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## Contraindications

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### Yellow fever vaccine (WHO position paper)

[WER 2003, vol. 78, 40, pp 349-359](#)  
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The (yellow fever) vaccine is contraindicated in children aged under 6 months and is not recommended for those aged 6-8 months, except during epidemics when the risk of YF virus transmission may be very high. It is also contraindicated for persons with severe allergy to egg and for severely immunocompromised persons. On theoretical grounds, the 17D vaccine is not recommended during pregnancy. However, pregnant women may be vaccinated during epidemics when the risk of YFV transmission may be very high.

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## Diphtheria

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### WHO recommended standards for surveillance of selected vaccine-preventable diseases

[WHO/V&B/03.01](#)  
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(F)or diphtheria:

\_ All outbreaks should be investigated immediately and case-based data should be collected.

\_ In countries achieving low incidence (usually where coverage is >85-90%), immediate reporting of case-based data of probable or confirmed cases is recommended from the peripheral level to the intermediate and central levels.

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## General

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### Measles vaccines (WHO position paper)

[WER 2004, vol. 79, 14, pp 130-142](#)  
page 140

To protect individual high-risk patients during an outbreak, vaccination within 2 days of exposure may modify the clinical course of measles or even prevent clinical symptoms. In cases where vaccination is contraindicated, the administration of immunoglobulin within 3-5 days of exposure may have a similar beneficial effect.

### Measles vaccines (WHO position paper)

[WER 2004, vol. 79, 14, pp 130-142](#)  
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Asymptomatic HIV infection is an indication, not a contraindication, for measles vaccination. Ideally, the vaccine should be offered as early as possible in the course of HIV infection. In areas where measles is prevalent, or during outbreaks, individuals with early signs of HIV-induced immunosuppression may also be considered for vaccination.

### **Yellow fever vaccine (WHO position paper)**

[WER 2003, vol. 78, 40, pp 349-359](#)  
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During YF (yellow fever) epidemics, outbreak response vaccination campaigns should be carried out with minimum delay in order to limit the spread of the disease. The occurrence of an epidemic reflects incomplete implementation of prevention strategies, which therefore need to be strengthened following the outbreak. Appropriate measures to control *Ae. Aegypti* should accompany all efforts to improve immunization coverage.

Page 356: During YF outbreaks, mass immunization should be instituted at the earliest possible stage and according to locally defined priorities.

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### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 14

Recommended types of surveillance for measles:

1. Mortality reduction phase: When measles is endemic, routine monthly reporting of aggregated data on clinical measles cases is recommended by district, age group and immunization status. Only outbreaks (not each case) should be investigated. During outbreaks it is useful to attempt to document measles mortality. Laboratory confirmation may be attempted by sampling approximately 10 cases per outbreak. Under special circumstances, the isolation of wild strains from selected cases occurring in outbreaks could be performed to enable genetic characterization of circulating measles virus and determine patterns of importation and exportation for countries in the low-incidence or elimination phase.

2. Low-incidence or elimination phase: Case-based surveillance should be conducted and every case should be reported and investigated immediately (and also included in the weekly reporting system). Laboratory specimens should be collected from every sporadic suspect case. Suspected measles outbreaks should be confirmed by conducting serology on the first 5-10 cases only. Urine, nasopharyngeal or lymphocyte specimens (for virus detection and genetic characterization) should be collected from sporadic/outbreak cases (approximately 10 cases from each chain of transmission) to characterize viral circulation and importation patterns.

3. During all phases: Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

## **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
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Recommended types of surveillance for mumps:

- 1) When mumps is endemic, only routine monthly reporting of aggregated data of clinical mumps cases is recommended by district, age group and immunization status. Only outbreaks (not each case) should be investigated.
- 2) When a high level of control is achieved (i.e. sustained high vaccine coverage), case-based surveillance should be conducted and every case should be reported and investigated immediately (and also included in the weekly or monthly reporting system). Suspected mumps outbreaks should be confirmed by conducting laboratory investigation on 5-10 cases only. In specific situations, viral isolation can be attempted to differentiate meningitis cases that could be related to the wild virus, the vaccine strain or other factors.
- 3) Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

## **Conclusions and recommendations from the Strategic Advisory Group of Experts (SAGE) - 9-11 November 2005**

[WER 2006, vol. 81, 1, pp 2-11](#)  
page 6

SAGE recommended that . . . (a) all countries should develop pandemic preparedness plans that include strategies for the deployment of vaccines when these become available. SAGE stressed that countries must not depend solely on vaccines for pandemic control because lack of vaccine or at best shortage will be a reality in most countries.

