

## Common Adverse Events Following Vaccination

### Local reactions

- swelling, pain, redness, soreness, rash, itching
- Treatment: Apply a cold compress to the injection site, consider the need of an analgesic (pain reliever) or antipruritic (anti-itch) medication.

### Systemic reactions

- fever, malaise, myalgia, irritability, headache, loss of appetite
- Treatment: Give /take an analgesic (pain reliever).

### Fainting

- not dangerous
- rapid recovery (within a few minutes)
- Treatment: Treat as usual when a person faints

### Allergic reactions

- urticaria, angioedema, rhinitis
- caused by the antigen or other component of the vaccine (cell culture material, stabilizer, preservative, antibiotic).

## Anaphylaxis and its treatment

- Severe allergic reaction, which may be even life-threatening.
- **Rare:** less than 1: 1 000 000
- Appears usually within 5 minutes – an hour (hours) after vaccination (if appears)
- Vaccinator must always be prepared to take care of it!

An anaphylactic reaction is unpredictable and variable. It begins usually with sudden or gradual generalized itching, erythema (redness) or urticaria (hives). It continues with angioedema (swelling of the lips, face or throat), severe bronchospasm (cough, wheezing), shortness of breath, abdominal pain, vomiting, severe anxiety and distress, cramping. It may lead to life-threatening breathing or /and circulation problems: cardiovascular collapse and shock if not treated. Symptoms may appear in a different order.

Please note that skin or mucosal symptoms alone are not an anaphylactic reaction!

>>

## Treatment of an Anaphylactic Reaction

Give adrenalin IM according your own country's official guidelines

Call help or ask another adult call: ambulance / doctor

Make sure that airways are open:

- oxygen if available
- patient position according to the condition: laid down and legs raised or half-seated

Stay with the patient all the time

Another dose of adrenalin within 5(-15minutes) if needed

- Several doses of adrenalin may be needed

Observe and treat the patient according the symptoms until emergency care or doctor arrives

## References

Government UK. 2013. Immunisation against infectious disease. The Green Book. Chapter 8: Vaccine safety and adverse events following immunisation.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/147868/Green-Book-Chapter-8-v4\\_0.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/147868/Green-Book-Chapter-8-v4_0.pdf) (Retrieved 25.2.2020)

Government USA. 2015. Epidemiology and Prevention of Vaccine-Preventable Diseases. The Pink Book. 13th Edition. Chapter 2: General recommendations on immunization.

<https://www.cdc.gov/vaccines/pubs/pinkbook/genrec.html> (Retrieved 25.2.2020)

Government USA. 2015. Epidemiology and Prevention of Vaccine-Preventable Diseases. The Pink Book. 13th Edition. Chapter 6: Vaccine administration. <https://www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html#managing> (Retrieved 25.2.2020)