

# Developing pandemic preparedness in Europe in the 21st century: experience, evolution and next steps

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**Problem** Improving pandemic planning and preparedness is a challenge in Europe, a diverse region whose regional bodies (the Regional Office for Europe of the World Health Organization [WHO], the European Commission and the European Centre for Disease Prevention and Control) have overlapping roles and responsibilities.

**Approach** European pandemic preparedness indicators were used to develop an assessment tool and procedure based on the 2005 global WHO checklist for pandemic preparedness. These were then applied to Member States of WHO's European Region, initially as part of structured national assessments conducted during short visits by external teams.

**Local setting** Countries in WHO's European Region.

**Relevant changes** From 2005 to 2008, 43 countries underwent a pandemic preparedness assessment that included a short external assessment visit by an expert team. These short visits developed into a longer self-assessment procedure involving an external team but "owned" by the countries, which identified gaps and developed plans for improving preparedness. The assessment tool and procedure became more sophisticated as national and local pandemic preparedness became more complex. The 2009 pandemic revealed new gaps in planning, surveillance communications and immunization.

**Lessons learnt** Structured national self-assessments with support from external teams allow individual countries to identify gaps in their pandemic preparedness plans and enable regional bodies to assess the regional and global resources that such plans require. The 2009 pandemic revealed additional problems with surveillance, pandemic severity estimates, the flexibility of the response, vaccination, involvement of health-care workers and communication. European national plans are being upgraded and global leadership is required to ensure that these plans are uniformly applied across the region.

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## Introduction

Although pandemics have occurred at irregular intervals throughout history, pandemic preparedness plans only appeared in Europe in the 1990s.<sup>1,2</sup> Following preliminary guidance from the World Health Organization (WHO) in pandemic planning (1999), the 2003 World Health Assembly adopted a resolution that called for the development of national and global pandemic preparedness plans and that set the first targets for seasonal influenza immunization coverage.<sup>2,3</sup> The global disruption caused by severe acute respiratory syndrome (SARS) in 2003 fuelled the adoption in 2005 of the first comprehensive International Health Regulations. That same year WHO published its first global guidance and checklist for pandemic planning.<sup>2,4</sup>

In 2001, the European Union (EU) and its Member States held the first European pandemic planning workshop drawing on European legislation for health security.<sup>2</sup> The European Centre for Disease Prevention and Control (ECDC) commenced operations in May 2005 and made pandemic preparedness its first disease-specific priority. The ECDC worked with WHO's Regional Office for Europe in supporting Member States of the EU and the European Commission (EC) in strengthening pandemic preparedness in EU and European Economic Area (EU/EEA) countries, while the WHO's Regional Office also worked with other countries in WHO's European region.

This paper reports on the work of the ECDC, the EC and WHO's Regional Office in supporting the assessment, development and strengthening of pandemic planning and preparedness in WHO's European Region in 2005–2009. It explains the initial problems encountered, the changes made to the assessment procedure with experience, the lessons learnt from the 2009 pandemic, and those aspects of pandemic preparedness that should be improved. In a short paper the detail is limited, but more information is available through a timeline and in pandemic preparedness web pages.<sup>2,5–7</sup>

## Initial procedure

During 2005–2009, national pandemic preparedness was assessed in 43 European countries, including all countries belonging to the EU. Central to this was a standardized procedure to assist countries in assessing and improving their national and local pandemic preparedness plans based on WHO's 2005 checklist, whose indicators of preparedness were used.<sup>4</sup> These activities intensified when human cases of influenza A(H5N1) "bird flu" appeared in Azerbaijan and Turkey along with sporadic infection in wild and domestic birds in most other European countries.<sup>2</sup>

The assessments, which began in the summer of 2005, were conducted by external teams of pandemic preparedness experts from the ECDC, the EC and WHO's Regional Office

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for Europe. During brief visits to each country, these teams worked with health ministry officials and technical agencies in completing a standard questionnaire based on WHO's checklist of preparedness indicators. They subsequently sent a written report to each country.<sup>2</sup>

