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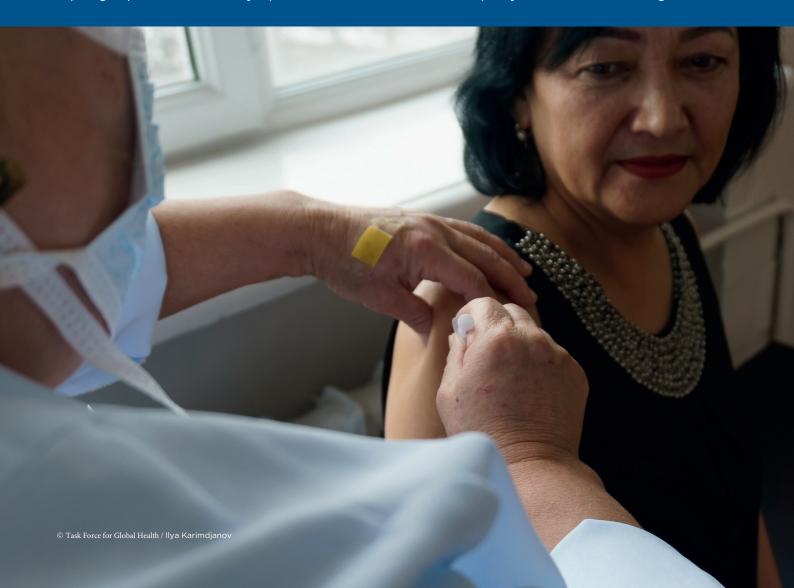
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About this Strategic Response Plan

This Strategic Response Plan for the measles emergency in the WHO European Region (SRP) articulates the overall status of measles resurgence in the WHO European Region and the priority actions needed to ensure an effective response to interrupt transmission, save lives and reverse the regional trend in case numbers. It covers September 2019 to December 2020, and the SRP will be reviewed and, if necessary, updated during this period. The SRP has been developed by the WHO Regional Office for Europe, and includes the contributions from the United Nations Children's Fund (UNICEF). The SRP complements but does not replace the need for emergency response planning at the country level, led through ministries of health and engaging all partners country by country.

The SRP is divided into two parts: (I) a strategic response framework outlining the context, risk assessment and response needs; and (II) an operations plan that outlines key interventions prioritized for countries and costed based on the current situation. In addition to UNICEF, a range of partners will be involved in implementation in line with their recognized mandates in WHO Member States. Relevant partners include: the European Centre for Disease Prevention and Control (ECDC), the United States Centers for Disease Control and Prevention (US CDC), the GAVI Alliance, bilateral development agencies, United Nations agencies, academic institutions, WHO collaborating centres, professional associations, nongovernmental organizations and civil society.

Contents

About this Strategic Response Plan	2
Foreword by the Regional Emergency Director	3
Part I: Strategic response framework for Europe	4
Overview	4
Risk assessment for the European Region	6
Strategic response objectives	6
Country classification	6
Target populations	9
International response stakeholders	9
Summary of requirements	9
Part II: Regional operations plan for Europe	10
Objective 1: Interrupting measles transmission in countries with large outbreaks through coordinated action	10
Objective 2: Providing safe care to patients	11
Objective 3: Increase commitment to immunization and strengthen vaccine acceptance and demand	12
Objective 4: Increased preparedness and readiness for countries at imminent risk	13
Objective 5: Reviewing past measles outbreak response, implementing corrective measures and planning long-term improvement	14
Response monitoring	14
Overall budget requirements	15

Foreword

The resurgence of measles in the Region is occurring because of a build-up over time of susceptible individuals in communities and countries with suboptimal immunization coverage. If outbreak response is not timely and comprehensive, the virus will find its way into more pockets of vulnerable individuals and potentially spread to additional countries within and beyond the Region. An additional concern is that the spread of measles, often likened to the proverbial canary in the coal mine, reveals gaps in the broader health system and may presage the appearance of other vaccine preventable diseases.

The cornerstones for eliminating measles remain high population immunity, including among adults, to stop disease transmission, and high-quality surveillance to monitor disease occurrence for public health action. Measles is entirely preventable, and each of us has our own responsibility to do so: individuals must seek immunization for themselves and those they care for in accordance with public health guidance; communities must build resilience and maintain herd immunity to protect the most vulnerable; and, countries must ensure universal health coverage including safe, quality, and people-centred public health and clinical services.

