SSIS HEALTH OFFICE HANDBOOK PART 1



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GENERAL INTRODUCTION

SSIS School Health Services are designed to protect, promote, and manage the health and safety of students and the school community.

The Health Office Handbook Part 1 provides information for the members of the SSIS community to better understand how the Health Office within SSIS operates. The Health Office Handbook Part 2 provides information and procedures for the School Nurse.

Roles and Responsibilities

- The **Head of School** provides educational direction to the School Leadership Team.
- The Associate Head of School for Finance and Operations reports to the Head of School and provides fiscal and policy direction to the Health Office.
- The Health Office Manager reports to the Associate Head of School -Finance and Operations. The Health Office Manager is responsible for
 planning, coordinating, implementing, and evaluating school health services at
 SSIS. The Health Office Manager ensures that nursing care is based on
 prioritization of health care needs which reduces the incidence of
 health-related absenteeism and eliminates or minimizes health problems that
 impair learning. The Health Office Manager collaborates with a wide variety of
 school systems and professional disciplines to enhance the educational
 process and promote an optimal level of wellness for students and staff.
- The School Nurse reports to the Health Office Manager. The School Nurse will manage and coordinate the assigned school's health services program based on requirements established by school division policies, procedures, and protocols, and by local and international regulations. The School Nurse will maintain and operate the Health Office. The School Nurse is also responsible for identifying both actual and potential health problems, providing case management services, and collaborating with educators, school administrators, students, and families to ensure that students grow and develop in a healthy manner as they respond to the school environment.

HEALTH OFFICE MANAGEMENT

There are two SSIS Health Offices on campus and these are staffed by five National Registered Nurses. The nurse team at SSIS may be employed through a nurse service contract with SOS or with SSIS directly. Nursing skills are based on International and Vietnamese standards.

A nurse is on campus Monday-Friday 0600-1800 during days school is in session, and there are after-school athletics/activities scheduled. On non school days or on days there are no athletics scheduled a nurse is on campus Monday-Friday 0730-1600. Nurses are not on campus during National Holidays. Nurses are not on campus on weekends unless they are supporting competitive sports events or practices. Non-Sport student activities outside the Health Office hours do not require a nurse on campus but are evaluated on a case-by-case basis for the level of risk and will be staffed accordingly.

STUDENT HEALTH RECORDS

SSIS uses electronic health records software that follows all data protection guidelines that are in line with HIPAA and FERPA data protection regulations. Only authorized users have access to students' health records and have the minimum access to perform their job as it pertains to each student. Please refer to the <u>SSIS Privacy Policy</u> that is part of the SSIS enrollment and re-enrollment contract.

SICK POLICY—WHAT TO DO IF YOUR CHILD IS ILL

- Stay home for a temperature of 37.8°C or higher
- Must remain at home until 24 hours being fever-free without taking fever-reducing medications
- Stay home if the student has flu-like symptoms cough, sore throat, body aches, chills, fatigue, etc. until recovered
- Stay home if having 2 or more episodes of diarrhea or vomiting
- Must remain at home until 24 hours have passed since the last episode of diarrhea or vomiting
- Please refer to the <u>Communicable Disease List and school exclusions</u> for specific illness information.

FEVER RETURN POLICY DEFINITION:

If you have a fever you are to stay home until you have not had a fever for a full 24 hours and have not taken any fever reducing medications. This means you will be home for at least 2 days.

For example:

- You have a fever at 8:00am on Monday and take fever reducing medication.
- You start feeling better and recheck your temperature at 4:00 pm Tuesday.
- You do not have a fever and you no longer need any fever reducing medication.
- The 24 hour clock starts when the fever has gone away and you no longer need any fever reducing medication. This is the "fever free" period of time.
- The 24 hour period would end at 4:00pm Wednesday.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
FEVER STARTS AT 8:00AM AND YOU TAKE MEDICATION STAY HOME	FEVER STOPS AT 4:00PM AND YOU NO LONGER NEED MEDICATION 24 HOURS STARTS FROM NOW	STAY HOME FOR 24 HOURS AFTER FEVER HAS GONE AWAY/STOPPED WITHOUT TAKING MEDICATION	RETURN TO SCHOOL/WORK AS LONG AS SYMPTOMS ARE IMPROVING AND YOU FEEL WELL ENOUGH TO PARTICIPATE	
		4:00PM IS THE 24 HOUR END		

EXAMPLE: Fever starts on Monday, you stay home Tuesday and Wednesday.

