Integrated School Health Programme

School Health Nurse

Resource Manual
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Introduction to the Integrated School Health Program

The Department of Health in collaboration with the Department of Basic Education revised the National School Health Policy in 2011. The Policy is aligned to the Negotiated Service Delivery Agreement (NSDA), 2010 – 2014, the government programme of action for promotion of long and healthy life for all South Africans, as well as the Millennium Development Goals (MDGs).

The revised policy also made way for the comprehensive, Integrated School Health Programme (ISHP) for grade 0 to 12 learners, implemented at sub-district level. This implementation strategy incorporates the principle of equity and human rights with specific consideration to the availability of resources required to cover all learners.

Goal
To contribute to the improvement of the general health of school-going children as well as the environmental conditions in schools and address health barriers to learning.

General Objective
To guide the provision of a comprehensive, integrated School Health Programme that operates within the PHC Package.

Specific Objectives
- To provide preventive and promotive services that address the health needs of school-going children
- To facilitate referral to health and other services where required
- To support the school community in creating health promoting schools.
- To ensure sustainable coordination and multisectoral partnership.
- To mobilize resources for the implementation of the school health policy
### List of ACRONYMS (NB not complete)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>Ante-Natal Care</td>
</tr>
<tr>
<td>ASRHR</td>
<td>Adolescent Sexual and Reproductive Health and Rights</td>
</tr>
<tr>
<td>CTOP</td>
<td>Choice on Termination of Pregnancy</td>
</tr>
<tr>
<td>DBE</td>
<td>Department of Basic Education</td>
</tr>
<tr>
<td>DSD</td>
<td>Department of Social Development</td>
</tr>
<tr>
<td>DOH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>HCT</td>
<td>HIV Counselling and Testing</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HP</td>
<td>Health Promoter</td>
</tr>
<tr>
<td>IL</td>
<td>loveLife</td>
</tr>
<tr>
<td>ISHP</td>
<td>Integrated School Health Policy</td>
</tr>
<tr>
<td>LC</td>
<td>Logistics Coordinator</td>
</tr>
<tr>
<td>LT</td>
<td>Lead Trainer</td>
</tr>
<tr>
<td>KPAs</td>
<td>Key Performance Areas</td>
</tr>
<tr>
<td>ISHP</td>
<td>Integrated School Health Programme</td>
</tr>
<tr>
<td>IUCD</td>
<td>Intrauterine Contraceptive Device</td>
</tr>
<tr>
<td>MC</td>
<td>Male Circumcision</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MMC</td>
<td>Male Medical Circumcision</td>
</tr>
<tr>
<td>NPC</td>
<td>Near Point Conversion</td>
</tr>
<tr>
<td>NSDA</td>
<td>Negotiated Service Delivery Agreement</td>
</tr>
<tr>
<td>RTC</td>
<td>Regional Training Centre</td>
</tr>
<tr>
<td>SHN</td>
<td>School Health Nurses</td>
</tr>
<tr>
<td>SHS</td>
<td>School Health Services</td>
</tr>
<tr>
<td>SA</td>
<td>South Africa</td>
</tr>
<tr>
<td>STIs</td>
<td>Sexually Transmitted Infections</td>
</tr>
<tr>
<td>STH</td>
<td>Soil Transmitted Helminth</td>
</tr>
<tr>
<td>SRH</td>
<td>Sexual and Reproductive Health</td>
</tr>
<tr>
<td>TC</td>
<td>Traditional Circumcision</td>
</tr>
<tr>
<td>TS</td>
<td>Trainer Support</td>
</tr>
<tr>
<td>TOP</td>
<td>Termination of Pregnancy</td>
</tr>
<tr>
<td>YFHS</td>
<td>Youth Friendly Health Services</td>
</tr>
<tr>
<td>YFS</td>
<td>Youth Friendly Services</td>
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SECTION 1:

ISHP HEALTH SERVICES PACKAGE
## ISHP HEALTH SERVICES PACKAGE

<table>
<thead>
<tr>
<th>Schooling Phases</th>
<th>Learner Assessments: Health Screening</th>
<th>On-site Services</th>
<th>Health Education</th>
</tr>
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<tbody>
<tr>
<td><strong>Foundation phase</strong></td>
<td>● Nutritional assessment</td>
<td>● Deworming (incl bilharzia and malaria control where appropriate)</td>
<td>● Hand washing</td>
</tr>
<tr>
<td>(Gr R-3)</td>
<td>● Physical assessment (Gross &amp; fine motor)</td>
<td>● Immunisation Td</td>
<td>● Personal &amp; environmental hygiene</td>
</tr>
<tr>
<td><strong>GRADE 1</strong></td>
<td>● Vision</td>
<td>● Oral health (where available)</td>
<td>● Nutrition</td>
</tr>
<tr>
<td></td>
<td>● Oral health</td>
<td>● Minor ailments</td>
<td>● Tuberculosis</td>
</tr>
<tr>
<td></td>
<td>● Hearing</td>
<td></td>
<td>● Road safety</td>
</tr>
<tr>
<td></td>
<td>● Speech</td>
<td></td>
<td>● Poisoning</td>
</tr>
<tr>
<td></td>
<td>● Chronic Illnesses (Long term health conditions)</td>
<td></td>
<td>● Know your body</td>
</tr>
<tr>
<td></td>
<td>● TB screen</td>
<td></td>
<td>● Abuse (sexual, physical and emotional abuse)</td>
</tr>
<tr>
<td></td>
<td>● Psychosocial Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mental Health</td>
<td></td>
<td></td>
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<tr>
<td><strong>Intermediate phase</strong></td>
<td></td>
<td></td>
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<tr>
<td>(Gr 4-6)</td>
<td>● Nutritional assessment</td>
<td>● Deworming</td>
<td>● Personal &amp; environmental hygiene</td>
</tr>
<tr>
<td><strong>GRADE 4</strong></td>
<td>● Physical assessment (Gross &amp; fine motor)</td>
<td>● Minor ailments</td>
<td>● Nutrition</td>
</tr>
<tr>
<td></td>
<td>● Vision</td>
<td>● Counselling and referral for sexual and reproductive health as needed</td>
<td>● Tuberculosis</td>
</tr>
<tr>
<td></td>
<td>● Oral health</td>
<td></td>
<td>● Medical and Traditional Male circumcision</td>
</tr>
<tr>
<td></td>
<td>● Hearing</td>
<td></td>
<td>● Abuse (sexual, physical and emotional abuse including bullying, violence)</td>
</tr>
<tr>
<td></td>
<td>● Speech</td>
<td></td>
<td>● Puberty (e.g., physical and emotional changes, menstruation &amp; teenage pregnancy)</td>
</tr>
<tr>
<td></td>
<td>● Chronic Illnesses (LTHC)</td>
<td></td>
<td>● Drug &amp; substance abuse</td>
</tr>
<tr>
<td></td>
<td>● TB screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Psychosocial Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mental Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schooling Phases</td>
<td>Learner Assessments: Health Screening</td>
<td>On-site Services</td>
<td>Health Education</td>
</tr>
<tr>
<td>------------------</td>
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<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Senior phase (Gr 7-9)</strong></td>
<td>Nutritional assessment • Vision • Oral health • Ear examination • (Hearing) • (Speech) • Chronic Illnesses (LTHC) • TB screen • Anaemia screen • Psychosocial Support • Mental Health • Physical assessment (including anaemia)</td>
<td>Immunisation (Td) • Minor ailments • Counselling and referral for sexual and reproductive health as needed</td>
<td>Nutrition • Personal &amp; environmental hygiene • Tuberculosis • Abuse (sexual, physical and emotional abuse, incl bullying and violence) • Sexual &amp; reproductive health o Menstruation o Contraception o STIs incl. HIV o MMC &amp; Traditional o Teenage pregnancy, CTOP, PMTCT o HCT &amp; stigma mitigation • Drug and substance abuse • Suicide</td>
</tr>
<tr>
<td><strong>GRADE 8</strong></td>
<td>• Nutritional assessment • Vision • Oral health • Ear examination • (Hearing) • (Speech) • Chronic Illnesses (LTHC) • TB screen • Anaemia screen • Psychosocial Support • Mental Health • Physical assessment (including anaemia)</td>
<td>Minor ailments • Counselling and referral for sexual and reproductive health as needed</td>
<td>• Personal &amp; environmental hygiene • Nutrition • Tuberculosis • Abuse (sexual, physical and emotional abuse including bullying, violence) • Sexual &amp; reproductive health o Menstruation o Contraception o STIs incl. HIV o MMC &amp; Traditional o Teenage pregnancy, CTOP, PMTCT o HCT &amp; stigma mitigation • Drug and substance abuse • Suicide</td>
</tr>
<tr>
<td><strong>FET (Gr 10-12)</strong></td>
<td>Nutritional assessment • Vision • Oral health • Ear examination • (Hearing) • (Speech) • Chronic Illnesses (LTHC) • TB screen • Anaemia screen • Psychosocial Support • Mental Health • Physical assessment (including anaemia)</td>
<td>Minor ailments • Counselling and referral for sexual and reproductive health as needed</td>
<td>Personal &amp; environmental hygiene • Nutrition • Tuberculosis • Abuse (sexual, physical and emotional abuse including bullying, violence) • Sexual &amp; reproductive health o Menstruation o Contraception o STIs incl. HIV o MMC &amp; Traditional o Teenage pregnancy, CTOP, PMTCT o HCT &amp; stigma mitigation • Drug and substance abuse • Suicide</td>
</tr>
</tbody>
</table>
• **Note:** An environmental assessment to be conducted in all schools:
  o First aid kit
  o Sick bay
  o Water & sanitation
  o Cooking area
  o Physical safety
  o Access for disabled learners
  o Ventilation (airborne infections)
SECTION 2:
SCHOOL HEALTH NURSE
MEDICINE, EQUIPMENT AND SUPPLIES
## Requirements for medicines, equipment and supplies

### Medicines

#### On-site services:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Drug</th>
</tr>
</thead>
</table>
| Soil Transmitted Helminth (STH) | Mebendazole  
Albendazole |
| Bilharzia                  | Praziquantel                  |
| Immunisation               | Td vaccination                |
| Dry skin                   | Emulsifying ointment (UE)  
Aqueous cream (UEA)           |
| Impetigo                   | Polyvidone iodine 5%, cream  
Amoxicillin (oral)            |
| Athlete’s Foot             | Imidazole cream e.g. clotrimazole 2% |
| Ring Worm                  | Imidazole cream e.g. clotrimazole 2% |
| Body/hair Lice             | Permethrin rinse               |
| Scabies                    | Benzyl Benzoate 25% lotion  
Sulphur 5% ointment          |
| Common warts               | Podophyllum resin 20%  
Salicylic acid 25% ointment  
Petroleum jelly              |
| General minor ailments     | Zinc and Castor  
Eye Ointment  
- Chloromycetin  
- Terramycin  
Total Sun block (SPF 40+)    |
For all the services, ensure you have the correct SHS forms for recording purposes and the referral forms for further treatment if required.