## **Vaccine introduction guidelines. Adding a vaccine to a national immunization programme: decision and implementation**

[WHO/IVB/05.18](#)  
page 47

While many countries have readily replaced single-antigen measles vaccine with measlesmumpsrubella (MMR) or measlesrubella (MR) vaccines, to prevent a potential gradual increase in rubella susceptibility among women of childbearing age and a paradoxical increase in congenital rubella syndrome (CRS) incidence, efforts are needed to assure that women of childbearing age are also protected against rubella.

A strong laboratory-based surveillance mechanism is a must for identification of rubella outbreaks following the introduction of MMR or MR into the NIP.

A screening programme should be available for females entering childbearing age because, once the vaccine is introduced into the NIP, the susceptibility of adults getting rubella will be increased.

## **Yellow fever vaccine (WHO position paper)**

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In countries at risk for YF, this vaccine is recommended for individual and outbreak prevention as well as outbreak control. At risk for yellow fever is defined as areas where evidence for presence of the virus has been demonstrated and where ecological factors can support yellow fever virus transmission to man.

### **Conclusions and recommendations from the Strategic Advisory Group of Experts (SAGE) - 9-11 November 2005**

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SAGE recommended that WHO should provide support to developing countries for the development of national, seasonal and pandemic influenza vaccination policies. All countries should develop pandemic preparedness plans that include strategies for the deployment of vaccines when these become available. SAGE stressed that countries must not depend solely on vaccines for pandemic control because lack of vaccine or at best shortage will be a reality in most countries. With the goal of facilitating equitable and timely access, WHO should continue to play a role in advising on priority groups for immunization with pandemic vaccine ([http://www.who.int/csr/resources/publications/influenza/WHO\\_CDS\\_CSR\\_RMD\\_2004\\_8/en/index.html](http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_RMD_2004_8/en/index.html)).

WHO should provide advice for enhanced surveillance for early detection of new influenza strains and of the onset of a pandemic, if it occurs. WHO should pursue its efforts in strengthening the capability in developing countries of health ministries and national regulatory authorities to facilitate the movement of samples and to ensure prompt registration of pandemic vaccines. Global regulatory convergence should be considered, and WHO should facilitate progress in this direction.

WHO should support research and development for pandemic and seasonal vaccines, including alternative and more effective methods of vaccine delivery such as intradermal and intranasal vaccination, improved vaccines and novel production technologies. SAGE noted that there is currently no influenza vaccine production capacity in the African region. Where appropriate, WHO should facilitate developing countries in establishing local capacity for production of influenza vaccine (including pandemic vaccine) based on manufacturers of vaccines of assured quality and should provide support for relevant technology transfer.

WHO should collaborate with expert groups to model the impact of different vaccination strategies in pandemic control, including the possibility of strategic deployment of vaccines, under various epidemiological settings. The risks and benefits of diverting some current vaccine production facilities to the production of influenza vaccines should be investigated. This should be taken forward urgently by WHO as it may provide a means of expanding vaccine production capacity more effectively than reliance on increasing use of seasonal influenza vaccination. The possible negative impacts on supplies of other vaccines should be considered.

WHO should ensure that the expertise in rapid mobilization for mass immunization is included in influenza preparedness planning. In addition, similar considerations should be given to access and distribution of antiviral medication.

### **Measles vaccines (WHO position paper)**

[WER 2004, vol. 79, 14, pp 130-142](#)  
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The (measles) vaccine should be used to prevent outbreaks; large-scale vaccination to control ongoing outbreaks is of limited value.

### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
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(A)cute viral hepatitis:

\_ All outbreaks should be investigated immediately and confirmed serologically.

