



POST-EXPOSURE RABIES PROPHYLAXIS: NEW RECOMMENDATION No. 37, 2010

In Denmark, bat bites are currently the only indication for prophylactic rabies treatment. If, after being bitten by other animals, there is reason to suspect that the animal has rabies, the animal should be examined by a veterinarian, who will arrange further investigation if necessary.

In other parts of the world, rabies is more widespread. Transmission occurs through the penetrating bite of an animal infected with rabies or - on rare occasions - through direct contact between infected saliva and mucous membranes or wounds.

The recommendations for post-exposure have been changed in accordance with new WHO guidelines.

Post-exposure prophylaxis

The prophylactic treatment after possible exposure to rabies consists of injection of human rabies immunoglobulin (HRIG) and vaccination against rabies.

Human rabies immunoglobulin

HRIG is given once to unvaccinated persons concurrently with the initial vaccination regardless of the interval that has passed since exposure.

In cases where HRIG is not given together with the first vaccination, HRIG should be given if less than eight days have passed since the first vaccination. Immunoglobulin will yield a protective effect until the maximum vaccine effect is achieved after approx. 14 days.

The dose is 20 IU/kg body weight. If possible, HRIG is infiltrated in and around the wound. The remaining amount is given intramuscularly on the side of the body opposite to where the vaccine is given.

Rabies vaccination

According to new WHO guidelines, the fifth dose of the regimen may be omitted when the following is true:

- the person is healthy and immune competent, and
- the rabies vaccine is known to be of a high quality, and
- immunoglobulin has been administered, and is known to be of a high quality.

Persons initiating treatment in Denmark who do not have immune compromising disorders shall therefore receive four vaccinations on days 0, 3, 7 and 14.

Immune competent persons who have initiated treatment abroad and who are given HRIG within eight days after the initial vaccination and who have received a vaccination of known high quality should be given four vaccinations on days 0, 3, 7, 14. Persons initiating treatment in Denmark who have immune compromis-

ing disorders including HIV should be given HRIG and five vaccinations on days 0, 3, 7, 14 and 28.

Persons initiating treatment abroad who have not received HRIG and/or have not been vaccinated with a vaccine of a known high quality should receive five vaccinations on days 0, 3, 7, 14 and 28.

Previously vaccinated persons

Persons who have previously received the primary vaccination (three doses on days 0, 7 and 28) should be vaccinated on days 0 and 3, i.e. receive a total of two doses. These persons should not be given HRIG.

Persons who have not received a full primary vaccination should be considered as unvaccinated.

Guidance and dispensing of vaccines

Prophylactic treatment after possible exposure is discussed with the Department of Epidemiology, where HRIG and vaccine may be ordered. Outside of normal opening hours, health staff may contact the epidemiologist on call (+45 4131 74 04). GPs receive HRIG and vaccines at the expense of the National Health Service.

Prophylaxis before exposure

Prophylaxis before exposure still consists of primary vaccination on days 0, 7 and 28, i.e. three doses.

Revaccination: Only recommended for persons at risk of work-related rabies exposure. These persons should receive vaccination following measurement of antibody levels to ensure continued protection.

(A. Christiansen, S. Cowan, Department of Epidemiology)

NEW VACCINE AGAINST MENINGOCOCCAL DISEASE

A new four-valent conjugate vaccine (Menveo[®]) has been approved for prophylaxis against *Neisseria meningitidis* groups A, C, W135 and Y. The vaccine replaces both the bivalent vaccine (Meningovax A+C[®]), which is no longer produced, and the previously used but unregistered four-valent vaccine, (Mencevax ACWY[®]), EPI-NEWS 25/10. Menveo[®] has item number 80782 and dispensing of the pharmaceutical is expected to start as from week 39, 2010.

The vaccine has been approved for use in adults and adolescents from the age of 11 years; a single 0.5 ml dose is given as an intramuscular injection. The need for and timing of any revaccination with Menveo[®] has not yet been established.

Immunogenicity studies among adolescents aged 11-18 years have

shown a similar response for Menveo[®] and Mencevax ACWY[®] one year after vaccination.

The Danish Medicines Agency has assessed that children aged 2 months - 1 year may receive primary vaccination in the form of two 0.5 ml doses administered at a minimum interval of one month; in case of continued risk of exposure, a 0.5 ml booster dose should be administered 12 months after the primary vaccination programme. Children from one year upwards are given a single 0.5 ml dose. Vaccination of children aged two months - 11 years should be limited to cases where administration of the four-valent vaccine is fully indicated. In cases that only need group C protection, a monovalent conjugate vaccine should be preferred.

The most common adverse reactions observed during clinical studies were limited in duration to one or two days and none were serious. Specifically, the adverse reactions seen included headache, nausea or pain, redness, hardness, swelling, itching or discomfort at the injection site. Other common adverse reactions were rashes, fever > 38°C and chills. More information can be found at www.ema.europa.eu.

All observed or suspected adverse reactions within a two-year period from the marketing date of newly registered pharmaceuticals must be reported to the Danish Medicines Agency.

(P. Valentiner-Branth, Department of Epidemiology, M. Orholm, Danish Medicines Agency)

HPV VACCINATION CATCH-UP PROGRAMME TO EXPIRE

Again, the National Board of Health wishes to call attention to the fact that HPV vaccination under the catch-up programme for girls born in 1993, 1994 and 1995 will be terminated by the end of 2010 to be covered by the offer of free vaccination. Routine HPV vaccination of girls aged 12 years or older should be completed before their fifteenth birthday. This is relevant for girls born in 1996.