This revised Strategic Response Plan (SRP) includes a dedicated focus on several objectives that need to be addressed now and in parallel to make a timely and sustainable impact. These include bringing the outbreaks under control, providing safe care to patients, strengthening vaccine acceptance and demand, increasing preparedness and risk mitigation, and reviewing outbreak response. The outputs of this SRP will thus compliment and accelerate regional action to reach targets for measles as defined in the EVAP

Measles is under global elimination, but it is resurging in Europe at a most alarming rate. Changing this course requires urgent and coordinated action across many of WHO's 53 European Member States. I would like to take this opportunity to recognize and thank all the partners involved for their collaboration and considerable efforts in support of this regional Strategic Response Plan.



Dr Dorit NitzanActing Regional Emergency Director

WHO Regional Office for Europe. WHO EpiData, No. 7/2019, July 2018—June 2019 (data as of 3 July 2019) [online]. (http://www.euro.who.int/__data/assets/pdf_file/0009/409842/2019-07-Epi_Data_EN_July2018-June2019.pdf, accessed 8 September 2019).

Part I: Strategic response framework for Europe

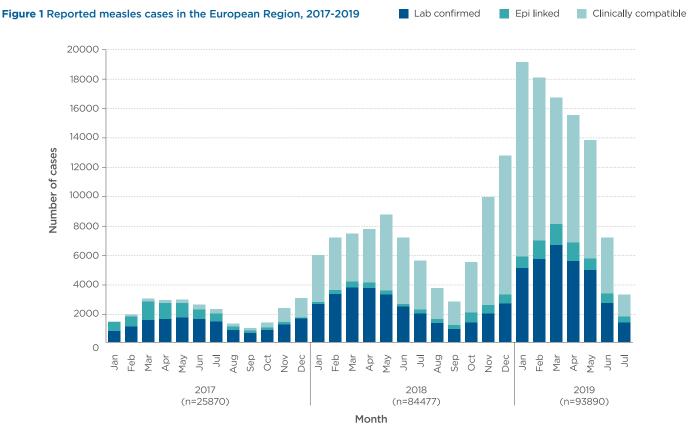
Overview

This plan includes the international response framework and the strategic interventions required to respond to multiple ongoing measles outbreaks and minimize the imminent risk of further outbreaks across the Region. Following WHO's internal grading of measles as a regional emergency in May 2019, internal resources have already been made available for the most critical actions, particularly in Ukraine where nationwide supplementary immunization activities are underway with WHO support. To meet urgent needs across the European Region, this document sets out the strategy and resources needed to implement it in prioritized countries.

Measles is a highly contagious viral disease caused by a paramyxovirus virus, manifesting as a febrile rash illness. It remains one of the leading causes of morbidity and mortality among young children globally, despite the availability of a safe and effective vaccine. Transmission from person-to-person is airborne, as well as by direct or indirect contact of secretions (nasal, throat) of an infected person. The virus can cause widespread outbreaks in the presence of large numbers of susceptible persons.

Measles complications such as pneumonia, diarrhoea and encephalitis can occur in up to 30% of persons depending on age and predisposing conditions, such as young age, malnutrition and immunocompromizing conditions. These complications usually occur 2 to 3 weeks after rash onset. Measles can infect anyone of any age, but most of the burden of disease globally is still among children < 5 years of age.

Since 1 January 2018, 49 of the 53 countries in the European Region have together reported over 170 000 measles cases (Fig. 1) and over 110 measles-related deaths¹. This is a dramatic resurgence of cases compared to previous years, which reveals persistent gaps in immunization coverage in the Region and demands an enhanced, urgent and internationally coordinated response.



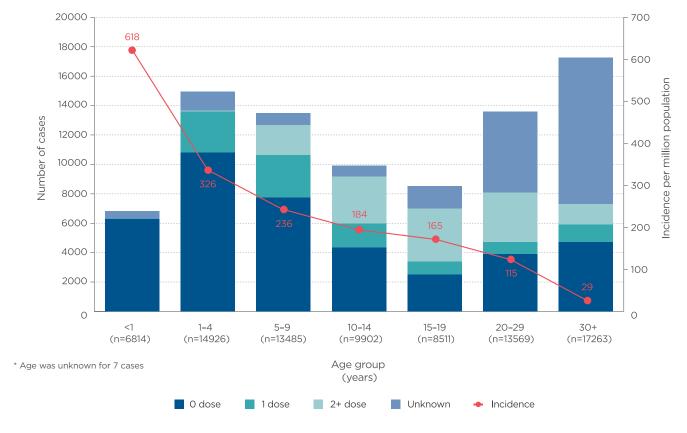
Data source: Monthly aggregated and case-based data reported by Member States to WHO/Europe directly or via ECDC/TESSy data as of 2 September 2019