## **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
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(F)or diphtheria:

- \_ All outbreaks should be investigated immediately and case-based data should be collected.
- \_ In countries achieving low incidence (usually where coverage is >85-90%), immediate reporting of case-based data of probable or confirmed cases is recommended from the peripheral level to the intermediate and central levels.

## **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
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Every pertussis outbreak should be reported immediately to the appropriate WHO regional office, investigated to understand why it occurred, and confirmed by laboratory methods. Case-based information should be collected on: date of onset, age, immunization status, geographical location and final outcome.

## **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 31

For polio:

- \_ All outbreaks should be investigated immediately.
- \_ All AFP cases under 15 years of age or with paralytic illness at an age where polio is suspected should be reported immediately and investigated within 48 hours, and two stool specimens should be collected 24-48 hours apart and within 14 days of the onset of paralysis.

## **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
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For rubella and congenital rubella syndrome (CRS):

1. CRS prevention stage - minimum requirements:

- \_ If a rubella outbreak is detected a limited number of suspected rubella cases should be investigated with rubella-specific IgM tests periodically during the outbreak (5 to 10 cases investigated per outbreak). Active surveillance (defined as regular visits to selected reporting sites to look for unreported cases) should be initiated to improve detection of suspected CRS in infants aged under 1 year and continued for nine months after the last reported case of rubella.

2. CRS/rubella elimination stage - minimum requirements:

- \_ All febrile rash cases, regardless of age, should be investigated. The investigation should include laboratory analysis of each case for measles and, if the result is negative, for rubella (see section of this document on measles). Priority should be given to the investigation of febrile rash illnesses in pregnant women.

## **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
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For yellow fever:

- \_ All suspected cases and outbreaks should be investigated immediately and blood samples should be collected for laboratory confirmation.
- \_ Case-based surveillance should be implemented in countries identified by WHO as being at risk for yellow fever. Specimens should be collected to confirm epidemics as rapidly as possible. Priority should then be given to collecting specimens from new or neighbouring areas (other than the areas where epidemics are already confirmed).

## **Hepatitis A vaccines (WHO position paper)**

The use of hepatitis A vaccine to control community-wide outbreaks has been most successful in small, self-contained communities, when vaccination is started early in the course of the outbreak, and when high coverage of multiple-age cohorts is achieved. Vaccination efforts should be supplemented by health education and improved sanitation.

[WER 2000, vol. 75, 5, pp 38-44](#)  
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The (yellow fever) vaccine is contraindicated in children aged under 6 months and is not recommended for those aged 6-8 months, except during epidemics when the risk of YF virus transmission may be very high.

[WER 2003, vol. 78, 40, pp 349-359](#)  
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## **Conclusions and recommendations from the meeting of the immunization Strategic Advisory Group of Experts (SAGE) - November 2006**

The ACPE (Advisory Committee on Polio Eradication) recommended that the risk of importation from polio-infected areas should be reduced further by ensuring all travellers from such areas are immunized, regardless of their age or immunization status; it proposed that a standing recommendation be established to this effect under the International Health Regulations (IHR) (2005).

[WER 2006, vol. 82, 1, pp 1-16](#)  
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## **Conclusions and recommendations from the meeting of the immunization Strategic Advisory Group of Experts (SAGE) - November 2006**

SAGE requested an urgent expert consultation to review all data on the immunogenicity of fractional doses (of meningococcal vaccine.)

SAGE recognizes the imminent threat of epidemic meningitis in the African Region and the serious shortage of vaccine should this scenario unfold. SAGE concluded that in the event of an epidemic and in the context of vaccine shortage, the national authorities of affected countries should undertake a risk-benefit analysis that recognizes the public health benefits of using fractional doses of licensed polyvalent polysaccharide vaccines during mass vaccination campaigns in order to provide protection to a larger proportion of the population. Limiting vaccination to narrower age groups at highest risk (that is, up to the age of 15 years instead of up to age 29) should also be considered.

