



**Zaporozhye State
Medical University**

Recommended vaccinations

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Plan of lecture

1. Law in the field of immunization.
2. The list of contraindications for vaccines
3. The concept of recommended vaccination
4. Vaccination against chickenpox
5. Vaccination against hepatitis A
6. Hepatitis B vaccination
7. Vaccination against flu
8. Vaccination against pertussis
9. Vaccination against measles, rubella, mumps
10. Vaccination against pneumococcal infections
11. Vaccination against meningococcal disease
12. Vaccination against human papillomavirus
13. Vaccination against rotavirus

Immunoprophylaxis of Infectious Diseases–

**system of measures to prevent
the spread of infectious diseases
and elimination through
preventive vaccinations.**

Vaccination carried:

- Only registered in Ukraine vaccines;**
- Accordance with the instructions for use of vaccines;**
- After receipt informed consent**

(Order the Ministry Health of Ukraine from 11.08.2014, № 551)

**The list of contraindications to vaccines
(Order the Ministry Health of Ukraine from 11.08.2014, № 551)**

All types of vaccines:

- ❑ **Severe complications after previous dose, such as anaphylactic reactions or toxic erythema;**
- ❑ **Allergic reaction to any component of the vaccine;**
- ❑ **Organic progressive disease of the nervous system, hydrocephalus and hydrocephalic syndrome, epilepsy, epileptic syndrome with convulsions more than 2 times a month;**
- ❑ **Congenital combined immunodeficiency;**
- ❑ **Immunosuppressive therapy.**

**The list of contraindications to vaccines
(Order the Ministry Health of Ukraine from 11.08.2014, № 551)**

Live vaccines:

- Transient hypogammaglobulinemia;**
- cancer;**
- pregnancy;**
- HIV infection.**

Recommended vaccinations -
recommended for specific
groups of patients, but
the cost of vaccine is paid
by patient.

CHICKEN POX

Indications for vaccination:

- Adults who do not have chickenpox;**
- healthy children under 12 months of age and who do not have chicken pox;**
- children to enroll in kindergartens and schools that previously do not have chicken pox;**
- healthcare and education, which have a high risk of infection and do not have chickenpox.**

CHICKEN POX live attenuated vaccine

-VARILRIX™ (Belgium);
-OKAVAX (Japan)



CHICKEN POX

CONTRAINDICATIONS

- Universal for all vaccines;**
- allergic reaction to any component of the vaccine, including neomycin;**
- Pregnancy;**
- lactation.**

CHICKEN POX

Planned prophylaxis:

- Children before 12 years: 1 dose of vaccine (0.5 ml) once**
- Children after 12 years: 1 dose of vaccine (0.5 ml) twice with a minimum interval of 6 weeks.**

Emergency prevention

Vaccinate once one vaccine dose (0.5 ml) for 96 hours after the first contact (preferably within 72 hours).

The vaccine injected subcutaneously

Viral hepatitis A

Indications for vaccination:

- **staff catering establishments;**
- **military personnel, firemen;**
- **servicers water treatment plants,;**
- **people who use drugs intravenously;**
- **HIV-positive people;**
- **persons, who living in endemic areas for hepatitis A;**
- **persons, who traveling to areas of high endemicity;**
- **person, to communicate with the patient of hepatitis A.**

Viral hepatitis A

- 1) **AVAXIM 160U inactivated adsorbed liquid vaccine**
- 2) **AVAXIM 80U inactivated adsorbed liquid vaccine for Junior (France)**
- 3) **TWINRIX™ (vaccine for the prevention of hepatitis A (inactivated) and B (adsorbed) (Belgium))**
- 4) **Havrix™-1440 / Havrix™-720 Junior monodose (Belgium)**

Viral hepatitis A

CONTRAINDICATIONS

- Universal for all vaccines;
- Pregnancy and lactation -NOT are contraindications.

The vaccination (2 doses): 1 dose of vaccine twice with interval of 6 (12) months (subcutaneous, intramuscular)



Viral hepatitis B

Indications for vaccination:

- ☐ Medical workers;**
- ☐ military personnel, firemen;**
- ☐ staff and patients of closed institutions (psychiatric clinical, etc.);**
- ☐ staff and persons in prisons;**
- ☐ personnel services, who have professional contact with human body fluids (hairdressers, beauty salons personnel, masseurs, etc.);**

Viral hepatitis B

Indications for vaccination:

- people who use drugs intravenously,
- HIV-infected,
- persons who frequently change sexual partners;
- women who provide sexual services;
- men who have sex with men;
- patients with chronic diseases and cancer,
- chronic liver failure;
- persons who traveling to endemic areas of hepatitis B

Vaccines, registered in Ukraine, for the prevention of hepatitis B containing recombinant antigen HBs

- 1) Heberbiovac HB® (Cuba);**
- 2) Hepavax-Gene® (Korea);**
- 3) ENGERIX™ B (Belgium);**
- 4) EUVAX B (Korea);**
- 5) PROFI gen B™ (Ukraine)**

Viral hepatitis B

CONTRAINDICATIONS

- universal for all vaccines;
- Pregnancy and lactation -NOT are contraindications.

