

# Passive immunization

## Passive immunization:

- natural - IgG crossing the placenta, antibodies in breast milk;
- artificial - is used to quickly induce immunity by administering ready-made antibodies.

## Types of antibodies used for passive immunization

- Animal - heterologous, xenogeneic globulins.
- Human - homologous, allogeneic **normal** or **hyperimmune** globulins:
  - **Monospecific** - designed to passively increase immunity against certain infectious diseases.
  - **Polyspecific** - intended for substitution treatment of antibody immunodeficiencies.

It is used to induce the so-called booster effect - ie. rapid induction of the immune system after administration of ready-made antibodies.

## Disadvantages

The disadvantage is the temporary effect (several days or weeks), especially for heterologous globulins.

Furthermore, the possibility of complications:

- mild - headaches, back pain, palpitations;
- severe - anaphylactic shock, serum sickness.

Therefore, it must be administered in fractions.

## Passive immunization is used:

- **Preventively** - when, for example, a seasonal increase in incidence is approaching, and it may be too late for vaccination.
- **Prophylactically** - to immunize people at risk of contact with a patient or suspected of being infected.
- **For therapy** - we give much larger doses.

Passive immunization is necessary, for example, in acute poisoning by certain toxins (snake venoms, bacterial, etc.). The administered antibodies bind to and neutralize the toxin.

## Links

### Related articles

- Active immunization
- Simultaneous combined immunization
- Specific immunity
- Non-specific immunity
- Antibodies
- Breakdown of vaccination in the Czech Republic
- Regular vaccinations in the Czech Republic

### Sources:

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