[WER 2006, vol. 82, 1, pp 1-16](#)  
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## HIV/AIDS and immunosuppression

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### Measles vaccines (WHO position paper)

Asymptomatic HIV infection is an indication, not a contraindication, for measles vaccination. Ideally, the vaccine should be offered as early as possible in the course of HIV infection. In areas where measles is prevalent, or during outbreaks, individuals with early signs of HIV-induced immunosuppression may also be considered for vaccination.

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## Hepatitis A

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## Influenza

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## MMR

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### **Vaccine introduction guidelines. Adding a vaccine to a national immunization programme: decision and implementation**

[WHO/IVB/05.18](#)  
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A strong laboratory-based surveillance mechanism is a must for identification of rubella outbreaks following the introduction of MMR or MR into the NIP.

A screening programme should be available for females entering childbearing age because, once the vaccine is introduced into the NIP, the susceptibility of adults getting rubella will be increased.

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## Measles

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### **Measles vaccines (WHO position paper)**

[WER 2004, vol. 79, 14, pp 130-142](#)  
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To protect individual high-risk patients during an outbreak, vaccination within 2 days of exposure may modify the clinical course of measles or even prevent clinical symptoms. In cases where vaccination is contraindicated, the administration of immunoglobulin within 3-5 days of exposure may have a similar beneficial effect.

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Asymptomatic HIV infection is an indication, not a contraindication, for measles vaccination. Ideally, the vaccine should be offered as early as possible in the course of HIV infection. In areas where measles is prevalent, or during outbreaks, individuals with early signs of HIV-induced immunosuppression may also be considered for vaccination.

### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)

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Recommended types of surveillance for measles:

1. Mortality reduction phase: When measles is endemic, routine monthly reporting of aggregated data on clinical measles cases is recommended by district, age group and immunization status. Only outbreaks (not each case) should be investigated. During outbreaks it is useful to attempt to document measles mortality. Laboratory confirmation may be attempted by sampling approximately 10 cases per outbreak. Under special circumstances, the isolation of wild strains from selected cases occurring in outbreaks could be performed to enable genetic characterization of circulating measles virus and determine patterns of importation and exportation for countries in the low-incidence or elimination phase.

2. Low-incidence or elimination phase: Case-based surveillance should be conducted and every case should be reported and investigated immediately (and also included in the weekly reporting system). Laboratory specimens should be collected from every sporadic suspect case. Suspected measles outbreaks should be confirmed by conducting serology on the first 5-10 cases only. Urine, nasopharyngeal or lymphocyte specimens (for virus detection and genetic characterization) should be collected from sporadic/outbreak cases (approximately 10 cases from each chain of transmission) to characterize viral circulation and importation patterns.

3. During all phases: Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

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The (measles) vaccine should be used to prevent outbreaks; large-scale vaccination to control ongoing outbreaks is of limited value.

## **Meningococcal**

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## Mumps

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### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 19

Recommended types of surveillance for mumps:

- 1) When mumps is endemic, only routine monthly reporting of aggregated data of clinical mumps cases is recommended by district, age group and immunization status. Only outbreaks (not each case) should be investigated.
- 2) When a high level of control is achieved (i.e. sustained high vaccine coverage), case-based surveillance should be conducted and every case should be reported and investigated immediately (and also included in the weekly or monthly reporting system). Suspected mumps outbreaks should be confirmed by conducting laboratory investigation on 5-10 cases only. In specific situations, viral isolation can be attempted to differentiate meningitis cases that could be related to the wild virus, the vaccine strain or other factors.
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## New Vaccines

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A screening programme should be available for females entering childbearing age because, once the vaccine is introduced into the NIP, the susceptibility of adults getting rubella will be increased.

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## Pertussis

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Every pertussis outbreak should be reported immediately to the appropriate WHO regional office, investigated to understand why it occurred, and confirmed by laboratory methods. Case-based information should be collected on: date of onset, age, immunization status, geographical location and final outcome.

## Policy

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### **Measles vaccines (WHO position paper)**

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For rubella and congenital rubella syndrome (CRS):

1. CRS prevention stage - minimum requirements:

- \_ If a rubella outbreak is detected a limited number of suspected rubella cases should be investigated with rubella-specific IgM tests periodically during the outbreak (5 to 10 cases investigated per outbreak). Active surveillance (defined as regular visits to selected reporting sites to look for unreported cases) should be initiated to improve detection of suspected CRS in infants aged under 1 year and continued for nine months after the last reported case of rubella.