## Procedural improvements and problems

As country visits took place, the limitations of the external assessment model became clear. Over time a self-assessment tool and procedure<sup>2,6,8</sup> based on improved indicators were developed. The indicators were specifically designed for the pandemic planning process and reflected the increasing complexity of national and local pandemic preparedness. This revised assessment procedure covered new issues, such as local preparedness; intersectoral work (i.e. work beyond the health sector); the consistency of policies across neighbouring countries (interoperability); vaccination against seasonal influenza; laboratory preparedness; antiviral treatment and vaccination strategies; pandemic simulation exercises; and communication between agencies and with the public, professionals and neighbouring countries. Some national authorities had stopped preparations after producing written plans and had not developed the operational aspects or determined if they would work in practice. Hence, the concept of three essential "Ps" – planning, preparedness and practice – was adopted, and the concept that published national plans were essential but not sufficient was emphasized. Local tests to see how national policies would be developed at the front line (e.g. in distributing and delivering vaccines) were published so that countries could assess their capacity for delivering local countermeasures and services.<sup>9</sup> In November 2005, the EC carried out a pandemic exercise called Common Ground involving every government of an EU or European Economic Area (EEA) country, WHO, all relevant EU agencies and the European pharmaceutical industry.<sup>2</sup> An efficient innovation was that many countries combined this with national exercises. Successive EU surveys in 2006 and 2007 that compared national capacity against the new indicators still revealed many gaps, particularly deficits in intersectoral planning, seasonal influ-

enza immunization, operational planning, especially at the local level, and surge capacity in many areas, notably communications.<sup>10,11</sup>

## Towards self-assessments

In the EU/EEA area the initial assessment procedure was found lacking. The short external assessments could not cope with the complexity of pandemic preparedness and did not mobilize in-country activity sufficiently, especially outside the health sector. Hence, the procedure evolved into longer self-assessments "owned" and enacted by each country, with in-country leads and involvement of more national agencies. The short visit by an expert external team remained important, and over time these teams began to include national experts in pandemic preparedness from other European countries. At the end of each visit, a self-assessment report with recommendations was agreed upon with the national authority. Countries were encouraged to publish their self-assessments on national web sites and five countries did so: Finland, Ireland, the Netherlands, Norway and Sweden.<sup>2</sup> This led to delays in finalizing reports as countries negotiated internally for consensus and resources to enact recommendations, but it increased national impact, dissemination and country ownership of the findings.

## Sharing regional resources

Each visit concluded with the identification of the needs and expectations that countries had of the ECDC and WHO. This led to the development of a suite of shared resources available to all countries through the web sites of the EC, the ECDC and WHO and several resources, such as one devoted to public health measures and surveillance, were fed into WHO's development of the 2009 pandemic guidance.<sup>2,5,6</sup>

## Plan development

WHO's initial focus was exclusively on health services, as were European pandemic plans. However, the work of the United Nations System Influenza Co-ordination and the focus of the French Presidency of the EU in 2008 on cross-sectoral pandemic preparedness<sup>12</sup> led to increased awareness of the importance of sectors other than health in pandemic

preparedness. For example, social distancing measures, such as proactive school closures, involve cross-sectoral preparation.<sup>12</sup> EU countries started to publish their cross-government plans with the endorsement of the EU Health Council and WHO.<sup>2</sup>

## Monitoring preparedness

A sensitive question was whether national preparedness should be centrally monitored using the WHO indicators, which included items such as the existence or absence of an intersectoral plan or of local arrangements for delivering vaccines. Some countries preferred to withhold their specific results or to share them only with a technical agency (WHO or the ECDC) because in a recent publication national preparedness plans that had been posted on the internet were analysed by external researchers and countries were ranked in "league tables" without the countries' validation of the findings.<sup>2,13</sup> As an acceptable compromise, the ECDC collected country-specific results, as generated using the indicators for the 2006 and 2007 EU surveys, but did not publish or communicate them individually. Instead, normative data allowed countries to determine how they compared with others. However, since national authorities felt their preparedness could still be judged against the preparedness indicators, after further consultation a more refined new generation of indicators was agreed upon in late 2008 but was not ready for use before the 2009 pandemic.<sup>14</sup>

## Maintaining momentum

Four regional workshops were carried out by the EC, the ECDC and WHO from 2005 to 2007.<sup>2</sup> These were valuable for maintaining political and operational momentum, mobilizing resources and allowing countries to learn from each other.<sup>2</sup> Smaller sub-regional workshops on specific topics also contributed. One of them led to the establishment of an EU Communicators Network, and the ECDC organized a series of workshops on the topic of surveillance and studies during a pandemic and issued publications that were used during the pandemic in 2009.<sup>2,15</sup> The WHO's Regional Office for Europe held several "master classes" in pandemic preparedness for eastern European countries through the South-eastern Europe Health Network, a