Part I: Strategic response framework for Europe continued

During the period of June 2018 to May 2019, the majority of cases reported in the European Region were from Ukraine (n = 85 833), Kazakhstan (n = 8476), Georgia (n = 5024), Israel (n = 4011), and the Russian Federation (n = 3034). The cases in Ukraine represent 67% of all cases reported in the Region for this period. The highest incidence per million population in 2018 was in Ukraine (n = 1209) followed by Serbia (n = 579) and Georgia (n = 564).

The vast number of measles outbreaks in the European Region are driven by a high rate of unvaccinated children, adolescents and adults. This trend indicates broader health system weaknesses, whereby measles could be the herald of other vaccine-preventable disease outbreaks, such as pertussis, diphtheria and rubella. The specific drivers of sustained transmission differ significantly both across, and within, countries in the European Region and therefore require specific and tailored action.

Figure 2 Measles cases and incidence by age group and vaccination status in the WHO European Region, 2018



Data source: Monthly aggregated and case-based data reported by Member States to WHO/Europe directly or via ECDC/TESSy data as of 2 September 2019. Population source: United Nations Department of Economic and Social Affairs, Population Division. World Population Prospects 2019.

² European Vaccine Action Plan 2015-2020 is available at http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2014/european-vaccine-action-plan-20152020-2014

³ WHO Regional Office for Europe. European Vaccine Action Plan 2015-2020. Copenhagen: WHO Regional Office for Europe; 2014. (http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2014/european-vaccine-action-plan-20152020-2014, accessed 8 September).

Risk assessment for the European Region

The level of risk to public health associated with measles outbreaks in the European Region is currently assessed by WHO as moderate.

The European Region achieved 91% estimated coverage for the second dose of measles vaccination in 2018. While this level of coverage is an improvement from previous years, it is not uniform across the Region nor high enough to ensure herd immunity and stop the spread of the virus. High national-level coverage can mask pockets of low coverage at the local level, resulting in an accumulation of susceptible individuals that often goes unrecognized until outbreaks occur.

The impact on public health will persist until ongoing outbreaks are controlled, routine immunization coverage is continuously high (95%) and immunity gaps in the population closed. As long as measles continues to circulate anywhere in the world, no country can avoid importation; however, countries can protect their populations through high routine and supplemental immunization coverage of susceptible individuals.

In line with the WHO Emergency Response Framework (ERF), and in line with the risk assessment, on 6 May 2019 WHO activated a Grade 2 emergency response to measles circulation in the Region.

Strategic response objectives

At least 95% of individuals in every population needs to be immune to measles, through two doses of vaccination or prior exposure to the virus, to ensure community protection for everyone – including babies too young to be vaccinated and others who cannot be immunized due to existing diseases and medical conditions.

In adopting the European Vaccine Action Plan 2015-2020 (EVAP)² all 53 Member States of the European Region committed to eliminating measles and rubella as one of the Region's priority immunization goals. Despite this commitment, several European Member States are currently experiencing ongoing and widespread outbreaks, other Member States have recently brought outbreaks under control, and others again are at significant risk over the next 12 months.

Through implementation of this SRP, WHO Regional Office for Europe will continue to work with countries in the Region to reduce the incidence and public health impact of measles transmission in the European Region by:

- 1. interrupting measles transmission in countries with ongoing outbreaks through coordinated action;
- 2. providing safe care to patients;
- **3.** increasing commitment to immunization and strengthening vaccine acceptance and demand;
- **4.** increasing the preparedness and readiness status of countries:
- **5.** reviewing past measles outbreak response, implementing corrective measures and planning long-term improvement.

Measles is an entirely preventable disease. WHO's overarching goal driving this SRP is to enable countries to respond rapidly to ongoing acute measles outbreaks while implementing measures to prevent future outbreaks from occurring. The outputs of this SRP will thus compliment and accelerate regional action to reach targets for measles as defined in the EVAP³. The targets related to measles under the EVAP are:

- interruption of endemic measles virus transmission for > 12 months, with high-quality surveillance in all countries:
- measles elimination by all countries verified by the European Regional Verification Commission (RVC).