<table>
<thead>
<tr>
<th>Service</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All services</strong></td>
<td></td>
</tr>
<tr>
<td>General essential equipment</td>
<td>SHS recording forms and referral letters</td>
</tr>
<tr>
<td></td>
<td>Hand gloves</td>
</tr>
<tr>
<td></td>
<td>Wooden Spatula</td>
</tr>
<tr>
<td></td>
<td>Gauze swabs</td>
</tr>
<tr>
<td></td>
<td>Cotton wool swabs</td>
</tr>
<tr>
<td></td>
<td>Hibiscrub</td>
</tr>
<tr>
<td></td>
<td>Webcol swabs</td>
</tr>
<tr>
<td></td>
<td>De-germ</td>
</tr>
<tr>
<td></td>
<td>70% Alcohol</td>
</tr>
<tr>
<td><strong>Learner assessments (screening)</strong></td>
<td></td>
</tr>
<tr>
<td>Anthropometric measurement</td>
<td>Digital weighing Scales</td>
</tr>
<tr>
<td></td>
<td>Stadiometer</td>
</tr>
<tr>
<td></td>
<td>Calculator</td>
</tr>
<tr>
<td></td>
<td>BMI, height for age, weight for age standard charts</td>
</tr>
<tr>
<td>Gross and fine motor</td>
<td>No equipment</td>
</tr>
<tr>
<td>Oral health</td>
<td>Wooden spatula</td>
</tr>
<tr>
<td></td>
<td>ENT set (throat)</td>
</tr>
<tr>
<td>Speech</td>
<td>No equipment</td>
</tr>
<tr>
<td>Vision and external eye examination</td>
<td>Snellens Chart / E chart</td>
</tr>
<tr>
<td></td>
<td>Reading card</td>
</tr>
<tr>
<td></td>
<td>Penlight with a +10.00D lens</td>
</tr>
<tr>
<td></td>
<td>Occluder (eye cover)</td>
</tr>
<tr>
<td>Hearing and external ear examination</td>
<td>Otoscope/ENT set</td>
</tr>
<tr>
<td></td>
<td>Audiometer</td>
</tr>
<tr>
<td>Speech</td>
<td>No equipment</td>
</tr>
<tr>
<td>Chronic Diseases (Long term health Condition)</td>
<td>No equipment</td>
</tr>
<tr>
<td>TB Screen</td>
<td>No equipment</td>
</tr>
<tr>
<td>Psychosocial screening</td>
<td>No equipment</td>
</tr>
<tr>
<td>Mental Health Screening</td>
<td>No equipment</td>
</tr>
<tr>
<td><strong>On-site services</strong></td>
<td></td>
</tr>
<tr>
<td>De-worming</td>
<td></td>
</tr>
<tr>
<td>Immunisation</td>
<td>Vaccine, Syringe and needle:</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td>Td vaccine 10 dose vial</td>
</tr>
<tr>
<td></td>
<td>2ml syringe and needle</td>
</tr>
<tr>
<td></td>
<td>Cotton swab</td>
</tr>
<tr>
<td></td>
<td>Clean water to clean the vaccination site</td>
</tr>
<tr>
<td>Minor ailments</td>
<td>Medications (see above)</td>
</tr>
<tr>
<td>Sexual and Reproductive health</td>
<td>TBC</td>
</tr>
<tr>
<td></td>
<td>Male and female condoms as examples for discussion</td>
</tr>
<tr>
<td></td>
<td>Leaflet about usage condoms TBC</td>
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<tr>
<td></td>
<td>Sanitary towels</td>
</tr>
<tr>
<td></td>
<td>Tampons</td>
</tr>
<tr>
<td>Anaemia Screen (Haemoglobin test)</td>
<td>Haemoglobinometer</td>
</tr>
<tr>
<td></td>
<td>Lancet device for pricking finger</td>
</tr>
<tr>
<td></td>
<td>Cotton wool</td>
</tr>
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<td></td>
<td>Anti-septic</td>
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</tbody>
</table>
SECTION 3:

GENERAL GUIDELINES

FOR THE SCHOOL HEALTH NURSE
SECTION 3: General Guidelines for the School Nurse to conduct School Health Screening

i. District plans and visiting a School

A. PREPARATION AND PLANNING

Adequate planning and preparation are essential to ensure that visits to schools run smoothly and that high quality services are provided to all targeted learners.

1. Establish a Provincial Health Forum

Members of the forum will include Provincial Coordinators of DBE, DSD and DOH, District Coordinators, health specialists, NGOs, CBOs and partners (e.g. Spec Savers)

Tasks of the forum will include:

- Clarifying roles and responsibilities of the respective Departments and partners;
- Clarifying objectives, Health Services Package and yearly targets;
- Conducting a needs analysis regarding equipment, medication and services; and
- Addressing challenges regarding HR, shortage of equipment and medication, collaboration, etc.

2. Establish a District Health Forum

Members of the forum will include District Coordinators from the DBE, DOH and DSD, health specialists, NGOs, CBOs and partners (e.g. Spec Savers)

The main duty for the District Health Forum is to develop an annual plan which must be jointly developed by the DBE, DOH, and DSD, and approved by the relevant managers and structures, including the District Based Support Team (DBST). The plans must be clearly communicated to all role-players including the school health teams and the School Based Support Teams (SBSTs).

2.1 Scheduling of visits

These teams need to decide which schools will be screened on which dates. Plotting needs to be done as schools need to be informed of the estimated number of days that school nurses will be working in a particular school and what the needs will be (e.g. a working space, 2 tables and 4 chairs). Challenges need to be reported to the Provincial Task team.

All schools with new school entrants (Grade Rs and/or Grade 1s) should be visited as soon as possible in the school year, so that individual learner assessments and on-site services of the School Health Services (SHS) Package can be provided to these new entrants. This should ideally be completed during the first quarter after which assessments of learner in other targeted grades can be undertaken.
2.2 Services to be provided

The plan should indicate:
- The annual target
- The number of schools to be reached
- The number of targeted learners in that school
- The number of equipment / medication / disposables (e.g. gloves) and services that will be needed
- Which services will be provided at each school and by whom. (All services outlined in the SHS package must be provided, but there will be some variation in terms of how and by whom the services will be provided.)

It is envisaged that in the future more services will be provided on-site, and this should be encouraged. For example, the current package includes screening for problems with vision. In most cases it is assumed that learners identified as having problems with vision will be referred for further assessment and management. However, in an ideal situation these services would be provided on-site by an optometrist, and where possible this approach should be encouraged.

The options for providing services are therefore:

1. The full designated package of services are provided by the SHN
2. Other DOH services come to the school to support SHN visits eg oral hygienists, optometrists, audiologists

Referral service options (co-ordinated by the SHN):
1. Preferred option: Specialised mobile services for School health Services
2. Referral to the local PHC facility
3. Other service providers on a regular or intermittent basis (e.g. Phelophepha, optometry services, NGOs).

In the latter two cases, whilst the School Health nurse does not provide the services directly, she retains responsibility for co-ordinating the services, and liaising with the school.

2.3 Targets

In addition to the routine learner assessments and on-site services for Grade R/1, 4, 8, 10 learners, learners who are repeating a grade should also be assessed and provided with on-site services. Learners may also be referred by an educator, their parent/carer or even a self-referral.

Learners who are referred due to poor school performance should be fully assessed. Learners referred for a specific problem e.g. a skin condition do not require full assessment. However the nutritional status of all learners should always be assessed.
2.4 Referral and follow-up services

Available health and other services must be mapped, and the district plan must include clear guidelines regarding referral and follow-up of learners where this is required. School Health nurses must be aware of the available referral services within the district (and beyond) so that appropriate referrals can be made.

3. Preparing for a visit to a school

Every school must have a designated person who is responsible for liaising with the school health nurse. This will usually be the Life Orientation teacher, but may be another member of the SBST as delegated by the School Management Team.

The following issues must be agreed upon and necessary preparations made:

3.1 Scheduling of learner assessments

In the past, screening (especially of Grade R and 1 learners) has been done en masse with little or no privacy and with suspension of teaching activities. This approach is not acceptable when assessing learners in particular those in later educational phases - both because privacy and confidentiality become critical, and because interruption of teaching and learning time needs to be avoided as much as possible. The Provincial Department of Education must guide on the appropriate times during which learners in Grade 2 and above can be screened.

It is probably most feasible for two learners to be out of the classroom at the same time, with one being seen by the nurse and one learner waiting outside. When the first learner has been seen, he or she can return to the classroom and send the next learner to wait whilst the learner who was waiting is seen. En masse assessment may still be used for Foundation Phase learners, especially when girls and boys are seen separately. Even here individual assessments are encouraged.

Parents and caregivers will be welcomed to attend assessments of their children, and must be accommodated.

Arrangements will also need to be made to accommodate learners who are repeating grades, or who have been identified by educators, by caregivers or by themselves as requiring assessment.

3.2 Space to conduct assessments in schools

Although it is anticipated that some school health nurses may make use of a mobile clinics, in most cases the Provincial and district DBE will need to assist in identifying a suitable area in which the school health nurse can conduct individual learner assessments. Other needs e.g. the number of chairs and tables or a quiet space for hearing screening must be discussed and arrange in advance.
It should be noted that ensuring of privacy and confidentiality are of utmost importance, and that the Provincial and district DBE and DOH must take this into account when deciding how and where the school health nurse should be accommodated.