Table 1. Weaknesses in the response to the 2009 pandemic and suggested improvements

| Weaknesses revealed in 2009 pandemic response  | Ways to improve pandemic preparedness  |
|--|--|
| <b>Preparedness and planning</b>   |  |
| <ul style="list-style-type: none"> <li>– General weaknesses in core preparedness capacities</li> <li>– Inadequate regional coordination, preparedness and cooperation</li> <li>– Differing and sometimes conflicting national responses</li> <li>– National plans and preparedness not always carried through to the local level and front line services</li> <li>– Difficulties in adjusting general pandemic plans and preparedness to the specific requirements of a particular pandemic</li> <li>– Planning assumptions not fit to the specific pandemic</li> <li>– Confusion over WHO's pandemic definition and phases and their relation to disease severity</li> <li>– Sub-optimal information sharing during the pandemic</li> <li>– Specific gaps in national plans and preparedness</li> <li>– Lack of structures for cross-sectoral work during a pandemic in some settings<sup>a</sup></li> <li>– Confusion between containment (responding to outbreaks of A(H5N1)) and mitigation (pandemic response)</li> <li>– Lack of effectiveness of new interventions introduced in the pandemic for the first time</li> </ul> | <ul style="list-style-type: none"> <li>– Assess core capacities by WHO and EU Member States as required by the IHR and facilitate this through coordinated approaches by WHO and the ECDC</li> <li>– Define the roles of key personnel during crisis management</li> <li>– See pandemic preparedness as part of wider general preparedness and develop both</li> <li>– Adopt a serious cross border threats initiative to improve coordination between Member States, WHO and EU structures</li> <li>– Use ECDC local tests to assess local preparedness and update these in light of the 2009 pandemic</li> <li>– Develop structures for describing and defining pandemics based on the appreciation that pandemics differ, that they have to be characterized as they emerge, that they can change over time and that countermeasures have to be flexible</li> <li>– Develop a range of planning assumptions and of pandemic patterns and severities and the ability to refine default planning assumptions in light of early surveillance data</li> <li>– Review WHO's definition of a pandemic and explain how severity fits within it</li> <li>– Share preliminary evaluations early, as soon as the first countries are affected, as required under EU legislation and the IHR</li> <li>– Collect all international and national evaluations of the response to the pandemic and analyse them to extract key lessons</li> <li>– Improve national plans and preparedness following international guidance from WHO, the EC and the ECDC</li> <li>– Identify the sectors that could be most seriously affected during a severe pandemic</li> <li>– Integrate more cross-sectoral aspects into pandemic influenza preparedness</li> <li>– Provide clearer guidance on the roles of different entities in the early assessment of a pandemic in Europe versus containment</li> <li>– As far as possible, introduce the potential tools and mechanisms needed during a pandemic and seasonal influenza, such as surveillance for severe influenza, studies of field vaccine effectiveness and monitoring of vaccine safety</li> </ul> |
| <b>Surveillance in a pandemic</b>  |  |
| <ul style="list-style-type: none"> <li>– Excessive concern over numbers of cases and deaths to the neglect of more important indices</li> <li>– Improving access to appropriate epidemiological and surveillance information at an early stage</li> <li>– Difficulty defining pandemic severity</li> <li>– Weaknesses in rapidly identifying risk factors, clinical problems and the spectrum of infection and disease (asymptomatic infections)</li> <li>– Poor sharing of information on clinical presentation, treatment effectiveness and other clinical parameters</li> </ul>   | <ul style="list-style-type: none"> <li>– Start with the information needed to inform key decisions</li> <li>– Adopt the “known unknowns” approach of the ECDC and rolling risk assessments</li> <li>– Adopt pre-defined protocols for information gathering and sharing</li> <li>– Apply Decision 2 119/98 and IHR(2005) for information sharing</li> <li>– Develop criteria to define pandemic severity in Europe</li> <li>– Select candidate set of appropriate severity indicators</li> <li>– Apply the indicators to seasonal influenza each year in an annual risk assessment</li> <li>– Develop severe disease surveillance (hospital cases and deaths), clinical surveillance and a plan for undertaking seroepidemiology in a pandemic</li> <li>– Share clinical experience in treating patients among Member States (e.g. through ICU networks)</li> <li>– Develop channels of communication with and among clinicians, especially intensivists</li> </ul>  |

(continues ...)