Country classification

With almost all European countries reporting measles cases in 2019, tailoring response actions across Europe will meet the specific needs of individual countries. To further characterize the overall situation in Europe, WHO has classified countries along different phases of the emergency cycle: prevention, preparedness and readiness, response and recovery (Table 1).

As the regional epidemiology evolves, this classification will be updated as countries move between the different emergency phases. The selection of countries for prioritized implementation of the SRP is subject to periodic revision based on the developing regional and global situation.

Part I: Strategic response framework for Europe continued

Table 1 Emergency cycle classification for countries with measles cases in the WHO European Region

CLASSIFICATION	CRITERIA	COUNTRIES
Measles response phase	Countries reporting ongoing and widespread measles outbreaks	France*, Kyrgyzstan*, Kazakhstan, North Macedonia, Russian Federation*, Turkey*, Ukraine*
Measles review phase	Countries recovering from and reviewing recently controlled measles outbreaks	Albania†, Azerbaijan, Czechia†, Georgia*, Greece†, Israel, Poland*, Serbia*
Measles prevention, preparedness and readiness phase	Countries with sporadic cases but not reporting widespread or recurrent measles outbreaks	Andorra**, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina*, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, Germany*, Hungary, Iceland, Ireland, Italy*, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, Norway, Portugal, Republic of Moldova, Romania*, San Marino**, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkmenistan**, United Kingdom of Great Britain and Northern Ireland†, Uzbekistan

- * Countries having retained endemic measles status in 2018 under the European Regional Verification Commission for Measles and Rubella Elimination (RVC)⁴
- [†] Countries were considered to have re-established measles transmission in 2018 under the European Regional Verification Commission for Measles and Rubella Elimination (RVC)⁵
- ** Countries not reporting measles cases from July 2018 June 2019⁶

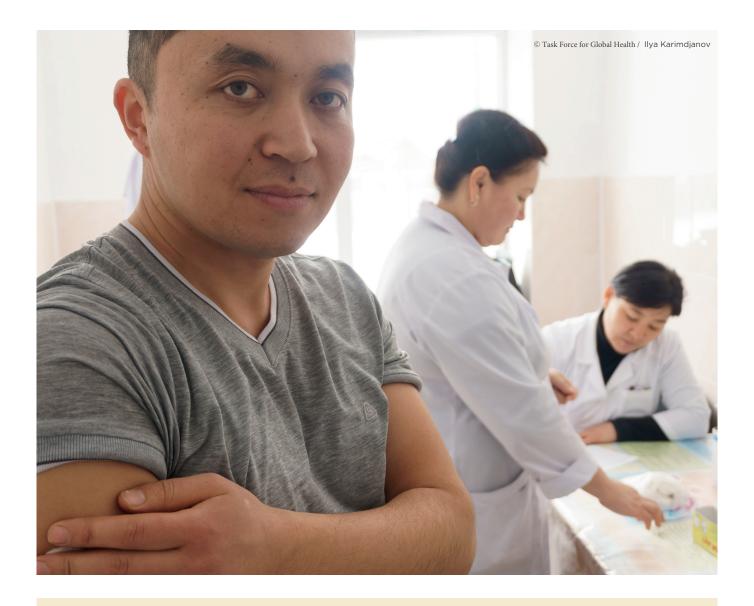
Since May 2019, WHO has reviewed the situation in all 53 Member States and conducted more in-depth analyses across several focus countries to better understand the context-specific drivers for sustained measles transmission and to define individual response needs.



⁴ Measles and rubella elimination status per Member State for 2018. WHO. Conclusions of the 8th meeting of the European Regional Verification Commission for Measles and Rubella Elimination, held 12-14 June 2019. Copenhagen: WHO Regional Office for Europe; 2019. (http://www.euro.who.int/__data/assets/pdf_file/0009/410967/8th-RVC-report-annex.pdf?ua=1, accessed 9 September 2019).

⁵ Ibid.

⁶ Monthly aggregated and case-based data reported by Member States to WHO/Europe directly or via ECDC/TESSy. ECDC. The European Surveillance System (TESSy) [online]. Stockholm: European Centre for Disease Prevention and Control; 2019. (https://ecdc.europa.eu/en/publications-data/european-surveillance-system-tessy, accessed 9 September 2019).



Measles response: Kazakhstan in focus

Kazakhstan reported over 9000 measles cases in the first half of 2019. Despite the seasonality of measles, which is generally reflected in diminished circulation in the summer months, Kazakhstan continues to see a high number of cases, with an additional 950 cases reported for June 2019.