3.3 Information to parents/caregivers

The DBE District Coordinator and school health coordinator are responsible for ensuring that the School Governing Body (SGB) as well as parents /guardians /caregivers are informed about the school health programme. The school together with the SGB will need to decide whether it is sufficient to send out the parent information leaflets (which should be available in the local language/s) or whether additional activities (such as a parent meeting) should be arranged. Organising a parent meeting to discuss the health services package and the importance of participation in the programme is recommended to ensure that informed consent is obtained. It may also be possible to inform parents during other meetings or activities at the school (e.g. parents of new school entrants could be informed at registration that the school health programme will be visiting the school in order to assess new learners). Where requested by the SGB, the nurse should attend any preparatory meetings with parents in order to answer questions and deal with any concerns.

3.4 Information to learners

The class teacher must make every effort to inform and prepare learners for the visit. This includes informing learners about what screening will be done and highlighting the importance of their participation especially for older learners who are required to provide assent for participation.

3.5 Completion of assent and consent forms

The District Coordinator/principal school is responsible for ensuring that the consent and assent forms are distributed at least one week before the nurse’s visit to the school, and are collected and made available to the school nurse. These forms should also be available in local languages.

The forms which need to be completed depend on the age of the learner and are as follows:

- Parents / guardians / caregivers for learners younger than 18 years need to sign the consent form.
  - Learners younger than 12 years old who do not have a signed consent form should not be assessed or provided with any services.
- Learners between 12 and 18 years of age:
  - Learners whose parent/guardian/care-giver has signed the consent form, should be requested to sign an assent form. Learners who did not sign an assent form should not be assessed or provided with services.
  - Learners who do not have a completed consent form but request that they receive the services should be given the option of signing their own consent form. They may then be provided with the services. These learners must be
counselling on the importance of gaining the support of their parents should there be any further assessment or treatment required

- Learners above 18 years should sign their own consent form. Learners who do not wish to sign a consent form, should not be assessed or provided with services.

In addition, parents are requested to provide an original Road to Health Chart for learners younger than 12 years so immunization and other interventions can be recorded.

3.6 Equipment and supplies

The required equipment and supplies are outlined in section 1 of the School Nurse Resource Manual. It is critical that there is liaison between the school and the nurse in order to ensure that all the necessary equipment and supplies (including stationery and forms) are available during the visit. The DBE has purchased scales, stadiometers and Snellens charts. This must be made available for the screening through the joint task team.

3.7 Preparation for documentation for screening

All necessary forms need to be duplicated and available.

3.8 Involvement of DBE

Class teachers need to be present when learners are screened en mass and when learners receive health education. The teacher’s presence serves as security for younger learners. They can also control the learners, direct the flow of learners, assist with registration of learners and identify learners that experience challenges. Additional members of DBE (such as a parent or member of the DBST) may also provide assistance by weighing or measuring heights of learners.

B. CONDUCTING LEARNER ASSESSMENTS

The following points should be noted:

- Every effort should be made to ensure that services are provided in a child and youth friendly way.
- As outlined above, learner assessments should ideally be conducted individually and in a way which guarantees privacy and confidentiality. This is particularly important if sensitive matters such as sexual and reproductive health issues or issues related to abuse are being discussed.
- The assessments should be done as outlined in the guidelines using the appropriate recording form to record the information. The consent and/or assent form should be stapled to the assessment form.
- Every effort should be made to build rapport with each learner and to explain to them what is being done and why. Each learner should be given the opportunity to ask any questions or raise any concerns which they have.
- Once the assessment is complete, the nurse should complete the various forms including the referral form if a referral is necessary.

- The SHS recording forms should initially be kept by the nurse, but should be handed to the principal at the end of each day. The principal is then responsible for ensuring that the learner assessment forms are filed in each Learner’s Profile. Standard procedures regarding maintenance of confidentiality around learner profiles (as prescribed by the DBE) should be followed.

- Ensuring that learners who are referred receive appropriate care is a joint responsibility shared by the nurse and the school. The school health nurse will retain a copy of the list of learners who require referral and/or follow-up, and should also leave a copy with the school principal. It is the school’s responsibility to ensure that the learner’s parent/guardian/caregiver is notified that the learner needs some health intervention. If the learner has not received the service, the SBST needs to provide assistance or collaborate with other stake-holders to ensure that the learner receives the necessary health services.
SECTION 3: General Guidelines for the School Health Nurse

ii. Guidelines for completion of ISHP SHS forms

Please see the Integrated School Health Programme (ISHP) Monitoring and Evaluation document for more information. This guideline aims to provide a quick reference to school health nurses with regards to completion and disposal of the various data collection tools. The ISHP SHS forms are found in Appendix III (TBA) these tools are shown in the table below:

<table>
<thead>
<tr>
<th>Data Collection tools</th>
<th>Identification code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent and learner information leaflet</td>
<td>SHS 1a and 1b</td>
</tr>
<tr>
<td>ISHP consent form</td>
<td>SHS 1c</td>
</tr>
<tr>
<td>ISHP assent form</td>
<td>SHS 1d</td>
</tr>
<tr>
<td>Referral letter to parent /guardian</td>
<td>SHS 2</td>
</tr>
<tr>
<td>Referral letter to clinic / private health care provider</td>
<td>SHS 3</td>
</tr>
<tr>
<td>Follow up assessment form</td>
<td>SHS 4</td>
</tr>
<tr>
<td>Learner assessment form: Foundation and Intermediate Phases</td>
<td>SHS 5a</td>
</tr>
<tr>
<td>Learner assessment form: Senior Phase and FET Band</td>
<td>SHS 5b</td>
</tr>
<tr>
<td>ISHP Health Education Data Collection Tools</td>
<td>SHS 6</td>
</tr>
<tr>
<td>ISHP daily register: Foundation and Intermediate Phases</td>
<td>SHS 7a</td>
</tr>
<tr>
<td>ISHP daily register: Senior Phase and FET Band</td>
<td>SHS 7b</td>
</tr>
<tr>
<td>Record of learners referred for further assessment or management</td>
<td>SHS 8</td>
</tr>
<tr>
<td>ISHP District Monthly Summary Report Sheet</td>
<td>SHS 9</td>
</tr>
<tr>
<td>ISHP Provincial Monthly Summary Report Sheet</td>
<td>SHS 10</td>
</tr>
</tbody>
</table>

Parent and learner information leaflet (1a and 1b)

These provide information to parents and learners regarding the ISHP. They should be available in all official languages. The DBST and SBST are responsible for ensuring that these leaflets are distributed to parents (together with consent forms) and learners in preparation for provision of ISHP services.

ISHP assent and consent forms (1c and 1d)
The District Coordinator/principal of a school is responsible for ensuring that the consent and assent forms are available and are distributed at least one week before the nurse’s visit to the school. They should also ensure that the forms are collected and made available to the school nurse. Parents of learners 12 years old and younger must be reminded to make the learner’s original Road to Health chart also available.

The forms which need to be completed depend on the age of the learner and are as follows:
- Parents / guardians / caregivers for learners younger than 18 years need to sign the consent form.
  o Learners younger than 12 years old who do not have a signed consent form should not be assessed or provided with any services.
- Learners between 12 and 18 years of age:
  o Learners whose parent/guardian/care-giver has signed the consent form, should be requested to sign an assent form. Learners who did not sign an assent form should not be assessed or provided with services.
  o Learners who do not have a completed consent form but request that they receive the services should be given the option of signing their own consent form. They may then be provided with the services, but must be counselled on the importance of gaining the support of their parents should there be any further assessment or treatment required
- Learners above 18 years should sign their own consent form. Learners who do not wish to sign a consent form, should not be assessed or provided with services.

Each learner’s consent and/or assent form should be stapled to their assessment form from that visit, and filed in the Learner’s Profile.

Referral letter to parent /guardian and to service (SHS 2, 3,4)

Where learners require referral, SHS 2 and SHS3 forms should be completed. SHS 2 is to inform the parent / guardian / caregiver that the learner requires a service that cannot be provided at the school. Although learners will most often be referred to a health facility (or private health provider), they may also be referred to other services, such as a social worker.

The referral form SHS 3 should be completed with care. Information that may harm the learner should not be read by someone other than a health professional, must not be stated on this form. Similarly, the feedback form SHS 4 should be completed with care and attached to the referral letter. The learner should then access the service and present the referral letter and feedback form to the service provider. The service provider should complete the feedback form and give it back to the learner (or parent). The learner should return the feedback form to the school principal. The principal should make a copy of the feedback form. The original should then be filed in the Learner’s Profile whilst the copy should be filed in a file for the attention of the school health nurse at her next visit.
It should be noted that learners may be advised to seek additional services without being officially referred. This applies mostly to older learners with regard to sexual and reproductive health issues. For example, a sexually active learner is advised to access family planning services. Because this is not a “referral” there is no need to fill-in a referral letter or to list the learner in the referral list for the school. This is done to ensure privacy and confidentiality. Furthermore the learner will be able to request the services at the facility, so no referral is required.

However if the learner requests a referral letter either to the service or to the parent/guardian, he/she should be provided with the completed forms.

Learner Assessment Forms (5a and 5b)

The forms aim to provide both a guide to assist the nurse in her assessment and as a recording form. The assessment as well as an action taken should be recorded.

There are two forms, namely:
- Learner assessment form: Foundation and Intermediate Phases (SHS5a)
- Learner assessment form: Senior Phase and FET Band (SHS5b)

NOTE: Any information that may harm a learner (e.g. issues regarding the sexual and reproductive health of learners, their HIV status or that the learner was sexually abused) must not be noted on the assessment forms. This information is considered particularly sensitive and confidential. Where there is a need to record this information, it must be kept on file at the health clinic, social worker’s file or on a file of the District Based Support Team.

At the end of the consultations of the day, the nurse should hand all the assessment forms (SHS5a and SHS5b) to the principal. The principal is then responsible for ensuring that the recording forms are filed in each Learner’s Profile. Standard procedures regarding maintenance of confidentiality around learner files should be followed.