2. CRS/rubella elimination stage - minimum requirements:

- \_ All febrile rash cases, regardless of age, should be investigated. The investigation should include laboratory analysis of each case for measles and, if the result is negative, for rubella (see section of this document on measles). Priority should be given to the investigation of febrile rash illnesses in pregnant women.

### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 41

For yellow fever:

- \_ All suspected cases and outbreaks should be investigated immediately and blood samples should be collected for laboratory confirmation.
- \_ Case-based surveillance should be implemented in countries identified by WHO as being at risk for yellow fever. Specimens should be collected to confirm epidemics as rapidly as possible. Priority should then be given to collecting specimens from new or neighbouring areas (other than the areas where epidemics are already confirmed).

## Hepatitis A vaccines (WHO position paper)

The use of hepatitis A vaccine to control community-wide outbreaks has been most successful in small, self-contained communities, when vaccination is started early in the course of the outbreak, and when high coverage of multiple-age cohorts is achieved. Vaccination efforts should be supplemented by health education and improved sanitation.

[WER 2000, vol. 75, 5, pp 38-44](#)  
page 43

## Yellow fever vaccine (WHO position paper)

The (yellow fever) vaccine is contraindicated in children aged under 6 months and is not recommended for those aged 6-8 months, except during epidemics when the risk of YF virus transmission may be very high.

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## Polio

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### WHO recommended standards for surveillance of selected vaccine-preventable diseases

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page 31

For polio:

- \_ All outbreaks should be investigated immediately.
- \_ All AFP cases under 15 years of age or with paralytic illness at an age where polio is suspected should be reported immediately and investigated within 48 hours, and two stool specimens should be collected 24-48 hours apart and within 14 days of the onset of paralysis.

### Conclusions and recommendations from the meeting of the immunization Strategic Advisory Group of Experts (SAGE) - November 2006

[WER 2006, vol. 82, 1, pp 1-16](#)  
page 10

The ACPE (Advisory Committee on Polio Eradication) recommended that the risk of importation from polio-infected areas should be reduced further by ensuring all travellers from such areas are immunized, regardless of their age or immunization status; it proposed that a standing recommendation be established to this effect under the International Health Regulations (IHR) (2005).

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## Pregnant Women

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### Yellow fever vaccine (WHO position paper)

The (yellow fever) vaccine is contraindicated in children aged under 6 months and is not recommended for those aged 6-8 months, except during epidemics when the risk of YF virus transmission may be very high. It is also contraindicated for persons with severe allergy to egg and for severely immunocompromised persons. On theoretical grounds, the 17D vaccine is not recommended during pregnancy. However, pregnant women may be vaccinated during epidemics when the risk of YFV transmission may be very high.

[WER 2003, vol. 78, 40, pp 349-359](#)  
page 356

## Rubella

### **Vaccine introduction guidelines. Adding a vaccine to a national immunization programme: decision and implementation**

[WHO/IVB/05.18](#)  
page 47

While many countries have readily replaced single-antigen measles vaccine with measlesmumpsrubella (MMR) or measlesrubella (MR) vaccines, to prevent a potential gradual increase in rubella susceptibility among women of childbearing age and a paradoxical increase in congenital rubella syndrome (CRS) incidence, efforts are needed to assure that women of childbearing age are also protected against rubella.

A strong laboratory-based surveillance mechanism is a must for identification of rubella outbreaks following the introduction of MMR or MR into the NIP.

A screening programme should be available for females entering childbearing age because, once the vaccine is introduced into the NIP, the susceptibility of adults getting rubella will be increased.

### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 36

For rubella and congenital rubella syndrome (CRS):

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## SAGE - recommend to WHO

### Conclusions and recommendations from the Strategic Advisory Group of Experts (SAGE) - 9-11 November 2005

[WER 2006, vol. 81, 1, pp 2-11](#)  
page 6

SAGE recommended that WHO should provide support to developing countries for the development of national, seasonal and pandemic influenza vaccination policies. All countries should develop pandemic preparedness plans that include strategies for the deployment of vaccines when these become available. SAGE stressed that countries must not depend solely on vaccines for pandemic control because lack of vaccine or at best shortage will be a reality in most countries. With the goal of facilitating equitable and timely access, WHO should continue to play a role in advising on priority groups for immunization with pandemic vaccine

([http://www.who.int/csr/resources/publications/influenza/WHO\\_CDS\\_CSR\\_RMD\\_2004\\_8/en/index.html](http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_RMD_2004_8/en/index.html)).

WHO should provide advice for enhanced surveillance for early detection of new influenza strains and of the onset of a pandemic, if it occurs. WHO should pursue its efforts in strengthening the capability in developing countries of health ministries and national regulatory authorities to facilitate the movement of samples and to ensure prompt registration of pandemic vaccines. Global regulatory convergence should be considered, and WHO should facilitate progress in this direction.

WHO should support research and development for pandemic and seasonal vaccines, including alternative and more effective methods of vaccine delivery such as intradermal and intranasal vaccination, improved vaccines and novel production technologies. SAGE noted that there is currently no influenza vaccine production capacity in the African region. Where appropriate, WHO should facilitate developing countries in establishing local capacity for production of influenza vaccine (including pandemic vaccine) based on manufacturers of vaccines of assured quality and should provide support for relevant technology transfer.

WHO should collaborate with expert groups to model the impact of different vaccination strategies in pandemic control, including the possibility of strategic deployment of vaccines, under various epidemiological settings. The risks and benefits of diverting some current vaccine production facilities to the production of influenza vaccines should be investigated. This should be taken forward urgently by WHO as it may provide a means of expanding vaccine production capacity more effectively than reliance on increasing use of seasonal influenza vaccination. The possible negative impacts on supplies of other vaccines should be considered.

WHO should ensure that the expertise in rapid mobilization for mass immunization is included in influenza preparedness planning. In addition, similar considerations should be given to access and distribution of antiviral medication.

### Conclusions and recommendations from the meeting of the Immunization Strategic Advisory Group of Experts (SAGE) - November 2006

[WER 2006, vol. 82, 1, pp 1-16](#)  
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The ACPE (Advisory Committee on Polio Eradication) recommended that the risk of importation from polio-infected areas should be reduced further by ensuring all travellers from such areas are immunized, regardless of their age or immunization status; it proposed that a standing recommendation be established to this effect under the International Health Regulations (IHR) (2005).

## **Conclusions and recommendations from the meeting of the immunization Strategic Advisory Group of Experts (SAGE) - November 2006**

[WER 2006, vol. 82, 1, pp 1-16](#)  
page 13

SAGE requested an urgent expert consultation to review all data on the immunogenicity of fractional doses (of meningococcal vaccine.)

SAGE recognizes the imminent threat of epidemic meningitis in the African Region and the serious shortage of vaccine should this scenario unfold. SAGE concluded that in the event of an epidemic and in the context of vaccine shortage, the national authorities of affected countries should undertake a risk-benefit analysis that recognizes the public health benefits of using fractional doses of licensed polyvalent polysaccharide vaccines during mass vaccination campaigns in order to provide protection to a larger proportion of the population. Limiting vaccination to narrower age groups at highest risk (that is, up to the age of 15 years instead of up to age 29) should also be considered.

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## **Schedule**

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### **Measles vaccines (WHO position paper)**

[WER 2004, vol. 79, 14, pp 130-142](#)  
page 131

Asymptomatic HIV infection is an indication, not a contraindication, for measles vaccination. Ideally, the vaccine should be offered as early as possible in the course of HIV infection. In areas where measles is prevalent, or during outbreaks, individuals with early signs of HIV-induced immunosuppression may also be considered for vaccination.