(... continued)

| Weaknesses revealed in 2009 pandemic response  | Ways to improve pandemic preparedness  |
|--|--|
| <b>Communications</b>  |  |
| <ul style="list-style-type: none"> <li>– Poor relationship with the media at times</li> <li>– Inexperience of some official communicators</li> </ul>   | <ul style="list-style-type: none"> <li>– Work more closely with the media during each influenza season</li> <li>– Conduct workshops with communicators</li> <li>– Provide guidance for communicators in EU countries on how to communicate health information</li> <li>– Organize workshops for key journalists</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Failure to monitor the beliefs and attitudes of the public and specifically health-care workers (HCWs)</li> <li>– Failure to detect the early loss of confidence in countermeasures and the authorities</li> </ul>                    | <ul style="list-style-type: none"> <li>– Have standard European models for monitoring public attitudes and beliefs of HCWs to be used by Member States</li> <li>– Keep the relevant professional associations of health professionals informed and involved</li> <li>– Create communication channels for advocacy concerning influenza immunization and the risks of influenza infection in health-care workers</li> </ul> |
| <ul style="list-style-type: none"> <li>– Occasional lack of targeted messages for different risk and vulnerable groups</li> </ul>  | <ul style="list-style-type: none"> <li>– Develop EU guidelines on how to reach specific risk groups</li> <li>– Have core, tested information for the public and health-care workers that can be adapted by Member States into appropriate languages</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Difficulties in disseminating early reports on vaccine and antiviral safety and effectiveness, and in dealing with questions over whether those providing information and advice were independent of commercial influences</li> </ul> | <ul style="list-style-type: none"> <li>– Develop protocol for circulating and disseminating the independent reports of various agencies</li> <li>– Improve communication flow between different institutions</li> </ul>  |
| <ul style="list-style-type: none"> <li>– Difficulty working with the new social media</li> </ul>   | <ul style="list-style-type: none"> <li>– Assess the use and influence of new social media with respect to public health messages</li> <li>– Include new social media in communication campaigns known to be effective</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Poor coordination of the timing and content of some health messages</li> </ul>  | <ul style="list-style-type: none"> <li>– Improve the coordination, consistency, timing and content of health messages</li> </ul>   |
| <b>Vaccines, vaccination and other medical countermeasures</b>   |  |
| <ul style="list-style-type: none"> <li>– Poor seasonal influenza vaccine uptake</li> </ul>   | <ul style="list-style-type: none"> <li>– Develop EU guidance on successful vaccination strategies</li> <li>– Improve monitoring of seasonal influenza vaccination coverage</li> <li>– Implement the 2009 EU Council recommendation on seasonal influenza immunization</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Loss of confidence by health-care staff in vaccination in some countries</li> </ul>   | <ul style="list-style-type: none"> <li>– Develop EU guidance on how to reach vulnerable and risk groups</li> <li>– Develop methods to monitor the views and attitudes of the public and health-care workers concerning immunization</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Failure to reach some vulnerable risk and marginal groups;</li> </ul>   | <ul style="list-style-type: none"> <li>– Make advance purchase agreements more flexible</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Inequitable access to vaccines across Europe</li> </ul>   | <ul style="list-style-type: none"> <li>– Develop a system for the joint procurement of vaccines in the EU</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Lack of flexibility of vaccine procurement contracts, especially concerning the liability of manufacturing vaccines</li> </ul>  |  |
| <ul style="list-style-type: none"> <li>– Suboptimal effectiveness of influenza vaccines</li> </ul>   | <ul style="list-style-type: none"> <li>– Continue to support research on influenza vaccines, including adjuvants</li> </ul>  |
| <ul style="list-style-type: none"> <li>– Poor use of antivirals to treat pandemic and seasonal influenza</li> </ul>  | <ul style="list-style-type: none"> <li>– Review guidance, policies and practices surrounding the prescription of antivirals against seasonal and pandemic influenza</li> </ul>   |
| <ul style="list-style-type: none"> <li>– Lack of surge capacity in some key aspects of health care, notably intensive care and paediatric services</li> </ul>  | <ul style="list-style-type: none"> <li>– Plan for improving surge capacity in intensive care, paediatrics and develop plans for triage</li> </ul>  |
| <ul style="list-style-type: none"> <li>– Late detection of potential adverse events following vaccination and use of antivirals</li> </ul>   | <ul style="list-style-type: none"> <li>– Improve routine mechanisms for detecting adverse events and subsequent rapid evaluation and independent scientific investigation of these reports</li> </ul>  |

EC, European Commission; ECDC, European Centre for Disease Prevention and Control; EU, European Union; ICU, intensive care unit; IHR, International Health Regulations; WHO, World Health Organization.