The vaccine is used intramuscularly into the deltoid muscle.

Injection in the gluteal region considered invalid and must be repeated vaccination.



Viral hepatitis B

Vaccination schedules

1) **BASIC** – Scheme 3 doses of 0, 1 and 6 months (after 3 doses of antibody concentration check anti - HBs serum);

2) **Acceleration** - use in adults (before leaving in endemic areas, before surgery).
Scheme (4 primary vaccination dose): 0, 7, 21 days and 12 months;

3) **patients without immune response to primary vaccination series** (anti-HBs 1-2 months after the primary vaccination <10 IU / L \rightarrow repeat the full scheme of the primary vaccination.

INFLUENZA

Indications for vaccination:

- **military personnel, construction workers, employees of traffic police, the Ministry of Internal Affairs;**
- **medical workers;**
- **Persons, who caring for patients with influenza at home;**
- **children from 6 months of age;**
- **aged over 60 years;**
- **women who will be pregnancy during influenza epidemic;**
- **pregnant women.**

INFLUENZA

CONTRAINDICATIONS

-Allergy to chicken eggs or to components of vaccine;
-Acute Illness or reactivation of chronic diseases;
Is the relative contraindication, during the first trimester of pregnancy. Vaccination with inactivated vaccines in the second and third trimesters of pregnancy is safe.

**Scheme: 1 dose
introduced
intramuscularly
or deep subcutaneous
injection
in autumn
every ears.**



Measles, rubella, mumps – combined live vaccine.

Indications for vaccination:

- adults for the prevention of measles, rubella, mumps;
- HIV-infected patients.

Contraindications

- universal for all vaccines;
- thrombocytopenia;
- allergic to amino glycosides, chicken eggs;
- The introduction of blood products in history.

On the territory of Ukraine registered a vaccine for the prevention of

Measles, rubella, mumps :

□ PRIORIX™ (Belgium)

□ TRIVIVAC (Czech Republic)

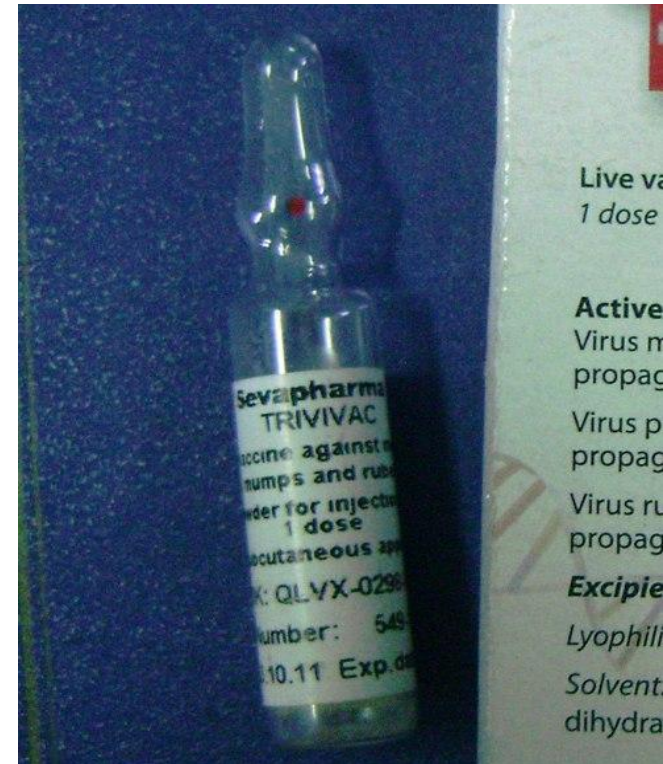
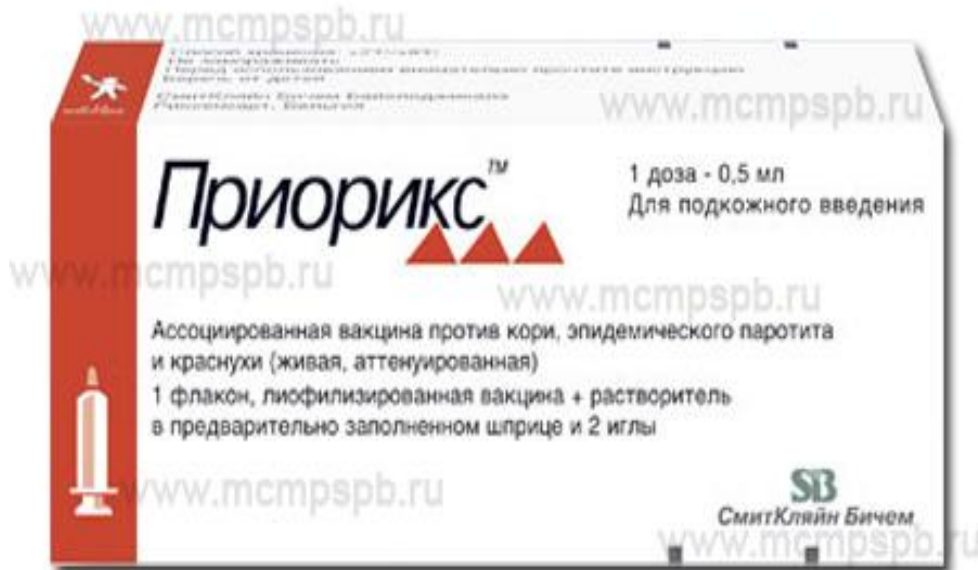
□ TRIMOVAX MERIEUX R.O.R. (France)