Completion of daily registers (SHS 7a and 7b)

Information on each learner seen should be recorded in the daily register. This serves as a record of all learners seen, but also facilitates collection and collation of data which will need to be forwarded to the PHC facility at the end of each month. The register is retained by the school health nurse as her record of all the learners who have been seen.

There are two daily registers namely:
- ISHP daily register: Foundation and Intermediate Phases (SHS 7a)
- ISHP daily register: Senior Phase and FET Band (SHS 7b)

The learner’s name and surname are recorded in the second column, and other relevant boxes are ticked (or left empty). Any treatment given must be recorded in the final column (for legal purposes). When the sheet is full, the totals can be tallied in the last row. This will facilitate collation of data at the end of the month.

List of learners who have been referred (SHS 8)
The school health nurse will retain a copy of the list of learners who require referral and/or follow-up, and should also leave a copy with the school principal. It is the school’s responsibility to ensure that the learner’s parent/guardian/caregiver is notified that the learner needs some health intervention. If the learner has not received the service, the SBST needs to provide assistance or collaborate with other stake-holders to ensure that the learner receives the necessary health services.

**ISHP Monthly Summary Report Sheet (SHS 9)**

This form should be completed by each school health nurse at the end of the month and submit to the PHC facility to which she is linked. The PHC facility manager is responsible for checking the information and for ensuring that it is processed with the rest of the facility DHIS data.

**ISHP District and Provincial Monthly Summary Report Sheets (SHS 10 and 11)**

These forms are used by the School Health co-ordinators to report on provision of all ISHP services in the district and the province.
iii. Checklist for environmental assessment

The checklist below is copied from the Health Promoting Schools (HPS) Implementation Guidelines, and is used by the HPS process for assessment of the school environment. In the future, it is likely that the ISHP will develop its own tool for environmental assessment. However for now, it is recommended that the HPS one is used.

The checklist is completed by ticking one of the columns based on the assessment.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
<td>Not Good Enough</td>
<td>Good</td>
<td>V. Good</td>
</tr>
</tbody>
</table>

**ENVIRONMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the environment safe and supportive?</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Is the classroom a healthy learning environment?</td>
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<tr>
<td>3</td>
<td>Is there adequate furniture?</td>
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<td></td>
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</tr>
<tr>
<td>4</td>
<td>Is there adequate space?</td>
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</tr>
<tr>
<td>5</td>
<td>Is there artificial/or natural ventilation?</td>
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<tr>
<td>6</td>
<td>Is there artificial/or natural lighting?</td>
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<tr>
<td>7</td>
<td>Cleanliness of classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Windows, floors, doors status.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Are classroom rules clearly displayed?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>Do the health messages form part of the curriculum content?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Sanitation/toilets conditions and number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Water supply and safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Refuse disposal: type/bins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Recycling programme in place?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>General safety and security+</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Kitchen</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Gas cylinder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fire extinguisher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tuck shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Fencing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Road safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Play ground conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Food and flower gardens in place</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Trees - availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**FIRST AID CHECKLIST**

The following questions should be used when assessing the availability and use of the first aid kit.

<table>
<thead>
<tr>
<th>FIRST AID KIT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does the school have a first aid kit?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Does the kit include a checklist which lists the equipment which it should contain?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Are there clear procedures in place which ensure that the kit is used appropriately?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Is there a procedure for replacing items that have been used? (including a responsible person)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4:
PROCEDURAL GUIDELINES FOR
INDIVIDUAL LEARNER ASSESSMENTS

I. Learner Assessment (screening)
II. On-site services
III. Health Education Messages
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

a) Nutritional Assessment

Recommended Schedule

Nutritional assessment should be undertaken for all learners during each learning phase for all grades assessed (i.e. 1, 4, 8, 10). It should also be routine for every learner that is self-referred, or referred by the teacher or parent.

Equipment

Digital weighing Scales (ideal if available, otherwise non-digital)
Disinfectant wipes for scale surface
Stadiometer
Calculator (can use BMI wheel, but check accuracy)
WHO standard reference chart booklet for height for age, weight for age, BMI for age

NB specifications and calibration instructions for weighing scales and stadiometers can be found in the Additional Details for Nutritional Assessment of learners Appendix I page 129.

Procedure for Nutritional assessment

There are 4 steps:

- STEP 1: Measure weight and height and calculate BMI
- STEP 2: Use WHO standard reference growth charts to determine the “SD” (or z-score) of the child’s measurements
- STEP 3: Categorise the nutritional status of the child
- STEP 4: Decide what action to take.

STEP 1: Measure weight and height and calculate BMI

1. Procedure for weighing

- Be sure that the scale is placed on a flat, hard, even surface. If using solar powered scales, there must be enough light to operate.
- Children should be weighed with minimal clothing. If it is socially unacceptable to undress the child, remove as much clothing as possible. Shoes should be taken off. Socks can be left on, or if removed use disinfectant wipes to clean the scale.
- Ensure that the scale is set to “zero” before the child stands on them.
- Ask the child to stand in the middle of the scale, feet slightly apart (on the “Footprints”, if marked), and to remain still until the weight appears on the display.
• Record the child’s weight to the nearest 0.1 kg (if using digital scales, otherwise may not be possible to be this accurate).

2. **Procedure for measuring height**

• Ensure that the height board is on level ground. Check that shoes and hair ornaments have been removed.
• Help the child to stand on the baseboard with feet slightly apart. The back of the head, shoulder blades, buttocks, calves, and heels should all touch the vertical board.
• The legs should be straight and the feet flat, with heels and calves touching the vertical board.
• Position the child’s head so that a horizontal line from the ear canal to the lower border of the eye socket runs parallel to the base board. To keep the head in this position, hold the bridge between your thumb and forefinger over the child’s chin.
• If necessary, push gently on the tummy to help the child stand to full height.
• Still keeping the head in position use your other hand to pull down the headboard/headpiece to rest firmly on top of the head and compress the hair.
• Read the measurement and record the child’s height in centimetres to the last completed 0.1 cm (1mm). This is the last line that you can actually see.

3. **Procedure for calculating BMI:**

• Calculate the BMI for children over 10 years of age only, unless the weight for age of a child less than 10 is < -2SD or > +2SD (see determination of SD later).

• The BMI is calculated according to the following formula:

\[
\text{BMI} = \frac{\text{Weight in kg}}{(\text{Height in metres})^2}
\]

OR

\[
\text{BMI} = \frac{\text{Weight in kg}}{(\text{Height in metres}) \times (\text{height in metres})}
\]

**An example of BMI calculation:**

Weight = 21kg  
Height = 115cm (or 1.15m)

\[
\text{BMI} = \frac{21}{(1.15)^2}
\]

OR.....

\[
\text{BMI} = \frac{21}{1.15 \times 1.15}
\]

\[
\text{BMI} = \frac{21}{1.3225}
\]

\[
\text{BMI} = 15.9
\]
NB for BMI calculation the height must be in metres, to 2 decimal places, as per example above, and do not round off ht² (as shown in illustration).

Record the child’s height (in cm, to nearest 0.1cm), weight (in kg, to nearest 0.1kg) and Body Mass Index (BMI, to nearest 0.1) on the learner assessment recording form (SHS 5a/5b).

**STEP 2: Use WHO standard reference growth charts to determine the “SD” of the child’s measurements**

The SD is the “standard deviation”, i.e. the extent to which a measurement varies from the average of the population (i.e. for height, weight or BMI).

NB. On the WHO standard reference charts, the SD is also referred to as the Z score, and the “median” is the average measurement.

The WHO standard reference charts are found in a separate booklet, and an example of a reference chart is found in Appendix I (page 129).

There are 3 sets of WHO standard reference charts required for each sex.

- **Weight for age:** 5 to 10 years
- **Height for age:** 5 to 19 years
- **BMI for age:** 5 to 19 years

For Children <10 years old use the following charts:

- Weight for age
- Height for age
- If the weight is < -2SD or > + 2SD, also use BMI for age

For children > 10 years old use the following charts:

- Height for age
- BMI for age

**An example of comparison to the growth charts:**

- Thato is an 8½ year old boy
- Weight = 21kg
- Height = 115cm (or 1.15m)
  - Weight for age = between -1 SD and -2 SD
  - Height for age = Between -2 and -3 SD
  - BMI for age: not used as <10 years old
STEP 3: Categorise the nutritional status of the child

<table>
<thead>
<tr>
<th>SD</th>
<th>Height for age</th>
<th>Weight for age</th>
<th>BMI for age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 3 SD</td>
<td>Child very tall - rarely endocrine disorder</td>
<td>Assess BMI for age</td>
<td>Obese</td>
</tr>
<tr>
<td>Between 2 and 3 SD</td>
<td>NORMAL</td>
<td>Assess BMI for age</td>
<td>Overweight</td>
</tr>
<tr>
<td>Between 1 and 2 SD</td>
<td>NORMAL</td>
<td>NORMAL</td>
<td>At risk of becoming overweight</td>
</tr>
<tr>
<td>Median (range between 1SD and -1 SD)</td>
<td>NORMAL</td>
<td>NORMAL</td>
<td>NORMAL</td>
</tr>
<tr>
<td>Between -1 SD and -2 SD</td>
<td>NORMAL</td>
<td>NORMAL</td>
<td>NORMAL</td>
</tr>
<tr>
<td>Between -2 SD and -3 SD</td>
<td>Stunted</td>
<td>Underweight (assess BMI for age)</td>
<td>Wasted</td>
</tr>
<tr>
<td>Below -3 SD</td>
<td>Severely stunted</td>
<td>Severely underweight</td>
<td>Severely wasted</td>
</tr>
</tbody>
</table>

If the weight, height or BMI fall directly upon the SD, you must still consider the range. For example,

- A girl of 5 years and 6 months is 14.6kg, which falls directly onto the -2SD. Take the range as between -2SD and -3SD = Underweight
- A boy of 5 years 11 months is 120.4cm tall, which falls directly onto the +1SD, take the range as between 1SD and 2SD = Normal

An example of nutritional status categorisation for Thato:

- Weight for age: NORMAL
- Height for age: STUNTED
- Record on SHS 5a as STUNTED

NB Record the nutritional status on the learner assessment recording form (SHS 5a/5b).

You will only record “Normal” if all parameters are normal. In this case record Thato as “stunted”.