Since 2000, the reported administrative immunization coverage for Kazakhstan has been consistently above 95% at national level for both the first and second doses of measles-containing vaccine. The current large outbreak is therefore a reflection of pockets of vulnerable children and adults at subnational level in the country.

Measles outbreak review: Serbia in focus

The number of measles cases has dropped in Serbia this year, with 15 cases reported in January to June 2019. National routine vaccination coverage has been below 95% (ranging from 82% to 93%) for the first dose of measles-containing vaccine since 2011, improving significantly over the last two years. In 2018, Serbia reported the second-highest incidence rate (579.3 per 1 million population) and highest proportion of cases among adults aged 20 years and older (67%) in the Region. It was also one of the four countries reporting a high number of deaths attributed to measles (n = 14). On 28 August 2019 the National Institute of Public Health of Serbia officially declared the measles outbreak in Serbia over.

Part I: Strategic response framework for Europe continued

Target populations

Outbreaks usually occur when the disease reaches large pockets of unimmunized or under-immunized. These populations exist even in countries where national routine immunization coverage with both doses of measles-containing vaccines approaches or exceeds 95% and include those too young to be immunized, adults born before vaccine introduction, and sometimes specific subgroups (ethnic, religious, philosophic, economic, territorial etc.), who are not immunized due to various reasons, often not recognized as susceptible and not served by (or have difficulty accessing) immunization services. If susceptible populations are of a poor socioeconomic status and with challenged access to/availability of health services, they are consequently prone to more severe manifestation of measles and its complications.

International response stakeholders

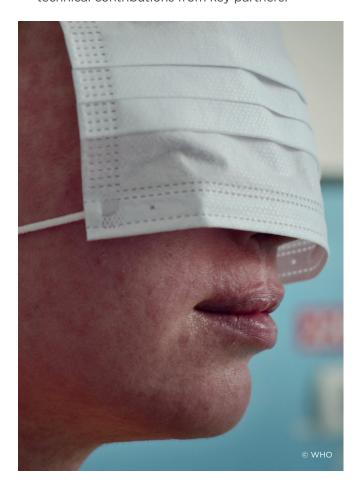
Stakeholders involved in the development and implementation of this SRP will ensure that country-level responses are implemented in strict coordination with health authorities at the national level. Ministries of health, alongside WHO and country-level partners, will also be conducting detailed response planning and implementation that will require more detailed and tailored control measures and costing.

The measles SRP has been developed and will be implemented in close collaboration with a range international partners having key operational and technical roles, including Global Outbreak Alert and Response Network (GOARN) partners. WHO's key operational partner at the international level in responding to measles outbreaks is UNICEF, and its contributions are included in the joint operations plan detailed below. Key technical and advisory partners, such as the ECDC, US CDC, GAVI, and many others will be essential in the implementation of specific country-level interventions.



Summary of requirements

- The total requested amount to meet the objectives for the measles SRP is US\$ 7 732 500. The SRP is currently 5% funded.
- The requested amount for WHO is US\$ 4 652 500 and the requested amount for UNICEF is US\$ 3 080 000.
- The SRP targets all 53 WHO Member States in the European Region, with 18 countries targeted for priority action based on the current situation.
- Based on WHO Member State needs, WHO will lead the coordination of international support at the country level including operational and technical contributions from key partners.



Part II: Regional operations plan for Europe

WHO will organize the health response around five strategic objectives as follows. The countries listed for prioritized action are subject to change, as the regional epidemiology evolves. Key partners are listed at a regional level, but their mandate, role and functions may differ country by country.

Objective 1: Interrupting measles transmission in countries with large outbreaks through coordinated action

Countries need to identify susceptible individuals and population groups and consider undertaking catch-up immunization or supplementary immunization activities to close immunity gaps. Every opportunity should be used to vaccinate susceptible children, adolescents and adults and to monitor and report adverse events following immunization. WHO will measure this objective through the implementation of nationwide supplementary immunization activities.

Measles response: Ukraine in focus

Measles vaccination coverage at the national level in Ukraine was relatively consistent and above 95% from the mid-1980s until 2008, when immunization rates declined. By 2016, coverage had dropped to 42% and 31% for the first and second doses of measles-containing vaccine, respectively. A high number of measles cases have been reported for the first 5 months of 2019 (95% of the total number of cases reported by Ukraine for all of 2018). Several factors have contributed to low immunization coverage in Ukraine, including low vaccine confidence by health care professionals; low demand from the public; and challenges with vaccine supply, storage and handling.