<sup>a</sup> Although the 2009 pandemic was not severe enough to stress sectors other than health, inter-sectoral work remains important.

political and institutional forum established to promote peace, reconciliation and health in the region. In addition, five EU countries held conferences on European pandemic preparedness to which they invited other EU countries.<sup>2</sup>

## Future developments

The 2009 pandemic provided a sustained arena that tested European preparedness and generated many evaluations and lessons (Box 1).<sup>16</sup> WHO's Regional Office for Europe carried out an evaluation of how pandemic preparedness aided the response to the pandemic.<sup>17</sup> The EC undertook a detailed evaluation of the handling of vaccine-related activities, and the ECDC posted all evaluations on a single web site.<sup>2,16</sup> Although overall the response to the pandemic was felt to be strong, many weaknesses were found at the country level (Table 1). For instance, vaccine policies were inconsistent across the EU and vaccines arrived in different places at different times.<sup>18</sup> Some improvements are already being made (Table 1); they apply to in-hospital surveillance for severe influenza; vaccination against seasonal influenza; joint vaccine procurement; and seroepidemiological capacity. The overall goal is a more risk-based, flexible approach to seasonal and pandemic influenza preparedness (Table 1). Finally, there

### Box 1. Summary of lessons learnt

- Structured national self-assessments with support from external teams allowed individual countries to identify gaps in their pandemic plans and preparedness and enabled regional bodies to assess the regional and global resources that such plans required.
- The response of European countries to the 2009 pandemic benefited from the prior self-assessment process but evaluations found difficulties in surveillance, estimating pandemic severity, the flexibility of the response, vaccination, involvement of health-care workers and communication.
- European national pandemic plans and preparedness now need to be upgraded and global leadership given to ensure that these plans are uniformly applied across countries of the European Region.

is common recognition of the danger of simply preparing for a repeat of the 2009 pandemic experience, since all pandemics are different. In the autumn of 2011, the ECDC and WHO's Regional Office for Europe held four "rolling" workshops for all Member States in WHO's European Region that addressed the changes being made to national pandemic plans and preparedness in the aftermath of the 2009 pandemic.<sup>2</sup> Some countries were already at an advanced stage in the process of updating their pandemic plans in accordance with the lessons they had learnt in 2009. However, no standard pattern in content or timing was in place, and many countries were waiting for WHO to lead with its own plan revisions. Some countries had dissociated their activities from WHO's global pandemic phases. Many countries expressed the intention of moving

towards making pandemic preparedness a part of general preparedness for a wider range of emergencies (Table 1). Without regional or global leadership in these domains, pandemic preparedness plans could diverge even further across Europe.

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## ملخص

تطوير التأهب للجوائح في أوروبا في القرن الحادي والعشرين: التجربة والتطور والخطوات التالية  
المشكلة يمثل تحسين التأهب للجوائح والتخطيط لها تحدياً في أوروبا، الإقليم المتنوع الذي تتولى هيئاته الإقليمية (المكتب الإقليمي لأوروبا التابع لمنظمة الصحة العالمية [WHO] والمفوضية الأوروبية والمركز الأوروبي للوقاية من الأمراض ومكافحتها) أدواراً ومسؤوليات متداخلة.

الأسلوب تم استخدام مؤشرات التأهب للجوائح في أوروبا بغية تطوير وسيلة وإجراء للتقييم بناءً على القائمة المرجعية لمنظمة الصحة العالمية على مستوى العالم للتأهب للجوائح لعام 2005. وتلى ذلك تطبيقها على الدول الأعضاء في منظمة الصحة العالمية في الإقليم الأوروبي، في البداية كجزء من التقييمات الوطنية للمنظمة التي تم إجراؤها خلال الزيارات القصيرة التي قامت بها فرق خارجية.