A vaccination series comprises three doses of Gardasil[®] 0.5 ml administered at day 0 and after 2 and 6 months. The minimum interval separating the 1st and 2nd vaccination is one month, and the 2nd and 3rd vaccinations should be given at a minimum interval of three months.

(Danish National Board of Health)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2010 figures are preliminary)

| Table 1 | Week 36 2010 | Cum. 2010 ¹⁾ | Cum. 2009 ¹⁾ |
|--------------------------------|-----------------|----------------------------|----------------------------|
| AIDS | 1 | 33 | 27 |
| Anthrax | 0 | 0 | 0 |
| Botulism | 0 | 1 | 0 |
| Cholera | 0 | 0 | 0 |
| Creutzfeldt-Jakob | 1 | 13 | 7 |
| Diphtheria | 0 | 0 | 0 |
| Food-borne diseases | 13 | 282 | 387 |
| of these, infected abroad | 2 | 65 | 70 |
| Gonorrhoea | 7 | 328 | 400 |
| Haemorrhagic fever | 0 | 0 | 0 |
| Hepatitis A | 5 | 43 | 24 |
| of these, infected abroad | 1 | 21 | 16 |
| Hepatitis B (acute) | 0 | 18 | 20 |
| Hepatitis B (chronic) | 0 | 134 | 120 |
| Hepatitis C (acute) | 0 | 2 | 4 |
| Hepatitis C (chronic) | 2 | 283 | 214 |
| HIV | 8 | 189 | 178 |
| Legionella pneumonia | 3 | 82 | 89 |
| of these, infected abroad | 0 | 19 | 17 |
| Leprosy | 0 | 0 | 0 |
| Leptospirosis | 1 | 3 | 0 |
| Measles | 0 | 4 | 9 |
| Meningococcal disease | 1 | 47 | 58 |
| of these, group B | 1 | 22 | 32 |
| of these, group C | 0 | 15 | 21 |
| of these, unspec. + other | 0 | 10 | 5 |
| Mumps | 0 | 25 | 10 |
| Neuroborreliosis | 0 | 23 | 24 |
| Ornithosis | 0 | 10 | 10 |
| Pertussis (children < 2 years) | 2 | 63 | 78 |
| Plague | 0 | 0 | 0 |
| Polio | 0 | 0 | 0 |
| Purulent meningitis | | | |
| Haemophilus influenzae | 0 | 1 | 5 |
| Listeria monocytogenes | 0 | 5 | 4 |
| Streptococcus pneumoniae | 0 | 54 | 64 |
| Other aethiology | 0 | 15 | 9 |
| Unknown aethiology | 0 | 17 | 17 |
| Under registration | 1 | 4 | 0 |
| Rabies | 0 | 0 | 0 |
| Rubella (congenital) | 0 | 0 | 0 |
| Rubella (during pregnancy) | 0 | 0 | 0 |
| Shigellosis | 4 | 66 | 75 |
| of these, infected abroad | 3 | 50 | 59 |
| Syphilis | 3 | 292 | 170 |
| Tetanus | 0 | 0 | 0 |
| Tuberculosis | 7 | 274 | 254 |
| Typhoid/paratyphoid fever | 2 | 29 | 18 |
| of these, infected abroad | 2 | 27 | 16 |
| Typhus exanthematicus | 0 | 0 | 0 |
| VTEC/HUS | 5 | 107 | 102 |
| of these, infected abroad | 1 | 27 | 22 |

¹⁾ Cumulative number 2010 and in corresponding period 2009

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received in SSI laboratories

| Table 2 | Week 36 2010 | Cum. 2010 ³⁾ | Cum. 2009 ³⁾ |
|--|-----------------|----------------------------|----------------------------|
| Bordetella pertussis (all ages) | 7 | 148 | 156 |
| Gonococci | 9 | 286 | 308 |
| of these, females | 2 | 73 | 84 |
| of these, males | 7 | 213 | 224 |
| Listeria monocytogenes | 2 | 36 | 53 |
| Mycoplasma pneumoniae | | | |
| Resp. specimens ³⁾ | 9 | 112 | 46 |
| Serum specimens ⁴⁾ | 9 | 146 | 80 |
| Streptococci ⁵⁾ | | | |
| Group A streptococci | 0 | 122 | 111 |
| Group B streptococci | 0 | 78 | 84 |
| Group C streptococci | 1 | 45 | 27 |
| Group G streptococci | 1 | 123 | 117 |
| S. pneumoniae | 18 | 716 | 757 |
| Table 3 | Week 34 2010 | Cum. 2010 ²⁾ | Cum. 2009 ²⁾ |
| MRSA | 26 | 566 | 482 |
| Pathogenic int. bacteria ⁶⁾ | | | |
| Campylobacter | 110 | 2426 | 2076 |
| S. Enteritidis | 14 | 234 | 395 |
| S. Typhimurium | 8 | 406 | 614 |
| Other zoon. salmonella | 17 | 456 | 480 |
| Yersinia enterocolitica | 3 | 139 | 157 |
| Verocytotoxin- producing E. coli | 5 | 127 | 97 |
| Enteropathogenic E. coli | 6 | 122 | 129 |
| Enterotoxigenic E. coli | 13 | 303 | 209 |

²⁾ Cumulative number 2010 and in corresponding period 2009

³⁾ Resp. specimens with positive PCR

⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

The sentinel surveillance ended in week 20, 2010