STEP 4: Decide the action to be taken using the following guidelines

- Children with wasting, severe wasting, severely underweight or severe stunting should be referred for further assessment (unless there is an obvious cause which has already been addressed e.g. an HIV-infected child who is now on ART).
- Ensure that children who are underweight, or stunted are enrolled in the school’s nutrition programme (if available). Ensure follow up to review nutritional status.
• Children who are at risk of overweight or overweight should receive counselling regarding diet and exercise. In younger learners the counselling should target the learner and the caregiver. In older learners, the counselling should target the learner.
• Learners with obesity should be referred for further assessment, counselling and advice.

Example of action for Thato

Thato is stunted, though his weight for age is normal. This means that he has possibly experienced some degree of long term nutritional deprivation previously to cause faltering of growth and therefore his height deficit OR he may also have a long term health condition (i.e. a chronic illness) that has affected his growth.

The SHN should ensure that he is enrolled in the Schools Nutrition programme and also ensure that he does not have a long term health condition that may have been unrecorded.

Thato should also be followed up next time the SHN visits the school to ensure he is eating properly and to do a repeat nutritional assessment.

Further information

See Appendix I (page 129) for detailed guidelines on anthropometric measurements in children.
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

b) Physical Assessment: Gross and Fine Motor assessments

Recommended schedule

Assessment of fine and gross motor functions should be routine for Grade 1 and 4 learners

GENERAL ASSESSMENT

Physical assessment of the Learner mainly encompasses fine and gross motor function. A “head to toe” examination is not required as part of the assessment. However during your overall assessment of the Learner, you may identify other physical abnormalities eg in facial, neck, upper and lower limbs, back etc. These should be recorded, and if a full physical assessment is required, you must decide if you are comfortable doing this or whether you should refer the child. Any abnormalities detected can also be discussed with the educator and parent/care giver as this maybe a long standing problem already identified.

MOTOR ASSESSMENT

Purpose: To identify learners with gross and fine motor problems.

GROSS MOTOR

• Ask the child to hop on the right and then the left leg.
• A child of 6 years, should be able to hop five times on each leg. A child of 9 - 10 years should be able to hop 10 times on each leg.
• Children who are unable to hop at all, should be referred.
• If the child is able to hop on each leg, but fewer than the required times, you will need to decide whether to refer the child (or to follow-up).

FINE MOTOR

• Ask the child to touch each of their fingers one by one with their thumb. Do this first for the right hand and then the left hand.
• Children who struggle with this action, may have fine motor problems which will benefit from intervention, such as occupational or physiotherapy. It may be valuable to discuss the learner with the educator, as learners with fine motor problems often struggle with tasks such as handwriting, tying shoes laces etc. If the learner has poor handwriting which is interfering with his/her learning, the child should be referred for further assessment and intervention.
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

c) Vision Screening

1. Recommended Schedule for vision screening

   I. Children entering school: all children should be screened within the 1st year of entering primary school (Grade 1) and again in Grade 4.
   II. Grade 8: All children should be screened after 8 years in full time education (typically at age 13 to 14)
   III. Grade 8: to be tested for near point convergence
   IV. All ages of school children, in any grade, with suspected visual difficulties

2. Standard Equipment

   • Penlight (with a +10.00D lens if possible)
   • 6M Snellens Chart: Letters or E chart
   • Reading card
   • Occluder (eye cover)
   • Measuring tape

3. Preparation for screening

   i. Establish whether the child’s care giver has consented for the services.
   ii. Introduce yourself to the learner.
   iii. Explain the procedure to the child
   iv. NB if the learner wears glasses, they must wear them for the visual acuity screening test.

4. Test environment

   • Well lit area
   • Space for a 6m distance testing (measured with a tape)

5. Procedure for screening:

   Screening eyes and vision is a 3 stage procedure
   i. External eye examination
   ii. Visual acuity
   iii. Near point convergence (only for grade 8 upwards)
   i. External examination: Penlight examination (with a +10.00D lens.)
STEP 1: The school health nurse must begin with a general examination of all the external structures of the eye and any deviation from the normal must be recorded.

Look for the following symptoms:
- Discharge
- Redness
- Squint
- Refractive error

STEP 2: If any of these are present, then do full examination, the following guide will help identification:

<table>
<thead>
<tr>
<th>Part of eye</th>
<th>Examinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyelashes</td>
<td>Check that the eyelids are turning outwards, and form a full row along the margin of the eyelids</td>
</tr>
<tr>
<td>Conjunctiva</td>
<td>The part of the conjunctiva that covers the sclera (bulbar conjunctiva) must have normal vessels and have a glossy appearance. Note the size and position of any abnormal discoloration and whether there are any raised portions or not</td>
</tr>
<tr>
<td>Sclera</td>
<td>The sclera should be examined for any dark pigmentation. The size, colour and elevations must be noted</td>
</tr>
<tr>
<td>Cornea</td>
<td>Check that the cornea is transparent and record any opacities by location and size. Ensure that the cornea is not dull as this may indicated Vitamin A deficiency.</td>
</tr>
<tr>
<td>Pupil</td>
<td>Shine the light through the pupil, ensuring that the pupil constricts when the light is shone through and dilates when the light is removed</td>
</tr>
<tr>
<td>Caruncle</td>
<td>Examine the caruncle area for any abnormal growths or hair follicles</td>
</tr>
</tbody>
</table>

ii. **Determining visual acuities (using the Snellen Chart)**

**STEP 1: Distance**
- Measure with a tape a 6m distance between the child and the Snellen chart
- Ensure that the room lights are on or the area used has sufficient daylight coming in
- Ensure there is no glare coming off the chart to affect the child’s vision
- Cover one eye with the occlude or ask the child to use her/his hand without exerting any pressure on the covered eye itself (ensure the eye is totally covered and that the child is not “peeping out” through a gap)
- Instruct the child to read the letters from the larger to the smaller ones on the Snellen chart. If the child is unable to read letters, then use the E chart and instruct the child to let you know in which direction the “arms of the E” are pointing
• Record the distance at which the child can read the chart over the smallest row read
  o eg at 6m the patient read the row labelled 9, and could not manage to read any further, then you would record it as 6/9.
  o If however the child read the 2 letters on the 9 row incorrectly, then record V/A as 6/9²
  o If you had to test the child at 3m, record the V/A in this case as 3/9

STEP 2: Near vision

• Ask the child to hold the reading card at normal working distance and record the smallest row that the child is able to read

iii. Near Point Convergence NB This test is generally for Grade 8 upwards

This is the inability to obtain or maintain sufficient convergence for comfortable binocular vision when looking at close objects.

• Ask the child to read the small letter (N5) on your reading card
• Check whether the letter is clear and proceed to bring the target in closer to the patient until he/she reports that it has doubled.
• You may get the child to look at the dot on a single vertical line. Ask the child to tell you when the line is doubled

6. Referral:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>School-entry</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>External examination</td>
<td>Any deviation from normal</td>
<td>Any deviation from normal</td>
</tr>
<tr>
<td>Distance visual acuity</td>
<td>6/12 or less</td>
<td>6/12 or less</td>
</tr>
<tr>
<td>Near visual acuity</td>
<td>6/9 or less</td>
<td>6/9 or less</td>
</tr>
<tr>
<td>Near point convergence</td>
<td>N/A</td>
<td>6 cm</td>
</tr>
</tbody>
</table>

NB Near Point Convergence: Refer if the child sees the image doubled further than 6cm away from his/her nose. You may notice one eye swing out at the point that the child reports doubling of the image

More information

Refractive errors, screening guideline for school children DOH June 2008
**SECTION 4: Procedural Guidelines for Individual Learner Assessments**

i. **Learner Assessment (screening)**

d) **Oral Health**

**Recommended Schedule**

Oral Health screening should be undertaken for all learners during each learning phase for all Grades assessed (i.e. 1, 4, 8, 10).

**Equipment:** Wooden spatula, ENT set (Otoscope)

**Purpose:**

- To identify children who require treatment for dental caries or other oral conditions.
- To promote good oral hygiene especially regular tooth-brushing

**EXAMINATION**

- Check for dental caries.
- Check for gum disease. Look for bleeding of the gums, and/or gingivitis (inflammation of the gums with separation of the gums from the teeth)
- Check for oral thrush and/or sores in the mouth.
- Look for other abnormalities e.g. cleft palate

**ACTION**

- Learners with gum disease, oral thrush or other significant abnormalities should be referred.
- Small aphthous ulcers do not require any treatment. Learners with large aphthous ulcers or where these have been present for more than two weeks should be referred.
- Where possible, dental therapists should provide services including fissure sealant and filling of teeth at schools. Where this is not possible, children with dental caries will need to be referred to the nearest health facility which provides a dental service.
- Always encourage learners to practice good oral hygiene especially regular tooth-brushing.
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

e) Hearing, language and Speech

Recommended schedule

Hearing, speech and ear examination should be undertaken for all learners in Grade 1. Grade 4 should have an ear examination and speech screening.

Learners in Grade 8 and 10 should have an external ear examination.

If hearing and speech difficulties are suspected in Grade 8 and 10 learners, tests should be performed. However, it does not need to be routine for these Grades.

Hearing, Language and Speech has 3 steps

i. Examination of the outer and middle ear
ii. Assessment of hearing
iii. Assessment of speech

Although screening for language does not form part of routine screening, school health nurses must assist with ensuring that learners who are identified as having language delays are referred to a speech and language therapist for assessment and management.

Standard Equipment

- Otoscope
- Audiometer:

A pure tone audiometer, calibrated to published audiometric standards is required for reliable pure tone audiometric testing i.e. it is the Gold Standard test. Audiometers are delicate electronic devices and can easily be damaged. The audiometer needs routine maintenance and accuracy checks by qualified technicians. All audiometers should be electro-acoustically checked and serviced (returned to the factory if necessary) at least once a year and more often if a malfunction is suspected.

NB a power source is essential for the Audiometer.

STEP 1: Examination of the outer and middle ear

1. Look for any abnormalities of the outer ear
2. Look for and ask the learner if he/she has discharge from the ear (a distinct rotten smell is often present in ears with infected discharge).

