

Healthcare Personnel Vaccination Recommendations

vaccines and recommendations in brief

Hepatitis B– If previously unvaccinated, give a 2-dose (Heplisav-B) or 3-dose (Engerix-B or Recombivax HB) series. Give intramuscularly (IM). For HCP who perform tasks 1–2 months after dose #2 (for Heplisav-B) or dose #3 (for Engerix-B or Recombivax HB).

MMR – For healthcare personnel (HCP) born in 1957 or later without serologic evidence of immunity or prior vaccination, give 2 doses of MMR, 4 weeks apart. For HCP born prior to 1957, see below. Give subcutaneously (Subcut).

Varicella (chickenpox) For HCP who have no serologic proof of immunity, prior (shingles) by a healthcare provider, give 2 doses of varicella vaccine, 4 weeks apart. Give Subcut.

Tetanus, diphtheria, pertussis Give 1 dose of Tdap as soon as feasible to all HCP who have not received Tdap previously and to pregnant HCP with each pregnancy (see below). Give Td or Tdap boosters every 10 years thereafter. Give IM.

Meningococcal– Give both MenACWY and MenB to microbiologists who are routinely exposed to isolates of *Neisseria meningitidis*. As long as risk continues: boost with MenB after 1 year, then every 2–3 years thereafter; boost with MenACWY every 5 years. Give MenACWY and MenB IM.

Hepatitis A, typhoid, and polio vaccines are not routinely recommended for HCP who may have on-the-job exposure to fecal material.

Hepatitis B
Unvaccinated healthcare personnel (HCP) and/or those who cannot document previous vaccination should receive either a 2-dose series of Heplisav-B at 0 and 1 month or a 3-dose series of either Engerix-B or Recombivax HB at 0, 1, and 6 months. HCP who perform tasks that should be tested for hepatitis B surface antibody (anti-HBs) 1–2 months after dose #2 of Heplisav-B or dose #3 of Engerix-B or Recombivax HB to document immunity.

If anti-HBs is at least 10 mIU/mL (positive), the vaccinee is immune. No further serologic testing or vaccination is recommended.
If anti-HBs is less than 10 mIU/mL (negative), the vaccinee is not protected from hepatitis B virus (HBV) infection, and should receive another 2-dose or 3-dose series of HepB vaccine on the routine schedule, followed by anti-HBs testing 1–2 months later. A vaccinee whose anti-HBs remains less than 10 mIU/mL after 2 complete series is considered a “non-responder.”

For non-responders: HCP who are non-responders should be considered susceptible to HBV and should be counseled regarding precautions to prevent HBV infection and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to hepatitis B surface antigen (HBsAg)-positive blood or blood with unknown HBsAg status. It is also possible that non-responders are people who are HBsAg positive. HBsAg testing is recommended. HCP found to be HBsAg positive should be counseled and medically evaluated.
For HCP with documentation of a complete 2-dose (Heplisav-B) or 3-dose (Engerix-B or Recombivax HB) vaccine series but no documentation of anti-HBs of at least 10 mIU/mL (e.g., those vaccinated in childhood): HCP who are at least 19 years of age and have not been vaccinated since 1990 should undergo anti-HBs testing upon hire or matriculation. See references 2 and 3 for details.

All HCP, including physicians, nurses, paramedics, emergency medical technicians, employees of nursing homes and chronic care facilities, students in these professions, and volunteers, may be given only to non-pregnant healthy HCP age 19 years and younger. Inactivated injectable MMR may be given only to non-pregnant healthy HCP age 19 years and younger for HCP who are in close contact with severely immunosuppressed patients (e.g., stem cell transplant recipients) when they require protective isolation.

measles and mumps vaccines given on or after 1957, and at least 1 dose of live rubella vaccine). HCP with 2 documented doses of MMR are not recommended to be serologically tested for immunity; but if they are tested and results are negative or equivocal for measles, mumps, and/or rubella, these HCP should be considered to have presumptive evidence of immunity to measles, mumps, and/or rubella and are not in need of additional MMR doses.

Although birth before 1957 generally is considered acceptable evidence of measles, mumps, and rubella immunity, 2 doses of MMR vaccine should be considered for unvaccinated HCP born before 1957 who do not have laboratory evidence of disease or immunity to measles and/or mumps. One dose of MMR vaccine should be considered for HCP with no laboratory evidence of disease or immunity to rubella. For these same HCP who do not have evidence of immunity, 2 doses of MMR vaccine are recommended during an outbreak of measles or mumps and 1 dose during an outbreak of rubella.

Varicella
It is recommended that all HCP be immune to varicella. Evidence of immunity in HCP includes documentation of 2 doses of varicella vaccine (e.g., 2 doses of Zostavax or 2 doses of Varivax) or a positive result on a blood test for varicella antibody. For more information, visit the CDC website at www.cdc.gov/vaccines/hcp/acip-recs/vaccines/imz-manual/summary/05-varicella.htm.