GENEVA | 17 May 2013 – The **yellow fever** 'booster' **vaccination** given ten years after the initial vaccination is not necessary, according to the World Health Organization. An article published in WHO's Weekly Epidemiological Record ER reveals that the Organization's Strategic Advisory Group of Experts on immunization (SAGE) has reviewed the latest evidence and concluded that a single dose of vaccination is sufficient to confer life-long immunity against yellow fever disease.

Since yellow fever vaccination began in the 1930s, only 12 known cases of yellow fever post-vaccination have been identified, after 600 million doses have been dispensed. Evidence showed that among this small number of "vaccine failures", all cases developed the disease within five years of vaccination. This demonstrates that immunity does not decrease with time.

"The conventional guidance has been that the yellow fever vaccination has had to be boosted after ten years," says Dr Helen Rees, chair of SAGE. "Looking at really very good evidence, it was quite clear to SAGE that in fact a single dose of yellow fever vaccine is effective. This is extremely important for countries where yellow fever is endemic, because it will allow them to reconsider their vaccine scheduling. It is also important for travelers."

Yellow fever is an acute viral haemorrhagic disease transmitted by infected mosquitoes that is endemic to 44 countries in tropical areas of Africa and the Americas. Infection with the yellow fever virus causes varying degrees of disease, from mild symptoms to severe illness with bleeding and jaundice and fatal outcomes.

There are an estimated 200 000 cases of yellow fever worldwide each year. About 15% of people infected with yellow fever progress to a severe form of the illness, and up to half of those will die, as there is no cure for yellow fever. The treatment is aimed simply at reducing patients' discomfort.

The vast majority of reported cases and deaths occur in sub-Saharan Africa. In endemic regions of Africa, yellow fever natural immunity is acquired with age, putting children at highest risk of infection. Over the past two decades, the number of yellow fever cases worldwide has increased due to declining population immunity to infection, deforestation, urbanization, population movements and climate change.

Vaccination is considered to be the most important and effective measure against yellow fever. Protective immunity develops within 30 days for 99% of people receiving the vaccination. For routine immunization programmes in Africa, home to 31 of the 44 yellow-fever endemic countries, the vaccine costs about $0.82 per dose.

SAGE is the principal advisory group to WHO for vaccines and immunization. It is charged with advising WHO on overall global policies and strategies, ranging from vaccines and technology, research and development, to delivery of immunization and its linkages with other health interventions. SAGE is concerned with all vaccine-preventable diseases including childhood

vaccines and immunization.