المواقع المحلية البلدان في الإقليم الأوروبي الأعضاء في منظمة الصحة العالمية.

التغيرات ذات الصلة في الفترة من 2005 إلى 2008، خضع 43 بلداً لتقييم التأهب للجوائح الذي اشتمل على زيارة قصيرة للتقييم

## 摘要

### 制订 21 世纪欧洲传染病大流行应对准备:经验、演变和未来的措施

**问题** 在欧洲,改进传染病大流行规划和应对准备是一个挑战,这是一个多元地区,其地区组织(世界卫生组织[WHO]欧洲办事处、欧盟委员会和欧洲疾病预防控制中心)的作用和责任相互重叠。

**方法** 根据 2005 年全球 WHO 传染病大流行应对准备检查表,使用欧洲传染病大流行应对准备指标制订评估工具和流程。然后在 WHO 欧洲区成员国中应用这些工具和流程,最初作为外部小组短期访问期间执行的结构化国内评估的一部分。

**当地状况** WHO 欧洲区国家

**相关变化** 从 2005 年至 2008 年,43 个国家执行了传染病大流行应对准备评估,其中包含专家小组的短期外部评估访问。这些短期访问发展成为更长的自评流程,它涉及

外部小组,但是归这些国家“所有”,由流程识别出差距,并制订出改进应对准备的计划。随着国家和地方传染病大流行应对准备的复杂化,评估工具和流程也变得更加复杂。2009 年的传染病大流行暴露了规划、监测通信和免疫方面新的差距。

**经验教训** 结构化国家自评辅以外团队的支持,让各个国家可以识别出传染病大流行应对准备计划的差距,让各个地区组织可以评估这些计划需要的地区和全球资源。2009 年的传染病大流行暴露了监测、传染病大流行严重性评估、响应灵活性、预防接种、卫生护理人员参与和沟通等方面的问题。欧洲国家计划正在升级,需要全球领导者确保这些计划在整个地区得到统一应用。

## Résumé

### Développer la préparation en cas de pandémie en Europe au 21<sup>e</sup> siècle: expérience, évolution et prochaines étapes

**Problème** Améliorer la planification et la préparation en cas de pandémie est un défi pour l'Europe, une région très diversifiée dont les organismes régionaux (le Bureau régional pour l'Europe de l'Organisation mondiale de la Santé [OMS], la Commission européenne et le Centre européen de prévention et de contrôle des maladies) ont des rôles et responsabilités qui se chevauchent.

**Approche** Les indicateurs européens de préparation en cas de pandémie ont été utilisés pour développer un outil et une procédure d'évaluation basés sur la Liste de contrôle mondiale 2005 de l'OMS pour la préparation en cas de pandémie. Ceux-ci ont ensuite été appliqués aux États membres de la Région européenne de l'OMS, d'abord dans le cadre d'évaluations nationales structurées, effectuées au cours de visites de courte durée par des équipes externes.

**Environnement local** Pays de la Région européenne de l'OMS.

**Changements significatifs** De 2005 à 2008, 43 pays ont subi une évaluation de préparation en cas de pandémie comprenant une courte visite d'évaluation externe par une équipe d'experts. Ces courtes visites se sont développées en une procédure d'auto-évaluation plus

longue, impliquant une équipe extérieure, mais “appartenant” à ces pays, qui a identifié les lacunes et développé des plans pour améliorer la préparation. L'outil et la procédure d'évaluation sont devenus plus sophistiqués, au fur et à mesure que la préparation à une pandémie nationale et locale devenait plus complexe. La pandémie de 2009 a révélé de nouvelles lacunes de communication, planification, surveillance et vaccination.

**Leçons tirées** Des auto-évaluations nationales structurées avec le soutien d'équipes externes permettent à chaque pays d'identifier les lacunes des plans de préparation à une pandémie, et aux organismes régionaux d'évaluer les ressources régionales et mondiales requises pour de tels plans. La pandémie de 2009 a révélé des problèmes supplémentaires en termes de surveillance, d'estimations de gravité de la pandémie, de flexibilité de la réaction, de vaccination, de participation du personnel de santé et enfin de communication. Les plans nationaux européens sont en train d'être mis à niveau et un leadership mondial est nécessaire pour s'assurer que ces plans soient appliqués uniformément dans toute la région.