For any medical absence needing to be recorded please reach out to your child's divisional and nursing office. When you report an absence due to a medical reason, please state the illness and symptoms your child is experiencing. Divisional school office email and phone: esoffice@ssis.edu.vn (84 28) 54130901 ext: 21190,21191 msoffice@ssis.edu.vn (84 28) 54130901 ext: 12005

hsattendance@ssis.edu.vn (84 28) 54130901 ext: 33080, 33081

Divisional nursing office email and phone:

<u>esnurse@ssis.edu.vn</u> (84 28) 54130901 ext: 11070 (building A105) <u>msnurse@ssis.edu.vn</u> (84 28) 54130901 ext: 11071 (building A105) <u>hsnurse@ssis.edu.vn</u> (84 28) 54130901 ext: 31001 (building C106)

COVID Absence

- If a student tests positive for COVID, you must notify the divisional nurse as above in the sick policy.
- You must quarantine until you test negative or for 5 days if testing is not done. This means that you cannot leave your home except for medical reasons.
- When you test negative you must provide a photo of the negative test with the date to the divisional nurse.
- If no testing is done, Day 1 is the first day your symptoms began. After 5 days of quarantine, you can return to school/work if no further testing is done.
- You must wear a mask for a full 10 days from when you test positive.

HEALTH SERVICES—EMERGENCY ON CAMPUS

In an emergency the School Nurse will provide basic patient assessment and case management, First Aid and CPR, appropriate use of Automated External Defibrillator (AED), administration of O2, and use of immobilization equipment (splints).

For any medical situation that calls for procedures beyond first aid support to patients as listed above, the School Nurse will be a staging point for medical evacuations from the campus to a location where further treatment can be performed. The School Nurse will coordinate such evacuation in conjunction with the 24-hour International SOS Assistance Center. The School Nurse will contact the designated International SOS Assistance Center and follow the case management directions of the International SOS Coordinating Doctor team. The School Nurse and International SOS will follow the Medical Evacuation Response Plan (MERP) specifically developed for SSIS by International SOS prior to the commencement of services. (MERP UPDATED APRIL 2022)

Once the emergency is under control, the School Nurse will communicate the emergency situation to the Health Office Manager (or Associate Head of School--Finance and Operations) and the Division Principal or Athletics and Activities Director (if during after-school activities). The School Nurse, the Health Office Manager, the Associate Head of School, or the Athletics and Activities Director will contact the parent/guardian of the student as soon as possible. During a FIRE DRILL/ EMERGENCY EVACUATION the School Nurse will follow the instructions of the campus Person In Charge. If a student is in the Health Office, the nurse will take the student to the evacuation point. The Homeroom teacher/ Advisory teacher should report to the Person in Charge that the student is not with them but with the nurse. The nurse will report to the Person In Charge that the student is with the nurse. The Person In Charge matches the list of students missing with students in the Health Office.

HEALTH SERVICES—NON EMERGENCY

Nursing Care

The School Nurse is a National Registered Nurse and will independently provide basic nursing care to students on campus. This includes assessment and treatment of minor injuries, wounds, and medical conditions; and general health education. The School Nurse will manage student illness or injury on campus until

- the student returns to class OR
- the student is released to a parent/ guardian OR
- The student is transferred to a medical facility for emergency care if needed.
- Due to the volume of nursing office visits, parents will only be notified if a student needs to be picked up or needs care at a higher-level facility. We are unable to notify all parents of minor injuries treated such as cuts/scrapes.

If a student is sent back to class, the School Nurse will call the EC, KG, Grade 1 classroom (or TA directly) for an escort back to class. For Grades 2 through 12 the School Nurse will issue a "Nurse Pass" to the student to take to his/ her teacher/ Division Office.

The SSIS Health Office's goal is to promote the safety and well-being of your child in the school environment. In the event that one of our nurse assesses your child and deems it medically necessary for your child to go home or to a higher level of care:

- 1. You will be required to arrange to pick up your child within 30 minutes to 1 hour of receiving a call. This is to make sure the medical needs of your child are met in a timely manner and avoid any delay in medical care.
- 2. If we are unable to reach the parent or guardian or if your child is not picked up within 1 hour, the nurse will call the emergency contact listed in your child's school record.