3. Using an Otoscope, look at the ear canal and eardrum. Steady the Otoscope with finger against side of head. Do not go deep in ear as this can harm the eardrum. Look for inflammation or perforations of the eardrum. If present, record the size and position of the perforation. Clean the ear price before using again.

4. Large amounts of wax will prevent you seeing the eardrum. Record if wax is present and if the eardrum is obscured.

5. If abnormalities are present, it is wise not to continue with Audiometry until the abnormality has been treated. Refer the child, then follow up and re-test hearing at a later date.

**STEP 2: Assessment of hearing**

This should be done using an audiometer. If no audiometer is available, you will have to rely on other techniques such as whispering some words behind the learner and recording if they hear them. This could include testing the child’s ability to discriminate between similar pairs of words eg. Care/ bear, cat/cap, tin/pin, base/bathe, men/pen (without visual cues). Remember that whilst this will identify learners with profound and severe hearing loss, it will not detect learners with moderate or mild hearing loss. Mild hearing loss is an important barrier to effective learning and socialization – thus every effort should be made to identify and support these learners.

In addition to the primary assessments as noted above, behaviour can be an indicator of hearing loss: children that are constantly fidgeting or seen to be distracted and not paying attention could have unidentified hearing loss.

**The Sweep test: Pure Tone Conduction Testing**

Pure tones are described in terms of pitch or frequency and loudness. Hertz (Hz) equals units that describe frequency. Loudness is measured in decibels (dB).

The **Sweep Test** is the preferred pure tone conduction hearing screening test. It is a screening measure whereby preselected frequencies are presented at predetermined levels, and the learner is asked to give a response each time the tone is heard. The series of frequencies is presented first in the right ear and then in the left. Each learner is tested individually. Time intervals between the presentation of each tone must vary for the screening results to be reliable.

The audiometric equipment should be checked before testing to verify that it is working properly. The test environment should be as quiet as possible. The recommended frequencies for sweep testing include 500, **1000, 2000 and 4000 Hz presented at 20 dB**, using the following steps as procedural guidelines.

---

1. Set (intensity) hearing level dial at 20 db.
2. Set audiometer on "reverse" or "tone off" so that the sound goes through the earphone only when the tester pushes the "tone switch".
3. Learner should be positioned so that the tester’s hand and eye movements cannot be observed.
4. Instruct learner to raise hand when tone is heard; lower hand when tone disappears.
5. Earphones should be placed on the learner by the tester to assure proper fitting so that the earphone is centred over the ear canal. Care should be taken to prevent obstructing the ear canal or folding the ear.
6. Provide a sample tone of loud intensity, such as 2000 Hz at 40 dB, to ensure that learner understands what is meant by the word “tone” and is conditioned to raise his hand when the tone is heard.
7. Provide the learner the opportunity to ask questions.
8. The suggested order of presenting tones is: 1000, 2000 and 4000 Hz.

The learner fails the sweep test if any one of the tested frequencies cannot be heard in one ear at the tested decibel level. Any learner who fails the sweep test should be referred for further assessment.

**STEP 3: General points for assessment of speech and language**

- Speech refers to the learner’s ability to articulate words clearly. Language refers to the learner’s ability to understand (receptive) and use (expressive) language. Both depend on the age of the learner.
- Learners with speech and/or language delays or problems will usually have been identified by educators.
- However during the course of the full learner assessment, you will be able to assess the learner’s speech and will be aware of problems with articulation.
- If the learner has a severe articulation or other speech problem, refer the learner for further assessment. Mild problems in young learners should be noted and followed-up during the following year.
- Assessment of language is not part of the routine assessment of learners by the school health nurse. However, where the educator has identified that the child has a problem with language, the school health nurse should assist with referral to a speech and language therapist for further assessment and management.
- It is particularly important to test hearing in learners with speech and language problems.
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

f) Chronic Illness (Long Term Health Conditions LTHC) + TB Screen

Recommended schedule
Screening for LTHC and TB should be undertaken for all learners during each learning phase for all Grades assessed (i.e. 1, 4, 8, 10). It should also be routine for every learner that is self-referred, or referred by the teacher or parent.

Guidelines

A long term (chronic) health condition of childhood is any condition that has lasted or is virtually certain to last for longer than one year and requires comprehensive and coordinated long term health care.

The term ‘long term health condition’ (LTHC) is used because ‘chronic condition’ may be thought to mean ‘serious’ or ‘bad’ by parents. Important concepts in discussing long term health conditions are:

1. the condition affects the child for enough time to potentially affect the child’s physical or psychological development (more than a year, sometimes for life)
2. the child requires on-going health and/or other services in order to function optimally, and, as a result,
3. the child requires co-ordinated, comprehensive health care.

School health nurses have an important role to play in ensuring that children with LTHC receive the care which they require, and that the potential negative effects associated with the condition are minimised.

Common LTHC in children include, amongst others:

- Asthma
- Epilepsy
- Communicable diseases such as HIV infection and TB
- Genetic conditions such as albinism
- Physical disabilities such as cerebral palsy
- Insulin Dependent Diabetes
- Food allergies

THE ROLE OF SCHOOL HEALTH NURSE
Identify and keep a record of children with LTHC conditions
Some children will be known to have LTHCs
Screening will identify children with LTHCs or possible LTHCs. Because HIV infection and TB are common in South Africa all children should be screened for these conditions.
In some cases, children will be identified through a history given either by the caregiver or teacher (e.g. a history of convulsions)

Ensure that the all children with LTHCs have been assessed and are receiving the treatment and care which they require

- If yes, stress and support the child and his/her family to adhere to the treatment plan.
- If no, refer the child and provide follow-up. Try to understand why the child is not receiving adequate care. Liaise with health professionals and other role-players such as social workers, especially if lack of transport or funds is preventing the child from accessing services.

Try to ensure that the child’s condition does not impact on the child’s ability to learn

- Encourage the caregiver to discuss the child’s condition with the educator
- Make sure that the educator knows what to do in an emergency (e.g. if a child with epilepsy had a fit or a child with diabetes becomes hypoglycaemic)
- Discuss other ways which the educator can support the child and his/her family e.g. the educator giving the child the midday dose of medication (providing that the caregiver gives written permission for the educator to do this).

Tuberculosis Screening

Simply ask the learner the following questions to assess if the symptoms are present, or make a judgement based on your physical assessment:

1. Cough  □ No □ Yes
2. Weight loss  □ No □ Yes
3. Hot body/fever □ No □ Yes
4. Night sweats □ No □ Yes

For more information refer to the following websites/contact details/documents:

http://www.epilepsy.org.za  Albinism society of South Africa (ASSA)
http://www.diabetessa.co.za/  Focus House
http://www.allergysa.org/  86 loveday street, PO Box 9881, Johannesburg
http://www.cerebralpalsy.org.za/  Tel/Fax: 0927 11 838 65 29
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner assessment (screening)

 g) Anaemia Screening and Haemoglobin (Hb) testing

Recommended schedule

Routine anaemia screening should start from Grade 8 learners (or age 12) and during subsequent screening at grade 10. More frequent anaemia screening of learners may occur due to teacher referral or pupil self-referral.

- All girls should have a Haemoglobin test
- Boys should be screened for pallor, and if this is present, then proceed to Hb test

Rationale

Anaemia is a condition characterised by a low haemoglobin level, clinically recognised by pallor. In children, it is commonly caused by:

- Nutritional deficiency of iron and/or folate
- Blood loss (bleeding/haemorrhage) eg caused by parasites, excessive menstruation (very rarely in this age group caused by GI bleeding, ulcers, tumours)
- Chronic systemic diseases
- Anaemia can also be related to HIV infection and a side effect of ARV

Testing of Hb level from Grade 8 (or 12 year olds) onwards can therefore help to identify if anaemia is present, caused by nutritional deficiency, heavy menstruation or the presence of persistent parasites.

Part 1: Examination for pallor:

- Look for pallor in palms and/or conjunctiva.
- Pallor present: Check Hb in boys, or refer both boys and girls if c/o severe pallor and you do not have a Haemoglobinometer
- If mild pallor present and no Haemoglobinometer: see intervention guidelines below. Refer is menorrhagia is present (see below)

Part 2: Procedure for Haemoglobinometer

- All girls
- Boys if pallor

Equipment

- Haemoglobinometer
- Lancet device for pricking finger
- Cotton wool
- Anti-septic
Procedure

1. Clean finger with antiseptic and cotton wool
2. Prick finger with lancet device to obtain blood
3. Instructions according to the make of Haemoglobinometer
4. Obtain reading for Hb level and record reading. The following table gives guidance to where intervention is necessary:

<table>
<thead>
<tr>
<th>Hb less than:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-pregnant female learner</td>
<td>11g/dL</td>
</tr>
<tr>
<td>Pregnant learner</td>
<td>10g/dL</td>
</tr>
<tr>
<td>Males</td>
<td>12g/dL</td>
</tr>
<tr>
<td>Children over 5 years</td>
<td>11g/dL</td>
</tr>
</tbody>
</table>

Intervention

i. Dietary advice
ii. Drug treatment: iron and folate supplements
iii. Question regarding other symptoms
iv. Treat for STH worms
v. Follow up 1 month later to do HB re-testing

i. Dietary advice

- Advise of frequent inclusion of iron and folate containing foods in the diet
  - Liver, eggs
  - Beans, nuts, soya bean, lentils, sugar beans and pulses
  - Green leafy vegetables eg spinach
  - Fortified breakfast cereals
  - Red meats and fish if affordable
  - Avoid alcohol intake

ii. Iron and folate supplements

<table>
<thead>
<tr>
<th>Age range</th>
<th>Iron mg daily</th>
<th>Folate mg daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 7 to 11 years (25 to 35kg)</td>
<td>5mL of Ferrous Gluconate syrup</td>
<td>5mg Folic acid</td>
</tr>
<tr>
<td>≥ 11 years and above (≥ 35kg)</td>
<td>1 tablet of Ferrous Sulphate compound BPC tablets (170mg) ± 65 mg elemental iron</td>
<td>5mg folic acid</td>
</tr>
</tbody>
</table>
iii. Questions regarding potential related problems