## Резюме

### Развитие уровня готовности к пандемиям в Европе в 21-м столетии: опыт, эволюция и следующие шаги

**Проблема** Повышение уровня планирования и готовности к пандемиям в Европе затруднено, поскольку на ее территории действует множество региональных организаций (Европейское региональное бюро Всемирной организации здравоохранения (ВОЗ), Европейская Комиссия и Европейский центр профилактики болезней и борьбы с ними), функции и обязанности которых могут дублироваться.

**Подход** Чтобы разработать инструменты для оценки и процедуры, основанные на предложенном ВОЗ глобальном перечне 2005 года для готовности к пандемиям, были использованы европейские индикаторы готовности к пандемиям. Полученные результаты были применены в странах-участницах ВОЗ европейского региона, изначально в рамках структурированных национальных оценок, проведенных во время краткосрочных визитов внешних команд.

**Местные условия** Страны, входящие в ВОЗ европейского региона.

**Осуществленные перемены** С 2005 по 2008 гг. в 43 странах была проведена оценка готовности к пандемиям, которая

включала в себя краткосрочный оценочный визит команды внешних экспертов. Эти краткосрочные визиты послужили основой для разработки расширенной процедуры оценки, которая проводилась страной-участницей с использованием собственных средств и привлечением внешней команды и служила для определения пробелов и разработки планов по повышению уровня готовности. С усложнением степени готовности к пандемиям на национальном и местном уровнях оценочный инструмент и процедуры также стали более сложными. Пандемии 2009 года выявили новые пробелы в планировании, обмене данными эпиднадзора и вакцинации.

**Выводы** Самостоятельная структурированная национальная система оценки с поддержкой внешних команд помогает отдельным странам выявить пробелы в их планах готовности к пандемиям, а также позволяет региональным организациям оценить региональные и глобальные ресурсы, необходимые для реализации этих планов. Пандемии 2009 года выявили дополнительные проблемы с эпиднадзором, оценкой тяжести пандемии, гибкостью реагирования, вакцинацией,

участием работников здравоохранения и коммуникацией. Производится обновление Европейских национальных планов,

а для равномерного внедрения этих планов по всему региону необходимо наличие глобального руководства.

## Resumen

### Desarrollo de la preparación pandémica en Europa en el siglo XXI: experiencia, evolución y pasos siguientes

**Situación** La mejora de la planificación y preparación pandémica es un reto en Europa, una región diversa cuyos organismos regionales (la Oficina regional para Europa de la Organización Mundial de la Salud [OMS], la Comisión Europea y el Centro Europeo para la Prevención y el Control de Enfermedades) tienen papeles y responsabilidades coincidentes.

**Enfoque** Se utilizaron los indicadores europeos de preparación pandémica para desarrollar una herramienta y un procedimiento de evaluación basados en la lista de comprobación global 2005 de la OMS relativa a la preparación pandémica. Éstos se aplicaron luego a los Estados miembros de la región europea de la OMS, en un principio, como parte de las evaluaciones nacionales estructuradas realizadas durante breves visitas de equipos externos.

**Marco regional** Países en la región europea de la OMS.

**Cambios importantes** De 2005 a 2008, 43 países se sometieron a una evaluación de preparación pandémica que incluía una breve visita de evaluación externa de un equipo de expertos. Estas visitas se desarrollaron hasta convertirse en un procedimiento de autoevaluación

más largo, que incluía a un equipo externo, pero de “propiedad” de los países, que identificó lagunas y desarrollaron planes para mejorar la preparación. La herramienta y el procedimiento de evaluación incrementaron su sofisticación a medida que la preparación pandémica nacional y local fue aumentando en complejidad. La pandemia sufrida en 2009 reveló nuevas lagunas en la planificación, las comunicaciones de vigilancia y la inmunización.

**Lecciones aprendidas** Las autoevaluaciones nacionales estructuradas con la asistencia de equipos externos permitieron a cada país identificar lagunas en sus planes de preparación pandémica y permitieron a los organismos regionales evaluar los recursos regionales y globales que requieren dichos planes. La pandemia de 2009 reveló problemas adicionales en la vigilancia, las estimaciones de gravedad pandémica, la flexibilidad de la respuesta, la vacunación, la implicación de los trabajadores sanitarios y la comunicación. Los planes nacionales europeos se están actualizando y es necesario un liderazgo global para asegurar que estos planes se aplican de manera uniforme en toda la región.

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