- 3. Once you or your emergency contact arrives at school, you will proceed to the divisional office for your child. You will check your student out from the divisional office and then proceed to the health office to pick up your child.
- 4. If the nurse is unable to reach the emergency contact or if it is a life-threatening emergency, then transportation to a higher level of care will be arranged and a staff member or nurse will accompany your child until you arrive.

Please know due to the volume of students and nurse visits we do not have the capacity to keep your child in the nursing office beyond 30 minutes-1 hour If a student is sent home due to illness or injury, or transferred to a medical facility for emergency care, the School Nurse will notify the Division Office by email or phone. This notification includes the name of the student, the cause of illness, and the expected date of return to school. The Division Office will notify the teachers as needed.

Medical Support from International SOS

International SOS offers additional medical support through the SSIS Campus Resilience Program. Staff, students, and parents can contact the Intl SOS Assistance Center to receive medical advice, travel/security advice, and assistance with booking appointments. The number to call is 028 3829 8520.

Mental Health

The School Nurse will work closely with the SSIS Psychologist and the Counselor team of each Division to assist in the management of students with Mental Health challenges.

International SOS offers additional Mental Health support through the Campus Resilience Program. Staff, students, and parents can contact the Intl SOS Assistance Center to arrange for short-term, solutions-focused therapy. The Campus Resilience program entitles staff and students to receive five (5) free sessions per incident per year with a mental health professional counselor. Call (028) 3829 8520 to arrange for an evaluation and to set up an appointment with a mental health provider.

A student coming to the Health Office with symptoms of anxiety or social/emotional concern will be assessed. The safeguarding flowchart will be followed. The nurse will

then notify the Division Office and the appropriate Counselor. After assessment, the student will:

- visit the counselor (the school nurse will escort the student to the Counselor Office or the Counselor will come to the Health Office.)
- return to class
- call a parent to go home
- transfer to a hospital or community therapist

Medication Administration

For the safety of all students while on campus the following medication rules apply:

- ALL medications your child is taking at school must be discussed with the divisional nurse and stored in the health office. To keep students safe, we need to be aware of any side effects or risks of the medications taken at school. First dose of all medications will not be administered at school.
- Students will only be administered medications from home that are prescribed by a medical provider.
- The nurses have small quantities of over-the-counter medications that can be administered with parent permission such as:
 - Antihistamines, panadol, paracetamol, streptosil, etc.
- Students are not allowed to keep or take their own medications with them while at school with the exception of emergency medications prescribed to middle or high school students. Such as:
 - Epipens, inhalers or diabetic medications
 - Students in elementary school will have emergency medications stored in the nurse's office or carried by CPR/First Aid adults on field trips.
- Medications must be in the original container with the name of the student, name of the medication, dosage, expiration date, and instructions for administration.
- Medications are to be brought to school by a parent or guardian and given directly to the nurse.
- Medication that is brought to school by a child will not be administered unless the child has on file they can self-carry an inhaler, insulin or epi-pen etc.
- All medications require a parent or guardian to fill out an <u>Authorization for</u> <u>Medication Administration (1).pdf</u>
- For medications needing to be administered multiple times during the day, the first dose must be administered at home.

If your child is in high school or middle school and chooses to carry an epi-pen or inhaler we require that a backup is left in the nursing office in the event of an emergency and your child does not have the medication with them.

REQUIRED ANNUAL HEALTH CHECK-UP

According to <u>Circular 13-2016</u>, the Ministry of Health requires schools **to collect annual health data**. These requirements are being enforced with greater consistency across schools and we appreciate your support in adhering to this annual requirement by completing the <u>health check-up form</u>, signed by a medical provider, at the start of the school year.

Individual Health Care Plan

If your child has specific health care needs, allergies, or chronic illness management such as, but not limited to, diabetes, asthma, epilepsy, or heart conditions, you will be required to have an Individual Health Care Plan signed and on file with the school. Students with chronic medical conditions requiring nursing support must be evaluated annually by a medical provider and have a signed emergency action plan on file prior to the student starting school. This is to ensure that the school is adequately prepared to care for your child.