Measles, rubella, mumps , chicken pox:

□ PRIORIX TETRA™ (Belgium)

Measles, rubella, mumps

Scheme: 1 dose of vaccine is administered subcutaneously at intervals of 1 month.



Pneumococcal infection

Indications for vaccination:

- children and adults for the prevention of pneumococcal disease;**
- children from private groups;**
- older persons, especially those living in boarding;**
- GROUP OF MEDICAL RISK**

Indications for the medical risk groups:

- patients with chronic heart disease (except hypertension), lungs, liver, diabetes, nephrotic syndrome or renal failure;**
- with alcohol dependence;**
- with congenital or acquired immunodeficiency;**
- after splenectomy or functional asplenia;**
- patients with malignant tumors in the stage of generalization;**
- with liquorrhea;**
- cochlear implant or before implantation;**
- parenchymal organ transplant.**

**On the territory of Ukraine registered
for prevention Pneumococcal infection:**

- **PNEUMO 23 polyvalent polysaccharide liquid (France)**
- **PREVENAR polysaccharide conjugated adsorbed (USA)**

Pneumococcal and Hib-infection

- **SYNFLORIX™ (Australia)**

Pneumococcal infection

**Inactivated vaccine,
contains purified polysaccharide antigens
of different serotypes Streptococcus
Pneumoniae**

**Scheme: 1 dose subcutaneously or
intramuscularly**

CONTRAINDICATIONS

- universal for all vaccines.

Meningococcal disease

Indications for vaccination:

- children and adults for the prevention of meningococcal disease, especially:
 - with functional or anatomical asplenia;
 - persons with impaired humoral immunity;
 - laboratory workers who have contact with infectious material;
 - pupils and students, who the first time in his life will live in a boarding school or dormitory;
 - soldiers (or other employees) in the barracks.

CONTRAINDICATIONS

- universal for all vaccines.

Registered in Ukraine
MENINGO A + C vaccine for the
prevention of meningococcal serogroups
A and C polysaccharide, dry (**France**)

**Use 1 dose once for children 18 months
and adults, revaccination after three
years.**



Human papilloma virus (HPV)

Indications for vaccination:

to prevent:

- ❖ **cervical intraepithelial neoplasia 2-3-th degree and cancer of the cervix, vagina, vulva in girls and women between 10 and 25 years;**
- ❖ **genital warts (men and women);**
- ❖ **other diseases caused by human papilloma virus.**

Vaccination is not exempt from regular, cytology screening for cervical cancer.

Vaccine **Human papilloma virus (HPV) comprising a recombinant protein, inactivated.**

Registered in Ukraine:

- Gardasil® quadrivalent (types 6, 11, 16, 18) (**Netherlands**);**
- Cervarix™ (type 16, 18) (**Belgium**)**

Human papilloma virus (HPV)

**3 doses intramuscularly in the deltoid muscle
scheme 0, 1, 6 months (or 0, 2, 6 months)**

CONTRAINDICATIONS

- universal for all vaccines;**
- Violation blood clotting.**



Rotavirus

Indications for vaccination:

for the prevention of gastroenteritis caused by rotavirus

CONTRAINDICATIONS

- universal for all vaccines;**
- unrepaired congenital hypoplasia of digestive tract (such as Meckel's diverticulum)**

Rotavirus

ROTARIX™ - monovalent vaccine contains live attenuated viruses (rotavirus strain of human G1-serotype and [P8] -genotyp) (Belgium)

Scheme: vaccination course consists of two doses with an interval at least 4 weeks. The first dose - children aged from 6 weeks, course of vaccination should be completed before the age of 24 weeks.

**The vaccine is designed
ONLY FOR
PERORAL!**

