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Vaccination programme for students of the Lausanne Medical School

Information for the general practitioner (GP) checking and completing the form

Vaccination of health care workers (including trainees) is recommended by the Federal Office of Public Health (OFSP) and the Federal Commission for Vaccinations.

The Faculty of Biology and Medicine of the University of Lausanne has decided to set up a vaccination programme for medical students in order to guarantee their own protection, as well as that of their patients. In this context, students have their vaccination and immune status checked before their first regular contacts with patients (bedside teaching).

Recommended vaccinations
Students are responsible for obtaining and updating their vaccinations from their GP. The document "Immunization status form" duly completed by the GP is to be sent by the student to the School of Medicine with the Learning Agreement and the Application Form.

Those who refuse vaccinations or refuse to complete missing vaccinations should get information regarding the related infectious risks and the measures to be taken in case of exposure. In addition, students have to send a written justification to the secretariat of the School of Medicine. This justification has to be sent with the Learning Agreement and the Application Form.

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1. Diphtheria, tetanus, pertussis and poliomyelitis

- In absence of primary vaccination: vaccination must be completed.
- In case of incomplete vaccination, the number of booster doses to be administered must correspond to the recommendations of the Federal Office of Public Health and the Federal Commission for Vaccinations (see table below).
- For pertussis, according to the new vaccination recommendations :
  - 1 single dose of vaccine as a booster or primary vaccination must be given to adults > 25 years old by using a combined dTPa vaccine (interval since the last tetanus vaccine > 2 years).
  - 1 single dose, regardless of age, for adults or adolescents in case of regular contact (professional or family) with infants under 6 months of age (interval since the last pertussis vaccine > 10 years and interval since the last tetanus vaccine > 4 weeks).
- For diphtheria-tetanus: booster every 20 years if the last dose was given between 25-64 years. Booster after 10 years if immunocompromised or if the last dose given before the age of 25.

2. Varicella

- If the history is positive for chickenpox, the person is considered as immune (no serology required).
- If the history is uncertain, serology (IgG assay) is recommended and if serology is negative, vaccination is recommended (2 doses given 4-6 weeks apart).
- In case of negative history of chickenpox: vaccination is proposed (2 doses given 4-6 weeks apart).

For persons with negative serology and/or who refuse vaccination, please explain the measures to be taken in case of contact with a case of chickenpox:

- Immediately contact the Workers Health Service of the hospital.
- Avoidance for a period of 8 to 21 days after contact (28 days if specific immunoglobulin is administered) as determined by these authorities (quarantine).
- Rapid administration of immunoglobulin if pregnant or immunosuppressed at the time of contact.

3. Measles, mumps, rubella

- The history of these childhood diseases is not considered reliable enough to determine immunity with sufficient certainty.
- Anyone who has received 2 doses of vaccine or has positive serology (IgG assays) is considered as immune.
    - Unvaccinated persons: administer 2 doses of vaccine 1 month apart. Post-vaccination serology not indicated.
    - Persons who have received 1 dose of vaccine (1 MMR dose, or 1 dose of unitary vaccine): complete vaccination to document 2 doses of vaccine against each of the 3 viruses.
    - **Note**: If the 2 doses of vaccine were given with the Triviraten® vaccine (Rubini strain for mumps), a 3rd MMR dose should be given, as the Rubini strain is insufficiently immunogenic.

Individuals who refuse vaccination should be adequately informed about the risks of infection in case of exposure and the measures to be taken: contact the Workers Health Service of the hospital.

4. Hepatitis B

a. Unvaccinated or incompletely vaccinated persons (< 3 doses if vaccinated after 16 years old, or < 2 doses of adult vaccine received before 16 years old): complete the missing doses (1 booster dose is sufficient regardless of age if the 1st dose with adult vaccine was given before 16 years old) and test for anti-HBs antibodies 4 weeks (maximum 8 weeks) after the last dose.

i. If anti-HBs antibody ≥ 100 IU/l: stop, no further action required.
ii. If anti-HBs antibody < 100 IU/l: give a new dose of vaccine and recheck anti-HBs antibody serology 4 weeks later (8 weeks maximum)
iii. If, after the additional dose, the anti-HBs antibody level remains < 100 IU/l: test for HBs antigen (HBs Ag) and anti-HBc antibody to exclude previous infection with the hepatitis B virus. If both tests are negative: administer further doses of the vaccine with testing anti-HBs antibody 1 month after each dose until the threshold of 100 IU/l is reached. The attitude has to be decided on a case-by-case basis when the level remains < 100 IU/l after a total of 6 doses of vaccine administered (including basic vaccination).

b. Fully vaccinated individuals (≥ 3 doses, or ≥ 2 doses of adult vaccine received before 16 years old) and **anti-HBs antibody level available**:

i. anti-HBs antibody level ≥ 100 IU/l: stop, no further measurement required.

ii. anti-HBs antibody level between 10 and 100 IU/l performed more than 5 years after the last dose of vaccine: stop, no further action required.

c. Fully vaccinated individuals (≥ 3 doses, or ≥ 2 doses of adult vaccine received before 16 years old) and **without available anti-HBs antibody result**:

i. If the last dose of vaccine was given < 5 years: perform anti-HBs antibody assay.
- If anti-HBs < 100 IU/l: proceed as per a-ii. or a-iii (see above).
- If anti-HBs antibody ≥ 100 IU/l: stop, no further action required.

ii. If the last dose of vaccine was given ≥ 5 years: give a new dose of vaccine first, then test for anti-HBs antibodies 4 weeks later (maximum 8 weeks later).
- If anti-HBs antibody < 100 IU/l: proceed according to a-ii. or a-iii (see above).
- If anti-HBs antibody ≥ 100 IU/l: stop, no further action required.
- (Special situation that may occur: if the last dose of vaccine was administered ≥ 5 years and it anti-HBs antibody result > 10 IU/l is available at least 5 years after the last dose: stop, no further action necessary).

Persons who refuse to be vaccinated must be adequately informed about the risks of infection with the hepatitis B virus in the event of exposure (e.g. in the event of a prick with a dirty needle) and about the measures to be taken (immediate declaration of the accident to the Workers Health Service of the hospital for possible passive immunization). The same procedure applies to persons who remain unresponsive to vaccination.

5. Seasonal influenza

Annual vaccination is strongly recommended. Students can be vaccinated by their GP or at the Workers Health Service of the hospital.

6. Tuberculosis

Tuberculosis status is tested by a gamma-interferon releasing assay (e.g. Quantiferon-TB Gold® test or T-Spot-TB® test).

- A negative result will serve as a reference test in case of further exposure.
- If the result is positive, the physician assesses whether chemoprophylaxis is necessary in case of latent tuberculosis infection and exclude the diagnosis of active tuberculosis (possibility of seeking advice from a specialist in pneumology).

7. COVID-19

Please refer to the Federal Office of Public Health recommendations (recommendations for vaccination with mRNA vaccines against COVID-19 and Vaccination schedule for persons with or without confirmed SARS-CoV-2 infection).

Federal Office of Public Health (OFSP) website: Coronavirus page.

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