Along with supplementary immunization activities conducted among children of 2008-2015 birth cohorts since September 2017, the Ministry of Health, with support from WHO, UNICEF and other international partners, is now launching nationwide measles outbreak response immunization and is providing access to free-of-charge immunization services to all children from 6 months of age and adults from high-risk groups.

Selective supplementary immunization activities are being organized to cover all children outside of the routine vaccination schedule. In 2019, the Ministry of Health implemented pilot outreach vaccination activities among schoolage children in two regions that reported high numbers of measles cases. Based on achieved results, WHO and UNICEF support to the Ministry of Health will now extend this to Kyiv City and the six regions most affected by measles, and will be further extended in 2020 to all remaining regions in Ukraine.

STRATEGIES	COUNTRIES IDENTIFIED FOR PRIORITIZED ACTION	KEY INTERNATIONAL PARTNERS
Secure access to a timely and affordable supply of vaccines for outbreak response	Kyrgyzstan, Ukraine	WHO, UNICEF
Supplementary immunization activities, including adverse event following immunization (AEFI) monitoring and reporting including enhanced surveillance, data analysis and partner coordination during emergency response	Kyrgyzstan, Ukraine	WHO, UNICEF, US CDC, ECDC, GAVI
Identify un- and under-immunized groups and document key system and behavioural gaps and drivers to support evidence-based decision making.	Kyrgyzstan, Ukraine	WHO, UNICEF

Part II: Regional operations plan for Europe continued

Objective 2: Providing safe care to patients

To provide safe and effective clinical care to patients and protect health workers, prevent and limit measles transmission in health care settings. Health workers should have presumptive evidence of immunity to measles and should have sufficient resources to fully implement Infection Prevention and Control (IPC) measures. WHO will measure this objective through the number of countries with ongoing outbreaks supported with additional clinical and IPC measures.

Measles prevention: Romania in focus

Romania reported the highest number of measles-related deaths in the Region in 2016 (12 deaths), 2017 (24 deaths), and 2018 (22 deaths). An additional 6 deaths have been reported so far in 2019. In the early 2000s, annual immunization coverage in Romania was estimated to be 95% or higher for both the first and second doses of measles-containing vaccine, but it has been waning since 2009 to a low of 75% for the second dose in 2017. Maintaining high vaccination coverage has been challenged by a transitioning health system, shortages of vaccine supplies and complexities in the outbreak response.

STRATEGIES	COUNTRIES IDENTIFIED FOR PRIORITIZED ACTION	KEY INTERNATIONAL PARTNERS
 Clinical management Repurposing of wards and ensuring continuity of hospital services Triage practices for admission and outpatient ward Provisions for community-based care. Supportive care advice if required 	Albania, Kazakhstan, Kyrgyzstan, North Macedonia, Ukraine	WHO
Accelerated implementation of IPC core components ⁷ : • Core Components 2. Evidence-based guidelines • Core Components 7. Workload, staff and bed occupancy • Core Components 8. Built environment, materials and equipment	Albania, Kazakhstan, Kyrgyzstan, North Macedonia, Ukraine	WHO
Train-the-trainer vaccinology courses for general practitioners and other health workers	Bosnia & Herzegovina, Kyrgyzstan, North Macedonia, Romania, Serbia, Ukraine	WHO, US CDC
Target vaccination of health care workers through occupational health services	Countries reporting ongoing and widespread measles outbreaks	WHO

WHO Infection Prevention and Control Core Components Summary. Geneva: World Health Organization; 2016. (https://www.who.int/infection-prevention/publications/ipc-cc-summary.pdf?ua=1, accessed 8 September 2019).



Objective 3: Increase commitment to immunization and strengthen vaccine acceptance and demand

Tailored strategies to strengthen political and financial commitment to immunization, as well as interaction between health workers and patients/caregivers, research to understand barriers and drivers to vaccination, and interventions to increase vaccination uptake accordingly are required. WHO will measure this objective through the number of country-specific interventions.

Measles outbreak review: Israel in focus

Measles vaccination coverage at the national level in Israel remains high, with reported routine coverage for both doses of measles-containing vaccine at \geq 95% since 2013. However, periodic outbreaks continue to be fuelled by pockets of un- and under-vaccinated individuals. The current outbreak, which started in early 2018, has exceeded 4000 cases (as of 4 July 2019). Israel reported the third-highest number of measles cases in the Region in 2018.

