Ministry of Health, Screening and Vaccination Requirements from 1 January 2019

Screening and Vaccination Requirements*	
Mumps, Measles and Rubella (MMR)	All students should be immune or vaccinated. • Documented proof of vaccination (2-dose series); or • Serological evidence of immunity against **all** three diseases; or • Laboratory confirmation of **all** three diseases Self-declaration of past infection or vaccination is not considered as evidence of immunity.
Varicella (Chickenpox)	All students should be immune or vaccinated. • Documented proof of vaccination with 2 doses of varicella vaccine given at least 4 weeks apart; or • Serological evidence of immunity; or • Diagnosis or verification of history of varicella disease by a physician or laboratory When past history of varicella is uncertain, serology testing should be carried out to confirm immunity against varicella.
Tetanus, Diphtheria and Pertussis	**Students who have not received Tdap before:** All students should receive tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccination, if they have not previously received the Tdap vaccination. These students should be vaccinated with a single dose of Tdap, followed by a booster dose of tetanus and diphtheria toxoids (Td) every 10 years. If Td is unavailable, it may be replaced with Tdap. **Students who have previously received Tdap:** Students who have previously received Tdap vaccination should receive a booster dose of Td every 10 years. If Td is unavailable, it may be replaced with Tdap. Documented proof of vaccination with Tdap or Td in the last 10 years would be acceptable as evidence of immunity. Self-declaration is not considered as proof of immunity.
Influenza	Annual (or half yearly as recommended by MOH) influenza vaccination is recommended for all students.

Screening and Vaccination Requirements*	
Hepatitis B	Hepatitis B screening should be carried out **before final admission** into the course, as results may affect students'/ schools' decision in continuing with the course.[†] All students should be screened for hepatitis B carriage or should show documented serological evidence of immunity against hepatitis B (i.e. anti-HBs ⩾10 mIU/mL). Students enrolled in courses that might require them to perform or assist in EPPs **must** be screened for Hepatitis B. **Students who do not have evidence of immunity:** Hepatitis B negative students who do not have documented serological evidence of immunity against hepatitis B (i.e. anti-HBs ⩾10 mIU/mL) should be vaccinated with the primary course series (i.e. 3 doses of hepatitis B vaccine). A post-vaccination serology test should be conducted to determine the concentration of protective antibodies i.e. anti-HBs of at least 10mIU/mL **Students with anti-HBs concentrations ⩾10 mIU/mL post-vaccination:** For students with documented serology response (i.e. anti-HBs ⩾ 10 mIU/mL) obtained prior to admission into the course, there is **no need to repeat** the hepatitis B screening. Schools and healthcare institutions can rely on students' previous hepatitis B screening results for PECT placements. **Students with anti-HBs <10 mIU/mL post- vaccination:** For those who are unable to acquire immunity after vaccinations (i.e. anti-HBs < 10 mIU/mL)), these students should be revaccinated with either of the recommended options: *(i) Option 1*: Students can be vaccinated with a single booster dose followed by serology testing within 1-2 months. If an immune response is not mounted after the first booster dose, a second and third booster dose should be given to complete a second 3-dose vaccination series. *(ii) Option 2*: Alternatively, students with anti- HBs concentrations less than 10mIU/mL can be revaccinated with a second 3-dose vaccination series, followed by re-testing within 1-2 months. If an immune response is not mounted after receiving two 3-dose vaccination series, the vaccine non-responder should be referred to an Occupational Health Physician for further counselling on the risk and susceptibility to acquiring HBV infection during the course of their training.

Screening and Vaccination Requirements*	
Hepatitis C and HIV	Students who are required to perform or assist in EPPs must be screened for Hepatitis C¶ and HIV. Screening must be carried out **before final admission into the course**, as results may affect students'/ schools' decision in continuing with the course. Similar to Hepatitis B, students need not repeat Hepatitis C and HIV screening just before embarking on PECT. PSEIs and HCIs can rely on students' Hepatitis C and HIV screening results from enrolment screening, for PECT placements. Students who engage in high risk activities are encouraged to go for regular testing and must inform their respective PSEIs of their BBD positive status immediately after they become aware of this †

* Students should comply unless they have medical reasons for not doing so (an official letter from a medical practitioner would be needed).

† Students tested positive for Hep B, Hep C and/or HIV through screening before admission into the course or anytime during the course should not perform or assist in EPPs See Annex 4 for the definition of EPPs. From AY2015 onwards, students **should not** be rejected from the programme or clinical training based on Hep B, Hep C or HIV carriage status alone. The students of courses where EPPs are part of routine practice should, however, be counselled to understand that their employability and areas of practice may be restricted in future.

¶ HCV carriage is defined as having detectable virus in the blood (i.e. HCV RNA positive). Positive serology (i.e. anti-HCV IgG positive) must be followed-up by a test for HCV RNA. Individuals who test anti-HCV IgG positive but HCV RNA negative can be considered to be non-carriers if they obtain a medical report from their treating physician certifying that they have cleared their infection.

Summary of vaccination requirements from 1 January 2019

Infectious Disease	Recommendations for vaccination	Acceptable evidence of immunity
Mumps, Measles and Rubella (MMR)	• If students do not have documented evidence of immunity, 2 doses; minimum interval of at least 4 weeks apart • Students who only received one dose of MMR during childhood should be vaccinated with second dose of MMR	• Documented proof of vaccination; **or** • Serological evidence of immunity against **all** three diseases; **or** • Laboratory confirmation of **all** three diseases
Tetanus, Diphtheria and Pertussis (Tdap)	• 1 dose of Tdap, if students have not previously received it, followed by Td booster once every 10 years • If students have previously received 1 dose of Tdap, Td booster is recommended once every 10 years	• Documented proof of vaccination with Tdap or Td in the last 10 years *[Note: The acceptable evidence of immunity has also been updated.]*
Influenza	• Annual (or half yearly based on MOH recommendations on seasonal influenza vaccination)	*Not applicable*
Varicella (Chickenpox)	• 2 doses; minimum interval of 4-8 weeks apart	• *Documented proof of vaccination with 2 doses of varicella vaccine given at least 4 weeks apart; or* • *Serological evidence of immunity; or* • *Diagnosis or verification of history of varicella disease by a physician or laboratory*

Infectious Disease	Recommendations for vaccination	Acceptable evidence of immunity
Hepatitis B [Note: Students who perform or assist in exposure prone procedures must be screened]	• Primary vaccination consists of 3 doses at 0, 1 and 6 months • All students who do not have evidence of immunity should be vaccinated (those practicing EPPs must be vaccinated) with a primary 3-dose vaccination series, followed by post-vaccination serology test (anti-HBs testing) within 1-2 months after completion of the primary 3-dose vaccination series to determine the level of protective antibodies (i.e. anti-HBs ≥10 mIU/mL). • Students with post-vaccination anti-HBs concentrations of <10 mIU/mL should be revaccinated with a single booster dose (followed by 2 more booster doses if there is no immune response) or a second 3- dose series, followed by anti-HBs testing within 1 to 2 months • If there is still no immune response after two cycles of vaccination (i.e. primary 3- dose series followed by serological testing and an additional 3-dose series or 3 booster doses followed by serological testing), refer the non-responder to an Occupational Health physician for counselling • If an immune response has been documented (i.e. anti-HBs≥10 mIU/mL), further serological testing and booster doses are not required	• *Documented proof of vaccination; and post vaccination serological evidence of immunity (anti-HBs concentrations of ≥10 mIU/mL); or* • *Serological evidence of immunity (anti-HBs concentrations of ≥10 mIU/mL)*