## MEASLES MUMPS AND RUBELLA (MMR) VACCINE

**MEASLES** is a very contagious disease caused by the rubeola virus. Usual symptoms are a high fever, a red rash and malaise. 10% of cases develop bronchopneumonia or otitis media. 1/1000 cases have permanent brain damage. Death occurs in 1/3000 cases. Rarely measles infection causes subacute sclerosing panencephalitis, a fatal disease. Adults born prior to1970 may be presumed immune. Those born after 1970 usually do not have the natural immunity that was conferred by infection.

**MUMPS** virus may produce a subclinical infection. In 40% of cases the salivary glands swell. 20-30% of affected post pubertal males get orchitis. Oophoritis occurs in 5% of adult women. Sterility is rare as these conditions are usually unilateral. Transient or permanent deafness occurs in 0.5 - 5/100,000 cases. Meningoencephalitis is possible. Women affected in the first trimester of pregnancy may spontaneously abort.

**RUBELLA** virus produces a transient red rash, swollen suboccipital glands, joint pains and a low-grade fever. Maternal infection while pregnant may produce foetal malformation including congenital heart disease, miscarriage, cataracts, deafness and mental retardation in up to 85% of first trimester pregnancies, but rarely after 20 weeks of pregnancy.

MMR VACCINES contain live attenuated strains of the three viruses. MMR can be administered at the same time as any other vaccine. If this is not possible and another vaccine containing a live attenuated virus is to be administered, the second immunization should be delayed four weeks from the date of the MMR administration.

**IMMUNIZATION RESPONSE** to MMR vaccine is rubella antibody production in >97%, mumps antibody in 80-95%, and measles antibody in 85-95% of susceptible individuals after the first dose and, for measles, 100% antibody production after the second dose.

**IMMUNIZATION IS RECOMMENDED** for adults born after 1970 who have not had measles, mumps and rubella and who have not had two doses of the vaccine. Unvaccinated or inadequately vaccinated health care workers are especially encouraged to have this immunization because of their higher risk of exposure to these three diseases.

**CONTRAINDICATIONS** to vaccination include anaphylactic reactions to the vaccine, to neomycin, to gelatin, pregnancy, immune impairment (HIV) or a severe illness.

**POSSIBLE ADVERSE REACTIONS** are a rash, fever, parotitis, or malaise in 5-10% of cases 7-12 days post injection. Lyphadenopathy occurs rarely. 1-3 weeks after immunization, an acute, transient joint pain (25%) or arthritis (10%) may develop, usually in women. Limb numbness or pains lasting up to three months post vaccination have occurred rarely.

## **CONSENT**

CONSENT	
I have read the information above and understand the risks and benefits involved in receiving MMR	
vaccine. I have had the opportun	ity to ask questions.
I agree to receive one dose of Mo	easles, Mumps and Rubella vaccine.
Name	Signature
Date	Witness