STRATEGIES	COUNTRIES IDENTIFIED FOR PRIORITIZED ACTION	KEY INTERNATIONAL PARTNERS
Conduct high-level advocacy to increase political and financial commitment on measles immunization	All response countries, with a focus on Bosnia & Herzegovina, Israel, Kazakhstan, Kyrgyzstan, Romania, Serbia, Ukraine	WHO, UNICEF, US CDC
Improve interaction between health workers and patients/ caregivers to identify and address vaccine hesitancy, strengthen acceptance and encourage vaccination of susceptible groups	Azerbaijan, Bosnia & Herzegovina, Georgia, Israel, Kazakhstan, Kyrgyzstan, Romania, Serbia, Ukraine	WHO, UNICEF, US CDC
Use behavioural insights research to understand barriers and drivers to vaccination and develop interventions for increased vaccination uptake accordingly	Bosnia & Herzegovina, Georgia, Israel, Kazakhstan, Kyrgyzstan, North Macedonia, Romania, Serbia, Ukraine	WHO, UNICEF, US CDC
Strengthen evidence-based social media engagement to promote vaccine acceptance.	Bosnia & Herzegovina, Georgia, Israel, Kazakhstan, Kyrgyzstan, North Macedonia, Romania, Serbia, Ukraine	WHO, UNICEF

Part II: Regional operations plan for Europe continued

Objective 4: Increased preparedness and readiness for countries at imminent risk

Despite long-established routine immunization programmes, capacities for emergency response are still required. Countries need to be able to rapidly change from routine mode to response mode through the development and testing of standard procedures and protocols to be disseminated to all health care workers to change practices from routine to active surveillance, case finding and contact tracing. To adequately respond to outbreaks, countries need to have a well-formulated and tested plan. WHO will measure this objective through the measured presence of a tested contingency plan as an indicator.

STRATEGIES	COUNTRIES IDENTIFIED FOR PRIORITIZED ACTION	KEY INTERNATIONAL PARTNERS
Strengthening technical capacity to detect individual cases and develop active surveillance protocols	Countries with sporadic cases but not reporting widespread or recurrent measles outbreaks. Specific focus on Albania, Armenia, Belarus, Bosnia & Herzegovina, Montenegro, North Macedonia, Republic of Moldova, Romania, Tajikistan, Turkmenistan, Uzbekistan	WHO, ECDC, South-eastern European Health Network (SEEHN)
Accelerated implementation of recommendations from Expanded Programme of Immunization (EPI) reviews, and identification of impediments to implementation of the recommendations	All countries with reviews in the past 5 years	WHO
Review and update existing measles outbreak response/ contingency plans, practice and guidance	Countries with sporadic cases but not reporting widespread or recurrent measles outbreaks. Specific focus on Albania, Armenia, Belarus, Bosnia & Herzegovina, Montenegro, North Macedonia, Republic of Moldova, Romania, Tajikistan, Turkmenistan, Uzbekistan	WHO, UNICEF, ECDC, US CDC
Testing country readiness through simulation exercises	Countries with sporadic cases but not reporting widespread or recurrent measles outbreaks. Specific focus on Albania, Armenia, Belarus, Bosnia & Herzegovina, Montenegro, North Macedonia, Republic of Moldova, Romania, Tajikistan, Turkmenistan, Uzbekistan	WHO, UNICEF, ECDC, US CDC

Objective 5: Reviewing past measles outbreak response, implementing corrective measures and planning long-term improvement

To prevent, prepare for and respond to future measles outbreaks, analyses from previous outbreaks are critical to institutionalize best practices and share solutions with the wider public health community. After action reviews (AARs) and outbreak response assessments (OBRAs) are conducted for learning and accountability and contribute to a culture of continuous improvement in emergency preparedness and response. WHO will measure this objective through the number of AAR/OBRAs conducted by countries.

Measles outbreak review: Kyrgyzstan in focus

The measles outbreak in Kyrgyzstan has affected nearly 3000 people since July 2018. The number of cases is declining, with the lowest monthly total since August 2018 reported in June 2019 (n = 38). Approximately 50% of the measles cases in this outbreak have been among children under 1 year of age. As a precaution, Kyrgyzstan is considering temporary introduction of a dose of measles vaccination at 9 months of age.