Individual Health Care Plans are laminated colored sheets for those students with a MEDICAL ALERT (a life-threatening condition). At the beginning of the school year, a hard copy and a soft copy of a student's IHCP are given to each Division Office. The Division Office ensures that the relevant teachers have a copy of the IHCP.

Food Allergy and Anaphylaxis Emergency Action Plan

General Seizure Emergency Action Plan

Asthma Emergency Action Plan

Diabetic Emergency Action Plan

Field Trips

Field trips require the nursing office to review to assess the risk. In certain cases, nursing support will be provided. All field trips must have a chaperone or coach who is CPR/First-Aid certified. Nurses will provide first aid kits to trip leaders. Any students who have emergency medications, the medication will be checked out for

the trip and returned after the trip. The nurse will ensure the CPR/First aider is trained on the use of emergency medications.

HEALTH SERVICES—INFECTION CONTROL

Communicable Diseases

SSIS works closely with the Vietnamese Ministry of Health, HCMC CDC, and the DoET to prevent, report, and manage communicable diseases on campus. The SSIS Admissions process requires that students have routine childhood immunizations (e.g. measles, diphtheria, tetanus, pertussis) as well as those mandated by the Vietnamese government (e.g. Japanese Encephalitis). SSIS has a process for the detection, reporting, communication, and control of communicable diseases in SSIS. SSIS uses Directive # 1209 Communicable Disease Chart for criteria of school exclusion and reporting.

Please refer to the <u>Communicable Disease Chart and school exclusions</u> for detailed information regarding communicable diseases.

Vaccination Policy

- 1. A copy of valid vaccination certificate or vaccination exemption is required for all students enrolling in SSIS. <u>SSIS Immunization Form</u>
- 2. Refuse admittance to any students who are not compliant with the immunization program in their home country.
- 3. The SSIS Nurse has to review students' health records on a regular basis and notify parents about vaccines due and/or overdue.
 - EC & ES: in reminder emails, parents are notified that within 02 weeks, if the school nurse receives no response from the parents about vaccines due/overdue, the school nurse will report to the ES Principal and the students may have to be at home until the due vaccines are completed.
- 4. The SSIS Immunization requirements are based on the CDC's 2023 Immunization Schedule. (See Appendix A)
- 5. Please refer to the <u>CDC 2023 catch-up schedule</u> and talk with your child's medical provider about any vaccines that need to be completed.

6. Please refer to the <u>CDC recommended vaccinations for travel to Vietnam</u> and talk with your child's medical provider for those moving to Vietnam.

Students with no immunization certificate for school enrollment

- 1. Ask the parents to contact the family physician, or clinic where the student got vaccinated for a copy of immunization history if possible.
- 2. If a vaccination record can't be found, the student will be referred to a medical doctor for:
 - Immunology tests: Hepatitis A and B, MMR, Varicella the catch-up program for these shots then will be arranged according to the test reports.
 - Catch-up program for DTP and IPV according to their age
 - Please refer to the <u>CDC 2023 catch-up schedule</u> and talk with your child's medical provider about any vaccines that need to be completed.
- 3. Students with no immunization certificate can only start school with the reports of the immunology tests and the proof showing that they have started their catch-up vaccine program.
- 4. The school nurse will periodically contact the parents for the child's catch-up vaccine program updates until it is completed.

Vaccine Exemptions

A medical exemption is acceptable when a child has a medical condition that prevents them from receiving a vaccine. If a child is exempted from meeting the immunization requirement for medical reasons, a doctor's written statement is required. The statement must include:

- 1. Which immunization(s) are to be exempted
- 2. The immunization is exempted temporarily or permanently
- 3. The specific nature of the medical condition(s)

(References: <u>https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html</u> <u>https://vaccineinformation.org</u>)

Health and Safety Protocols

SSIS communicates good hygiene practices to staff and students and follows government directives, CDC & WHO recommendations, and advice from International SOS regarding the prevention of all infectious diseases.