- Does the adolescent female have heavy periods i.e. Menorrhagia? Some of the following symptoms could mean Menorrhagia:
  - Her periods have become heavier than usual and are disrupting normal life
  - She feels that she is using an unusually high number of tampons or pads
  - She experiences flooding (heavy bleeding) through to her clothes or bedding
  - She needs to use tampons and towels together
- Are there any signs of blood when the learner passes a stool?
- Does the learner have chronic diarrhoea? Abdominal tenderness/pain?
- Has the learner a poor appetite and suffered recent weight loss (review anthropometric measurements)?
- Is there a history or signs of chronic disease?

iv. Treat for STH worms

- Refer to the guidelines for de-worming
- NB refer to your records regarding last de-worming and do not give if < 4 weeks previously

v. Follow-up

- The learner must be followed up in at least 1 month time and re-check Hb level
  - If you have a permanent clinic within the school, ask them to come back in a month’s time to see you personally.
  - Alternatively ask the learner to attend the local clinic to have their Hb checked again in a month.

vi. Referral

- Hb level less than 6g/dL or severe pallor
- Symptoms of severe Anaemia e.g. palpitations and shortness of breath
- Pregnant adolescent with Hb less than 7g/dL
- Symptoms of Menorrhagia
- Abdominal tenderness/pain
- Blood in stools or any other visible acute losses (eg whilst vomiting)
- Chronic diarrhoea
- Anthropometric measurements: evidence of stunting and wasting
- Signs of chronic disease
- Persistently low Hb level after 1 month, despite above interventions, and unknown cause
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

h) Mental Health Screening (NB not full version, still under review)

The primary responsibility of the SHN is NOT to screen for Mental Illness/Psychosocial issues, but to address obvious issues.

- Collaborate with educators and parents
- Flag child abuse
- Know resources available
  - Referral sources and support groups
  - Eg CSG, social development services, programmes orphans and vulnerable children

CHILD ABUSE: recognition and reporting

Child abuse may be:

Physical - non accidental injury to a child

Emotional - undermining a child's self-esteem by rejection, humiliation or undue criticism

Sexual - use (abuse) of a child for the sexual gratification (pleasure) of the abuser/perpetrator.

Often the child is subject to more than one type of abuse. There may be a single incident or on-going abuse. The abuse may take place in the home, in the school or in the community. Frequently the abuser is known to the child and may be a relative or family friend.

- How to recognise child abuse

Physical signs and symptoms

The educator or nurse may see evidence of physical injuries, bruises, burns or marks from beatings or the child may have had broken bones. There may be evidence of repeated injuries of different ages committed over a long period of time. Some children will try to hide their injuries e.g. they may wear long sleeved jerseys in warm weather.

Children who have been sexually abused may have stomach ache, bladder infection, they may need to go to the toilet frequently and they may have evidence of sexually transmitted infections (STIs).

Adapted from the Gauteng Educator’ Manual (this needs to be checked)
Behaviour Changes

Abused children may be very withdrawn, or they may become unusually sexually aware e.g. little girls 'flirting', young boys behaving aggressively. Frequently schoolwork and performance deteriorate. The child may be scared, and may have been threatened and told not to tell. However they may desperately need and want help. Children may feel guilty, believing that somehow it is their fault and they fear bringing shame on their families or a break up of their homes.

• What is the role of educators and the school health nurse?

Child abuse prevention and what children, families and teachers can do needs ongoing attention in the community, the schools and by health and social services. Classroom discussions on child abuse are increasingly incorporated in the curriculum.

The role of the educator and nurse is to establish him/herself as a supportive caring person who can be trusted. Giving children the opportunity to talk to a sympathetic understanding adult may be life saving for the child. This applies not just to immediate survival, but to influencing possible long term effects or consequences of earlier abuse.

The educator (or nurse) may land in a dilemma if the child confides 'a secret' and demands that no one else must know. Before such a disclosure explain that you are there to help, that you want what is best for the child, that others (including a family perpetrator) may also need help and that the child will be protected. Hopefully the latter is true.

The educator and the nurse cannot promise confidentiality to the child as they have a legal obligation to report child abuse or suspected abuse. The relationship between educators and their learners and their opportunities to observe changes in behaviour or evidence of distress result in schools being a common and very important place of early detection and first disclosure. The educator should not try to investigate the circumstances of the abuse or ascertain any details. Notifying the principal should set the intervention process in motion. Those involved may include, as deemed desirable or necessary, health services, the Department of Social Development, Department of Education Support Services, the South African Police Services - Child Protection Unit (CPU) and the justice system. The exact procedures may vary in different settings, but it is important that school health nurses are aware of the procedures to follow in their area.

The prime aim is to assist and protect the child and to restore proper family functioning if and as necessary. Appropriate punitive action is but one essential intervention. The Children’s Act protects any person (including health workers and educators) who report a case in good faith from any civil action that might be taken against them, even where it subsequently turns out that no abuse took place.

Additional information and support materials
• It is intended that each school should have staff members who have received special training on child abuse.
• A Discussion Document: Criminal Sexual Offence Policy for Schools - is available.
• Every school should have the publication - ‘KOOL KIDS GUIDE’ (a guide for children and their families defining their rights as well as the responsibilities of service providers).
SECTION 4: Procedural Guidelines for Individual Learner Assessments

i. Learner Assessment (screening)

i) Psychosocial Screening (NB still under review)

The primary responsibility of the SHN is NOT to screen for Mental Illness/Psychosocial issues, but to address obvious issues.

- Collaborate with educators and parents
- Flag child abuse
- Know resources available
  - Referral sources and support groups
  - Eg CSG, social development services, programmes orphans and vulnerable children
SECTION 4: Procedural Guidelines for Individual Learner Assessments

ii. On-Site Services

a. De-worming

1. Recommended Schedule for de-worming

De-worming medication for Soil transmitted helminths (worms) is administered routinely for Grade 1 and 4 learners. However, it should also be considered for older learners if worms are suspected or in the case of anaemia (see guidelines for Anaemia screening).

NB Bilharzia treatment is not presently routinely given in all provinces. Please check the provincial requirements for Bilharzia medication in high risk areas.

2. Preparations prior to de-worming

v. Establish whether the child’s care giver has consented for the services.
vi. Introduce yourself to the learner.
vii. Explain the procedure to the child

3. Procedure

i. Check against your records when the individual child last received deworming medication. NB: Do not give deworming medication if it was given less than four weeks ago

ii. Administer deworming medication according to the recommended dosage for age and height.

iii. Wash your hands

iv. Give the tablet to the child and let her/him chew the tablet and swallow it.

v. Record on the deworming dose specific Tally Sheet e.g. Albendazole 400mg OR Mebendazole 500mg by crossing out the numeric square for each dose administered.

vi. Give health education advice to prevent worm infections (refer to section 4 page113 in this manual).
Recommended drugs and dosages for treatment of school-age children in South Africa

<table>
<thead>
<tr>
<th>Infection</th>
<th>Drug</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>STH</td>
<td>Mebendazole</td>
<td>500mg stat</td>
</tr>
<tr>
<td></td>
<td>Albendazole</td>
<td>400mg stat</td>
</tr>
<tr>
<td>Bilharzia</td>
<td>Praziquantel</td>
<td>40mg/kg stat as a single dose or 2 divided doses</td>
</tr>
</tbody>
</table>

4. Referral situations

i. If the child has worms, referral to the local health centre is necessary if the child has the following symptoms:
   I. Abdominal tenderness
   II. Pain
   III. Vomiting
   IV. Pregnancy

ii. If the child has a potential infection with Bilharzia, referral is necessary in the following situations:
   I. Complications such as urinary tract obstruction, haematuria, systemic complications

For more information

SECTION 4: Procedural Guidelines for Individual Learner Assessments

ii. On-Site Services

b. Immunisation Td

Immunisation with the Td vaccine protects the learner from Diphtheria and Tetanus, both vaccine preventable diseases. Td prevents also the occurrence of neonatal tetanus in infants by fully protecting women from tetanus before their child bearing years.

Recommended Schedule for vaccination with Td

Booster doses of Td vaccine are administered at 6 and 12 years of age. However, the 2nd booster can also be given over the age of 12 years.

Who can administer Td?

The following cadre can administer Td:

- Second year Student Nurses & upward (under supervision of Professional Nurse)
- Professional Nurse
- Medical doctors

Equipment/ medication required

Vaccine, Syringe & needle, that is:

- Td vaccine 10 dose vial
- 2ml syringe and needle
- Cotton swab
- Clean water to clean the vaccination site.

Procedure

1. Establish whether the child’s caregiver has consented for the service.
2. Explain the procedure to the child.
3. Check the Road to Health booklet or chart to see if the child received all their primary vaccines as well as the 18 month doses. If not refer to the nearest clinic.
4. Check the Road to Health booklet or chart to see if the child received Td vaccine at 6 years and 12 years.
5. If due for immunization proceed. If not inform the child about any remaining immunizations e.g. 12 year old Td.
6. NB the Td vaccine can be given to a child from 12 years onwards, so children of ages 13-14 in grade 8 can receive the 2nd Td dose.
7. Always check the expiry date of the vaccine before use.
8. Read the information leaflet.
9. Clean left deltoid muscle with water, draw up 0.5ml into a 2ml syringe (use same needle to withdraw and administer), administer 0.5ml into the deltoid muscle.
10. Sign and record vaccine batch number on the Road to Health booklet.
11. Record on the SHS 5 recording form.

NB: Always maintain cold chain throughout the day.
ii. **On-Site Services**

c. **Minor Ailments**

**Identical Schedule**

Assessment and treatment for minor ailments (e.g., skin conditions and head lice) should be undertaken for all learners during each learning phase for all Grades assessed (i.e., 1, 4, 8, 10). It should also be routine for every learner that is self-referred, or referred by the teacher or parent.

**Identification and Treatment of Skin Conditions**

Skin conditions are common in children, and often remain untreated. Standard treatment guidelines (as contained in the Primary Health Care EDL) for common skin conditions are outlined below.

These are:
- Dry skin
- Impetigo
- Fungal infections i.e. athlete’s foot, ringworm and other tineas
- Parasitic infections i.e. lice and scabies
- Common warts

Children with other skin conditions should be referred to the nearest health facility.

**Dry Skin**

The skin is dry and rough, together with varying degrees of scaling.

