage against measles is high, in particular for the first dose; coverage with the second dose is lower and varies more across regions (between 88.1% in Murcia and 99.6% in Madrid in 2016).

Although active vaccine hesitancy seems quite limited, the concentration of parents who oppose vaccination in some localities (such as the Albaicin in Granada) limits the protection of collective immunity locally and facilitates the spread of epidemic outbreaks. In other cases, however, insufficient vaccination coverage seems more attributable to ignorance, indifference or social exclusion than to hesitancy.

Some barriers to achieving effective vaccination coverage against measles have to do with a distrust of official information, the perceived interests of laboratories and eventual biases of health professionals involved. There are also difficulties with underestimating the severity of complications from measles, while the impact of possible adverse effects from vaccination is exaggerated.

The increase in social and economic inequalities after the recent financial crisis has led to an increase in extreme poverty. This does not support the demand for vaccination.

The free provision of vaccinations and their administration in NHS primary health care centres is probably the most important facilitating element. There are 13 000 primary health care centres in the country and vaccines can be administered at any time during working hours (from 8am to 9pm). Massive institutional initiatives support the widespread demand for vaccines, but they do not always convince people who are against vaccination.

Influenza

In contrast, the current coverage of influenza vaccination for the population group over 65 years of age is 55%, the lowest proportion in the last ten years. In the 2009/10 season of the AH1N1 pandemic, coverage was estimated at 65.7%.

Vaccination coverage among health professionals in the years 2010–2015 has been less than 30%. For the 2015/16 season, information is available from eight Autonomous Communities from which it has been estimated that approximately 31.5% of health professionals were vaccinated. The main reasons why workers reject vaccination are the perceived low risk of getting sick, the fear of adverse reactions and doubts about the vaccine's effectiveness.

The barriers to influenza vaccination have to do with the low adherence of health personnel that is due, in part at least, to the degree of uncertainty of protection, due to the characteristics of the causal virus in each season. The likely discomforts, even mild ones, associated with vaccination without a guarantee of personal benefit do not seem to motivate enough people.

Inadequate preparation of health professionals to promote vaccination in adults and risk groups is potentially another barrier. The heterogeneity of registries and information systems to quantify vaccine coverage in adults and risk groups complicates the issue.

The specific facilitating factors have to do with the development of vaccination programmes directed at adults and the relevant strategies that have been initiated in Spain.

The involvement of scientific societies, particularly those concerned with occupational health, and occupational risk prevention services could be a facilitating factor in promoting the vaccination of health workers. In the 2012/13 season the initiative to promote vaccination against influenza for health professionals of the Catalan Society of Occupational Health, through the involvement of occupational risk prevention services, administered some 7500 vaccinations to about 47 000 workers (15.8%, range 5%–33%) from 27 centres, while in the 2017/18 season it administered some 21 000 vaccines among 90 500 workers (23.2%, range 2.7%–51.7%) in 61 centres.

References

Castilla J et al. (2013). Trends in influenza vaccine coverage among primary healthcare workers in Spain, 2008–2011. *Preventive Medicine*, 57:206–11.

Centro Nacional de Epidemiología [National Centre for Epidemiology] (2016). *Plan Nacional de Eliminación del Sarampión y de la Rubeola* [National Plan for the Elimination of Measles and Rubella. Annual report]. Informe anual. Madrid.

Coberturas de Vacunación. DATOS ESTADÍSTICOS [Vaccination coverage. Statistical data]. Ministerio de Sanidad, Servicios Sociales e igualdad [Ministry of Health, Social Services and Equality]. Online at: https://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/coberturas.htm.

Comisión de Salud Pública. Consejo Inter-territorial del Sistema Nacional de Salud [Public Health Commission. Inter-territorial Council of the National Health System]. RECOMENDACIONES DE VACUNACIÓN FRENTE A LA GRIPE Temporada 2017–2018 [Recommendations for vaccinations against the flu season 2017–2018]. Online at: https://www.msssi.gob.es.

Deloitte (2018). Las vacunas en España. Situación actual y perspectivas de futuro [The vaccines in Spain. Current situation and future perspectives]. Madrid: p. 126. Online at: https://www2.deloitte.com/es/es/pages/life-sciences-and-healthcare/articles/informe-vacunas-espana.html.

Diaz Fernandez R (2015). Vaccination in immigrant children or children for international adoptions. Trabajo fin de Grado. Universidad de Cantabria. Online at: https://repositorio.unican.es/xmlui/handle/10902/7950.

Dominguez A, Toledo D, Guayta-Escolies R (2018). Factores asociados a la vacunación antigripal en personal sanitario en España [Factors associated with influenza vaccination in health personnel in Spain]. *Eidon*, 49:4–17.

Errazola MP, de Juanes JR, Garcia de Codes A (2015). Conceptos generales. Calendarios de vacunación sistemática del niño y del adulto en España. Impacto de los programas de vacunación [General concepts. Systematic vaccination schedules for children and adults in Spain. Impact of vaccination programmes]. *Enfermedades Infecciosas y Microbiología Clínica*, 33:58–65.

Grupo de Trabajo Criterios 2011, de la Ponencia de Programa y Registro de Vacunaciones [Working Group Criteria 2011, from the Programme and Registration of Vaccinations]. *Criterios de evaluación para fundamentar modificaciones en el Programa de Vacunación en España* [Evaluation criteria for modifications of the Programme of Vaccination in Spain]. Comisión de Salud Pública del Consejo Inter-territorial del Sistema Nacional de Salud. Ministerio de Sanidad, Política Social e Igualdad [Public Health Commission of the Inter-territorial Council of the National Health System]. Online at: https://www.msssi.gob.es.

Limia Sanchez A. Política de vacunación en España e impacto en salud. Presentación ppt [Vaccination policy in Spain and impact on health. Ppt presentation]. ACIS. Online at: https://www.sergas.es/Saude-publica/PGV-Politica-de-vacunacion-en-Espa%C3%B1a-e-impacto-en-salud.

Luna A, Rodriguez LM, Ortega PC (2013). Análisis de un brote de sarampión en una barriada de la provincia de Sevilla [Measles outbreak in a socially deprived area of the province of Seville]. *Revista Española de Salud Pública*, 87:256–66.

No Gracias. Vacunas: no todas son iguales [No, thanks. Vaccines: not all are equal]. Online at: http://www.nogracias.eu/2015/06/05/editorial-nogracias-vacunas-no-todas-son-iguales/.

Salamero L (2016). Derechos individuales frente a la salud pública en la protección ante enfermedades contagiosas: propuestas de mejora del marco regulatorio vigente [Individual rights versus public health in the fight against contagious diseases: proposals to improve the current legal framework]. *Gaceta Sanitaria*, 30(S1):69–73.

Segura A (2018). Vacunas y vacunaciones: Responsabilidades individuales y colectivas [Vaccines and vaccinations: Individual and collective responsibilities]. *Eidon*, 49:18–31.

SESPAS. Posicionamiento 03/2016. Responsabilidades individuales y colectivas de las instituciones, los profesionales y la población en relación a las vacunas [Position paper 03/2016. Individual and collective responsibilities of institutions, professionals and the population in relation to vaccines]. Online at: www.sespas.es.

Tuells J (2016). Controversias sobre vacunas en España, una oportunidad para la vacunología social [Controversies over vaccines in Spain, a chance for social vaccinology]. *Gaceta Sanitaria*, 30:1–3.