Following the recent outbreak of COVID in HCMC the school is aware of the need to have campus protocols for the health and safety of the staff and students at SSIS. To lessen the risk of transmission of COVID, SSIS has a detailed health and safety approach which includes hand washing/disinfecting, mask-wearing, social distancing, vaccinations, and COVID testing. Campus protocols are based on government directives, CDC & WHO recommendations, and advice from International SOS. The most current protocols can be found here: https://www.ssis.edu.vn/reopening-campus

The Health Office Manager is responsible for sharing these protocols with all staff and students which can take place via orientation sessions, videos, emails, Zoom presentations to parents, or individual meetings with new staff and substitute teachers.

Pandemic Response

If circumstances require, the Health Office will assist with the implementation of emergency responses to epidemics and pandemics. SSIS will maintain or exceed health requirements and best practices to support the health and safety of the SSIS community.

HEALTH SERVICES—PREVENTION

Health Education and Training

As time permits, the School Nurse team will develop an annual health promotion and health education plan for the students and staff of SSIS. Topics may include vaccinations, healthy eating, hand hygiene, or communicable diseases. As time permits, the School Nurse will implement an annual health promotion calendar with monthly health education activities in the school for the students and staff as per the developed plan.

The School Nurse will provide health teaching to staff and students as needed. This includes training teachers to use the EpiPen, creating videos, and doing presentations on SSIS health and safety protocols for students, staff, and contractors.

Health Screenings

As per the direction of the Department of Education and Training, students from Kindergarten to grade 12 are required to have an annual health evaluation by a medical provider. They will also receive an Annual Health Screening at school. The screening includes Height, Weight, BMI percentile, Vision acuity screening, and Vital Signs. The screenings are meant to determine how the children are growing and to identify issues that may affect their learning. This health screening is not considered diagnostic and should not take the place of an annual medical check-up for students.

After the screening parents will be able to view the report on PowerSchool. The nurse will contact parents and teachers directly regarding any findings that may be of concern. Parents will be advised to consult with a physician for further assessment.

LINKS AND REFERENCES

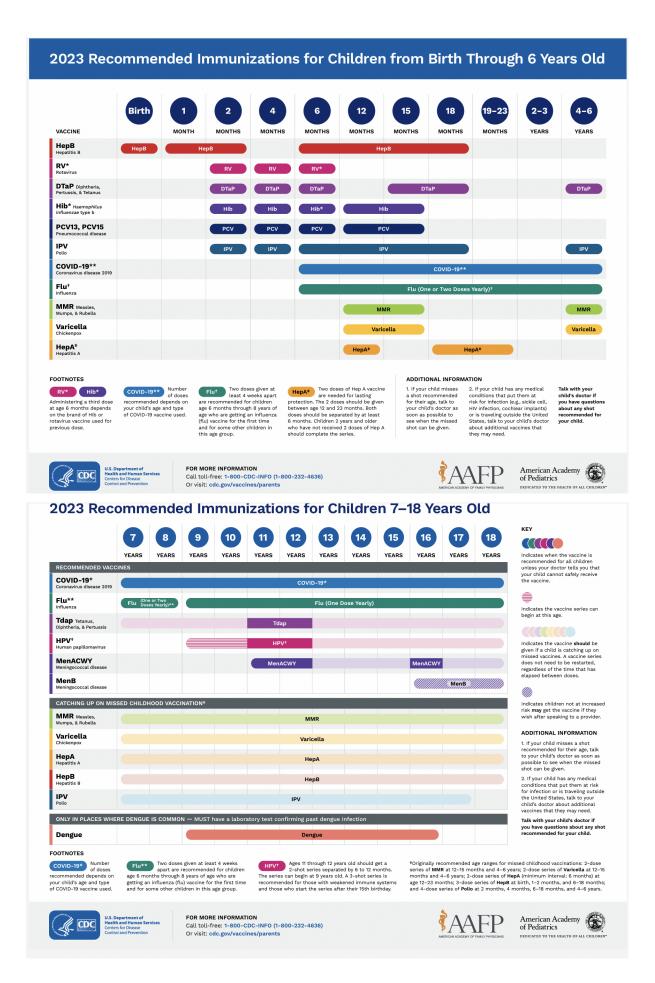
World Health Organization https://www.who.int/ Worldometer https://www.worldometers.info/coronavirus/ Vietnam Ministry of Health https://ncov.moh.gov.vn/ Centers for Disease Control Vietnam https://hcdc.vn/ Vietnam Briefing https://www.vietnam-briefing.com/news/vietnam-business-operations-and-the-corona virus-updates.html/ https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html https://vaccineinformation.org)

