CONTRAINDICATIONS FOR ADMINISTERING YELLOW FEVER VACCINE

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Please check the TravelHealthPro and Yellow Fever Zone websites for updates.

For specialist travel health advice, ring the NaTHNaC advice line for health professionals: 020 7383 7474.

A detailed risk assessment of the traveller is required to identify health conditions which contraindicate yellow fever vaccination. When the vaccine is contraindicated, travel is unavoidable and a receiving country has a certificate requirement as a condition of entry, a Medical Letter of Exemption, instead of vaccination can be offered.

CONTRAINDICATION	ADMINISTER VACCINE?	ADDITIONAL INFORMATION
Aged under six months	No	There is an increased risk of vaccine-associated encephalitis.
Confirmed anaphylactic reaction to a previous dose of yellow fever vaccine	No	The vaccine is propagated in chick embryos. Anaphylaxis, because of sensitivity to either egg or other vaccine components, is estimated to occur at an incidence of 1.3 cases/100,000 doses distributed. A history of anaphylaxis to any component in the vaccine is a contraindication.
Confirmed anaphylactic reaction to any of the components of the vaccine, including egg	No	
History of a thymus disorder (includes myasthenia gravis and thymoma) or thymectomy e.g. during cardiac surgery	No	There is an increased risk of yellow fever vaccine–associated serious adverse events in people who have undergone removal of their thymus for any reason.
History of a first-degree family member who has had a serious adverse event following yellow fever vaccination		In case of an unidentified genetic reason, vaccine is not given to those who have a first-degree family member (i.e. blood relative – mother, father, full brother or sister or child) with a history of yellow fever vaccine associated viscerotropic or neurologic disease following vaccination.

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CONTRAINDICATION	ADMINISTER VACCINE?	ADDITIONAL INFORMATION

Primary or acquired immunodeficiency refer to Green Book chapter 6	No	Includes
		• immunosuppression due to acute and chronic leukaemias and lymphoma (including Hodgkin's lymphoma)
		• severe immunosuppression due to HIV/AIDS (refer to British HIV Association and Children's HIV Association guidance)
		• cellular immune deficiencies (e.g. Severe combined immunodeficiency, Wiskott-Aldrich syndrome, 22q11 deficiency/DiGeorge syndrome)
		• being under follow up for a chronic lymphoproliferative disorder including haematological malignancies such as indolent lymphoma, chronic lymphoid leukaemia, myeloma and other plasma cell dyscrasias
		• having received an allogenic (cells from a donor) stem cell transplant in the past 24 months and no on-going immunosuppression or graft versus host disease (GVHD)
		• having received an autologous (using their own stem cells) haematopoietic stem cell transplant in the past 24 months
		• those who are receiving, or have received in the past 6 months, immunosuppressive chemotherapy or radiotherapy for malignant disease or non-malignant disorders
		• those who are receiving, or have received in the past 6 months, immunosuppressive therapy for a solid organ transplant (with exceptions, depending upon the type of transplant and the immune status of the patient)
		• those who are receiving or have received in the past 12 months immunosuppressive biological therapy (e.g. anti-Tumour Necrosis Factor therapy such as alemtuzumab, ofatumumab and rituximab) unless otherwise directed by a specialist
		• those who are receiving or have received in the past 3 months immunosuppressive therapy including:
		  ○ adults and children on high-dose corticosteroids (>40mg prednisolone per day or 2mg/ kg/day in children under 20kg) for more than 1 week
		  ○ adults and children on lower dose corticosteroids (>20mg prednisolone per day or 1mg/kg/day in children under 20kg) for more than 14 days
		  ○ adults on non-biological oral immune modulating drugs e.g. methotrexate >25mg per week, azathioprine >3.0mg/kg/day or 6-mercaptopurine >1.5mg/kg/day
		  ○ for children on non-biological oral immune modulating drugs (except those on low doses, see below), specialist advice should be sought prior to vaccination

PRECAUTIONS FOR ADMINISTERING YELLOW FEVER VACCINE

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A detailed risk assessment is required to identify conditions that may reduce the effectiveness of the vaccine or may increase the risk of serious adverse events following vaccination. Yellow fever vaccination can be considered where precautions to vaccination are identified but exposure to yellow fever is unavoidable and the benefit of vaccination is considered to outweigh the risk of vaccine associated adverse reaction.

When precautions are identified and travel to a country or region with a certificate requirement for yellow fever vaccination is unavoidable, a Medical Letter of Exemption from yellow fever vaccination can be considered, when the risk of vaccine associated serious adverse events outweighs risk of disease at the destination. For specialist travel health advice, ring the NaTHNaC advice line for health professionals: 020 7383 7474.

PRECAUTION	ADMINISTER VACCINE?	ADDITIONAL INFORMATION
Those over 60 years of age	Vaccination can be given to those aged 60 years and older at significant and unavoidable risk of infection (such as travel to an area where there is current or periodic risk of yellow fever transmission) following a detailed risk assessment	The risk for neurologic and viscerotropic adverse events increases with age. The risk for these serious adverse events increases to approximately 2.2 cases per 100,000 doses distributed for YEL-AND and YEL-AVD, the risk for those who are 60 years and older is 1.2 cases per 100,000 doses distributed and higher for those who are 70 years and older. Countries and areas designated by World Health Organization (WHO) as where vaccination is 'generally not' recommended, or not recommended, should be considered as not representing a 'significant and unavoidable risk'.
Those who are pregnant	Generally not, but can be considered following a detailed risk assessment, if benefits may outweigh the risk of the vaccine. Consider discussing with specialist before administering vaccine.	Pregnant women should be advised not to travel to yellow fever risk areas. Yellow fever vaccine should not generally be given to pregnant women because of the theoretical risk of foetal infection from the live virus vaccine. However, the WHO consider that in areas where yellow fever is endemic, or during outbreaks, the benefits of vaccination are likely to far outweigh risk from the vaccine. Women who are vaccinated during pregnancy and continue to be at risk should be revaccinated once the pregnancy is completed.
Those who are breastfeeding		There is some evidence of transmission of live vaccine virus to infants under two months of age from breast milk. For women who are breastfeeding children under the age of nine months specialist advice should be sought.
Infants (six to eight months)		For infants aged six to eight months, vaccination is generally only recommended when risk of yellow fever transmission is high, such as during epidemics/outbreaks. If travel is unavoidable; specialist advice should be sought.
Those living with HIV		There is limited evidence that yellow fever vaccine may be given safely to HIV-infected persons with a CD4 count that is greater than 200 and a viral load that is suppressed. Specialist advice should be sought in these cases. The antibody response following yellow fever vaccine in those who are HIV positive may be diminished.
Those who may be immunocompromised due to low dose steroid or non-biological oral immune		In the case of yellow fever vaccine data is limited, and a cautious approach recommended. Generally speaking long term low dose corticosteroid therapy (defined as up to 20mg prednisolone per day for more than 14 days in an adult or 1mg/kg/day in children under 20kg) either alone or in combination with other immunosuppressive drugs e.g. low dose non-biological oral immune modulating drugs (e.g. methotrexate 25mg per week in adults or up to 15mg/m2 in children, azathioprine 3.0mg/ kg/day or 6-mercaptopurine 1.5mg/kg/day), are not considered sufficiently immunosuppressive and these patients can generally receive live vaccines. **However, data are limited, and specialist advice may be sought in these circumstances.**