### **Conclusions and recommendations from the meeting of the immunization Strategic Advisory Group of Experts (SAGE) - November 2006**

[WER 2006, vol. 82, 1, pp 1-16](#)  
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## **Travellers**

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### **Conclusions and recommendations from the meeting of the immunization Strategic Advisory Group of Experts (SAGE) - November 2006**

[WER 2006, vol. 82, 1, pp 1-16](#)  
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## VPD Surveillance

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### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 14

Recommended types of surveillance for measles:

1. Mortality reduction phase: When measles is endemic, routine monthly reporting of aggregated data on clinical measles cases is recommended by district, age group and immunization status. Only outbreaks (not each case) should be investigated. During outbreaks it is useful to attempt to document measles mortality. Laboratory confirmation may be attempted by sampling approximately 10 cases per outbreak. Under special circumstances, the isolation of wild strains from selected cases occurring in outbreaks could be performed to enable genetic characterization of circulating measles virus and determine patterns of importation and exportation for countries in the low-incidence or elimination phase.
2. Low-incidence or elimination phase: Case-based surveillance should be conducted and every case should be reported and investigated immediately (and also included in the weekly reporting system). Laboratory specimens should be collected from every sporadic suspect case. Suspected measles outbreaks should be confirmed by conducting serology on the first 5-10 cases only. Urine, nasopharyngeal or lymphocyte specimens (for virus detection and genetic characterization) should be collected from sporadic/outbreak cases (approximately 10 cases from each chain of transmission) to characterize viral circulation and importation patterns.
3. During all phases: Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

### **WHO recommended standards for surveillance of selected vaccine-preventable diseases**

[WHO/V&B/03.01](#)  
page 19

Recommended types of surveillance for mumps:

- 1) When mumps is endemic, only routine monthly reporting of aggregated data of clinical mumps cases is recommended by district, age group and immunization status. Only outbreaks (not each case) should be investigated.
- 2) When a high level of control is achieved (i.e. sustained high vaccine coverage), case-based surveillance should be conducted and every case should be reported and investigated immediately (and also included in the weekly or monthly reporting system). Suspected mumps outbreaks should be confirmed by conducting laboratory investigation on 5-10 cases only. In specific situations, viral isolation can be attempted to differentiate meningitis cases that could be related to the wild virus, the vaccine strain or other factors.
- 3) Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

### **Vaccine introduction guidelines. Adding a vaccine to a national immunization programme: decision and implementation**

[WHO/IVB/05.18](#)  
page 47

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[WHO/V&B/03.01](#)  
page 41

For yellow fever:

- \_ All suspected cases and outbreaks should be investigated immediately and blood samples should be collected for laboratory confirmation.
- \_ Case-based surveillance should be implemented in countries identified by WHO as being at risk for yellow fever. Specimens should be collected to confirm epidemics as rapidly as possible. Priority should then be given to collecting specimens from new or neighbouring areas (other than the areas where epidemics are already confirmed).

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## **Yellow Fever**

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### **Yellow fever vaccine (WHO position paper)**

[WER 2003, vol. 78, 40, pp 349-359](#)  
page 350

During YF (yellow fever) epidemics, outbreak response vaccination campaigns should be carried out with minimum delay in order to limit the spread of the disease. The occurrence of an epidemic reflects incomplete implementation of prevention strategies, which therefore need to be strengthened following the outbreak. Appropriate measures to control *Ae. Aegypti* should accompany all efforts to improve immunization coverage.

Page 356: During YF outbreaks, mass immunization should be instituted at the earliest possible stage and according to locally defined priorities.

### **Yellow fever vaccine (WHO position paper)**

The (yellow fever) vaccine is contraindicated in children aged under 6 months and is not recommended for those aged 6-8 months, except during epidemics when the risk of YF virus transmission may be very high. It is also contraindicated for persons with severe allergy to egg and for severely immunocompromised persons. On theoretical grounds, the 17D vaccine is not recommended during pregnancy. However, pregnant women may be vaccinated during epidemics when the risk of YFV transmission may be very high.

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page 356

### **Yellow fever vaccine (WHO position paper)**

In countries at risk for YF, this vaccine is recommended for individual and outbreak prevention as well as outbreak control. At risk for yellow fever is defined as areas where evidence for presence of the virus has been demonstrated and where ecological factors can support yellow fever virus transmission to man.

[WER 2003, vol. 78, 40, pp 349-359](#)  
page 350

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