International SOS (028) 3829 8520 is available 24/7 for SSIS students

Circular 13 DoET MERP version 2.2 Directive # 1209 Communicable Disease Chart

APPENDIX A

Communicable Disease Chart/School Exclusion for Parents Annual Physical Examination Form Immunization History Form Food Allergy and Anaphylaxis Emergency Action Plan General Seizure Emergency Action Plan Asthma Emergency Action Plan Diabetic Emergency Action Plan



Diseases and the Vaccines that Prevent Them

ISEASE	VACCINE	DISEASE SPREAD BY	DISEASE SYMPTOMS	DISEASE COMPLICATIONS
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer, death
Rotavirus	RV vaccine protects against rotavirus.	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration, death
Diphtheria	DTaP* vaccine protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Pertussis whooping cough)	DTaP* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Tetanus	DTaP* vaccine protects against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death
Haemophilus influenzae type b (Hib)	Hib vaccine protects against Haemophilus influenzae type b.	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection of the covering around the brain and spinal cord), intellectual disability, epiglottitis (life-threateni infection that can block the windpipe and lead to serious breathing problems), pneumonia (infection in the lungs), dea
Pneumococcal disease PCV13, PCV15)	PCV vaccine protects against pneumococcal disease.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Coronavirus disease 2019 ^{COVID-19)}	COVID-19 vaccine protects against severe complications from coronavirus disease 2019.	Air, direct contact	May be no symptoms, fever, muscle aches, sore throat, cough, runny nose, diarrhea, vomiting, new loss of taste or smell	Pneumonia (infection in the lungs), respiratory failure, blood clots, bleeding disorder, injury to liver, heart or kidney, multi system inflammatory syndrome, post-COVID syndrome, deat
nfluenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs), bronchitis, sinus infectio ear infections, death
Measles	MMR** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Mumps	MMR** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness, death
Rubella	MMR** vaccine protects against rubella.	Air, direct contact	Sometimes rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic and blood disorders, death

Diseases and the Vaccines that Prevent Them

7-18 YEARS OLD

BIRTH-6 YEARS OLD

DISEASE	VACCINE	DISEASE SPREAD BY	DISEASE SYMPTOMS	DISEASE COMPLICATIONS
Coronavirus disease 2019 (COVID 19)	COVID-19 vaccine protects against severe complications from coronavirus disease 2019.	Air, direct contact	May be no symptoms, fever, muscle aches, sore throat, cough, runny nose, diarrhea, vomiting, new loss of taste or smell	Pneumonia (infection in the lungs), respiratory failure, blood clots, bleeding disorder, injury to liver, heart or kidney, multi- system inflammatory syndrome, post-COVID syndrome, death
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs), bronchitis, sinus infections, ear infections, death
Tetanus	Tdap* and Td** vaccines protect against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death
Diphtheria	Tdap* and Td** vaccines protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, deat
Pertussis (whooping cough)	Tdap* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Human papillomavirus	HPV vaccine protects against human papillomavirus.	Direct skin contact	May be no symptoms, genital warts	Cervical, vaginal, vulvar, penile, anal, oropharyngeal cancers
Meningococcal disease	MenACWY MenB vaccines protect against meningococcal disease.	Air, direct contact	Sudden onset of fever, headache, and stiff neck, dark purple rash	Loss of limb, deafness, nervous system disorders, developmental disabilities, seizure disorder, stroke, death
Measles	MMR [†] vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs death
Mumps	MMR ⁺ vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spin cord), encephalitis (brain swelling), inflammation of testicles o ovaries, deafness, death
Rubella	MMR ⁺ vaccine protects against rubella.	Air, direct contact	Sometimes rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic and bloo disorders, death
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer, death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Dengue	Dengue* vaccine protects against dengue.	Bite from infected mosquito	May be no symptoms, fever, headache, pain behind the eyes, rash, joint pain, body ache, nausea, loss of appetite, feeling tired, abdominal pain	Severe bleeding, seizures, shock, damage to the liver, heart, an lungs, death