Activities to identify and address underlying health system challenges are currently being developed by the Ministry of Health and partners to prevent future outbreaks. A working group has been established to review existing measles/rubella-related regulatory documents and to develop a measles action plan, which will include supplementary immunization activities. In May 2019, WHO also organized an operational review of the response to the measles outbreak under International Health Regulations 2005 monitoring and evaluation framework (IHR MEF).

STRATEGIES	COUNTRIES IDENTIFIED FOR PRIORITIZED ACTION	KEY INTERNATIONAL PARTNERS
Outbreak response assessments	Georgia, Kazakhstan, Kyrgyzstan, Ukraine	WHO, UNICEF, US CDC, ECDC
After action reviews for countries with recent outbreaks	Albania, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, North Macedonia, Serbia, Turkey, Ukraine	WHO, UNICEF, US CDC, ECDC
Integration of results into costed national action plans	Albania, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, North Macedonia, Serbia, Turkey, Ukraine	WHO, UNICEF

Response monitoring

The monitoring of this plan will align with the monitoring framework described under the under the EVAP Goal 2 to eliminate measles in the European Region. The regional impact indicator for this goal is the percentage of countries with interruption of endemic measles transmission. Under EVAP's monitoring framework, measles classification, reporting and surveillance indicators are collected across the European Region by country⁸. Performance indicators will also track the implementation of strategic interventions across the SRP response objectives.

⁸ WHO Measles classification, reporting and surveillance indicators for the European Region. WHO Regional Office for Europe. WHO EpiData, No. 7/2019, July 2018—June 2019 (data as of 3 July 2019) [online]. (http://www.euro.who.int/__data/assets/pdf_file/0009/409842/2019-07-Epi_Data_EN_July2018-June2019.pdf, accessed 8 September 2019).

Overall budget requirements

The total requested amount to meet the objectives for the measles SRP is US\$ 7 732 500. The SRP is currently 5% funded. These costs are further detailed in the table below.

	SRP response objectives and interventions	Total required WHO (US\$)	Available WHO (US\$)	Total required UNICEF (US\$)	Available UNICEF (US\$)
1	Interrupting measles transmission in countries with large outbreaks through coordinated action	1 664 875	20 000	1 050 000	50 000
1.1	Secure access to a timely and affordable supply of vaccines for outbreak response	-	-	To be defined	To be defined
1.2	Supplementary immunization activities, including AEFI monitoring and reporting including enhanced surveillance, data analysis and partner coordination during emergency response.	1 664 875	20 000	950 000	50 000
1.3	Identify un- and under-immunized groups and document key system and behavioural gaps and drivers to support evidence-based decision making.	-	-	100 000	-
2	Providing safe care to patients	439 250	-	-	-
2.1	Clinical management	137 125	-	-	-
2.2	Accelerated implementation of IPC core components	50 000	-	-	-
2.3	Train-the-trainer vaccinology training to clinicians.	252 125	-	-	-
3	Increase commitment to immunization and strengthen acceptance and demand	1 372 750	-	1 700 000	100 000
3.1	Conduct high-level advocacy to increase political and financial commitment on measles immunization	50 000	-	50 000	-
3.2	Improve interaction between health workers and patients/caregivers to encourage vaccination of susceptible groups	386 375	-	800 000	100 000
3.3	Use behavioural insights research to understand barriers and drivers to vaccination and/or develop, implement and evaluate interventions for increased vaccination uptake accordingly	936 375	-	500 000	-
3.4	Promote vaccine acceptance through social media.	-	-	350 000	-
4	Increased preparedness and readiness	731 375	93 000	150 000	40 000
4.1	Strengthening technical capacity to detect individual cases and develop active surveillance protocols	209 094	25 000	-	-
4.2	Accelerated implementation of recommendations from Expanded Program of Immunization (EPI) reviews, and identification of impediments to implementation of the recommendations	159 094	35 000	-	-
4.3	Review and update existing outbreak response guidance and practice including contingency plans	229 094	15 000	80 000	40 000
4.4	Testing country readiness through simulation exercises.	134 094	18 000	70 000	-
5	Reviewing past measles outbreak response, implementing corrective measures and planning long-term improvement	444 250	50 000	180 000	-
5.1	Outbreak response assessments	224 250	-	80 000	-
5.2	After action reviews for countries with recent outbreaks	200 000	50 000	80 000	-
5.3	Integration of results into costed national action plans.	20 000	-	20 000	-
	SUB-TOTALS (US\$)	4 652 500	163 000	3 080 000	190 000







The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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