Severe forms are mainly inherited eg. ichthyosis. Milder forms (xeroderma) show dryness with only slight scaling and are common in chronic conditions, e.g. HIV disease, malignancies and atopic eczema.

**Drug treatment**
- emulsifying ointment (UE), to wash or bath.
- aqueous cream (UEA), applied to dry areas as a moisturizer and for maintenance treatment.

**Impetigo**

A common skin infection due to streptococci or staphylococci that occurs mainly in children.
Clinical features:
- pussy painful sores with crusts or scabs
- painful usually starts on the face
- spreading to neck, hands, arms and legs

Non-drug treatment
- prevent infection by keeping breaks in the skin clean
- avoid insect bites
- cut finger nails
- wash and soak sores in soapy water to soften and remove crusts
- advise on the importance of washing daily
- continue with non-drug treatment until the sores are completely healed
- check urine for blood if the sores have been present for more than a week

Drug treatment
- polyvidone iodine 5%, cream, apply three times daily
- amoxicillin, oral, 8 hourly for 5 days (low dose)

<table>
<thead>
<tr>
<th>Oral</th>
<th>8 hourly</th>
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<tbody>
<tr>
<td>Weight Kilograms</td>
<td>Dose mg</td>
</tr>
<tr>
<td>&gt; 11 - 17.5</td>
<td>250</td>
</tr>
<tr>
<td>&gt; 17.5 - 25</td>
<td>375</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>500</td>
</tr>
</tbody>
</table>

Referral
Child is allergic to penicillin/amoxicillin
No response to treatment

ATHLETE’S FOOT - TINEA PEDIS

A common contagious fungal infection (tinea) of the foot characterised by itching, burning and stinging between the toes spreading to the sole. Reinfection is common

Non-drug treatment
- discourage the use of shared bathing or swimming areas until healed
- use own towels and toiletries
- keep feet dry:
  - wear open shoes or sandals
  - do not wear socks of synthetic material
  - dry between toes after washing the feet or walking in water
  - wash and dry feet twice daily before applying treatment

Drug treatment
- imidazole cream, e.g. clotrimazole 2%, applied twice daily for 4 weeks
Referral
- severe infection
- involvement of the nails
- no improvement after 4 weeks

RINGWORM AND OTHER TINEAS

A highly contagious fungal infection of the skin that can be found anywhere on the body including the scalp. Extensive disease is common in HIV.

Clinical features:
- itchy ringlike patches
- raised borders
- patches slowly grow bigger
- as the patch extends a clear area develops in the center which may become hyperpigmented in dark skin.

Non-drug treatment
- prevent spreading the infection to others
- do not share:
  - clothes
  - towels
  - toiletries, especially combs and hair brushes
- wash skin well and dry before applying treatment

Drug treatment
Treat any secondary skin infection with antibiotics (see section on impetigo)
- imidazole, e.g. clotrimazole 2% cream, topical, applied 3 times daily. Continue using cream for at least 2 weeks after lesions have cleared.

Referral
- widespread infection
- scalp lesions
- **LICE (PEDICULOSIS)**

An infestation of the hairy parts of the body with lice.

Head lice
- are common in children.
- the eggs (nits) appear as fixed white specks on the hair

Body lice
- live in the seams of clothing
- only come to the skin to feed.

Clinical features:
- itching
- bite marks
secondary eczema and secondary infection may be present

Non-drug treatment

Head lice
- wash hair
- use a fine comb to comb out the nits after washing hair
- shave the head – may not be necessary with permethrin rinse
- prevent spread by treating other contacts
- remove nits manually from eyelashes

Body lice
- do not shave the pubic area
- prevent spread by treating other contacts
- regularly wash bed linen and underclothes in hot water and expose to sunlight

SCABIES

An infestation with the parasite *Sarcoptes scabei*. Most commonly occurs in the skin folds. Spreads easily and usually affect more than one person in the household.

Clinical features:
- intense itching, more severe at night
- presents as small burrows between fingers, toes, elbow areas and skin folds where the parasite has burrowed under the skin
- secondary infection may occur due to scratching with dirty nails

Non-drug treatment
- all close contacts must be treated simultaneously even if they are not itchy – see drug treatment below
- cut finger nails and keep them clean
- wash all linen and underclothes in hot water
- expose all bedding to direct sunlight
- put on clean, washed clothes after drug treatment

Drug treatment

adults and children over 6 years:
- benzyl benzoate 25% lotion, undiluted, applied to the whole body from the neck to the feet on two consecutive days. Leave on overnight and wash off the next day

if benzyl benzoate is unsuccessful:
- sulphur 5% ointment, applied daily for 3 days

children under 6 years:
- sulphur 5% ointment, applied daily for 3 days
Treatment may need to be repeated after one week.
Antibiotic treatment for secondary infection (see section on impetigo)

**Note**
- do not apply to neck and face
- avoid the eyes
- benzylbenzoate is toxic if swallowed
- itching may continue for 2–3 weeks after treatment
- do not continue if rash or swelling develops
- avoid contact with eyes and broken skin or sores

**COMMON WARTS**

Seen most often on the hands and fingers
Raised nodular type with a rough ‘warty’ surface.

**Non-drug treatment**
- May be left alone to wait for improvement

**Drug treatment**
- podophyllum resin 20% and salicylic acid 25% ointment, applied under plaster nightly.
Protect surrounding skin with petroleum jelly. Repeat until the wart falls off.

**Referral**
- extensive warts
SECTION 4: Procedural Guidelines for Individual Learner Assessments

ii. On-Site Services

e. Sexual and Reproductive counselling and referral
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1. **How youth friendly are you?**

For many adults, the topic of adolescent sexuality is a scary one. Some worry that the rights discourse in South Africa encourages children to grow up too fast, and start having sex well before they are emotionally ready for it. They feel that the solution to this problem is to enforce stricter rules with teens, or to appeal to historical or cultural principles and insist that young people adhere to them.

Usually, they will find that the success of these approaches is limited. For example, research conducted on the “abstinence-only” approach has found that though sexual debut can be delayed slightly, the health outcomes (in terms of HIV, sexually transmitted infections, and unwanted pregnancies) over the medium term are mostly the same, and sometimes even a little worse in those young people who have been told that the only thing they can do to stop HIV, unplanned pregnancies or STIs is to stay away from sex.

Young people are natural risk-takers. Interventions from elders, in their quest to have young people behave within a set of traditional guidelines, may alienate them. Youth feel as if they are being pulled between two extremes – the old ways, and the exhilarating modern times. The more their elders try to control them, the more they assert their independence. In so doing they may enact the very same risky behaviours that their elders are trying to prevent.

The message of this manual is that, whatever we may feel about teenagers and their sex lives, it has been shown in many surveys that open, early, and honest discussion about sex, sexuality, and relationships in fact delays the first sexual encounter, makes sex safer when young people start, and ultimately reduces their chances of unplanned pregnancy, a sexually transmitted infection, or HIV.

This manual asks you to set aside your concerns and your fears, and address adolescent sexuality head-on. We will take you back to your own adolescent years, and encourage you to think about what it was like to be a teenager, and what it must be like to grow up as a teenager today.

We will also review all the facts about adolescent sexuality, in order to all get “on the same page” about the subject. The opportunity presented through the Integrated School Health Programme for face-to-face interaction with young people is wonderful, but it is also quite limited. Within a very short period of time, you will have to pick up whether to refer the young person to a clinic for a specific service, or just talk them through their feelings about the way their bodies are changing. In a high HIV-prevalence setting like South Africa, this conversation could mean the difference between a long and healthy life, and contracting a life-threatening disease.

School Health Nurses play a pivotal role in the health of young people and, together with parents, guardians, educators, and peer motivators in schools, you have a responsibility to the young people you serve. Your job is not to judge young people, or to give them moral instruction: it is to support

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1The first act of penetrative sex between people.
young people, offer them the appropriate advice, establish whether they need referral, and, above all, make them feel valued and important.

This will not always be easy. For that reason, loveLife has established a ParentLine, where adults can call in to our national centre for advice on how to talk to young people about sex, sexuality, and relationships.

**ParentLine: 0800 121 100**

*Or send a “please call me” to 083 323 1023 and we will call you back.*

If a young person you are speaking to needs another young person to talk to, you can refer them directly to loveLife’s YouthLine.

**YouthLine: 0800 121 900**

*Or send a “please call me” to 083 323 1023 and we will call you back.*
2. Why do young people take such big risks?

Why do young people take such risks with their lives when they know the dangers of sexually transmitted infections, teenage pregnancy, and HIV? Knowledge in South Africa among young people about HIV and how to contract it is very high. Those people who get HIV do not get it because of a lack of knowledge. Through numerous different models and studies, a few key factors have been associated with HIV incidence among young people in South Africa.

When you look at these factors and consider their roots in our divided and unequal past, you should reach the conclusion that the last thing a troubled teenager needs from the adult world is judgment, alienation, and moral instruction. This will only further entrench the core ideas that make them more prone to risky sexual behaviour in the first place.

The cluster of individual, social, and structural factors that determine risk can be represented in a diagram such as the one below:

The key insight of the risk construct is that to victimise a young person for their risky sexual behaviour is to become a big part of the problem. Young people tolerate high levels of risk in their lives because their communities tell them that they will never amount to much, that they don’t have a future, and that they do not belong.

They tolerate high levels of risk because of pressure from their peers, parents that won’t talk to them about sex, and societal expectations that limit their options to harmful gender norms. They tolerate...
high levels of risk because they are marginalised, poor, stuck in an education system that does not offer them great life prospects, and all-too-aware of the amazing comparative wealth of people who live in the same country as they do. All of these factors together create the sense that there are very few opportunities, and when you have nothing to lose and everything to gain, you tend to take big risks.

We see these risks in sexual behaviour, but the same factors drive substance abuse, and other dangerous behaviours.

As a School Health Nurse you must always ask yourself: **what did I do in my interaction with this young person to address the individual, social, and structural drivers of high risk tolerance?**
3. What are your values?

How often have you explored your value system? Values are a set of beliefs that form your inner guidance system within a decision-making framework. Your beliefs guide the development of your attitudes to life, your judgement of yourself, and your judgement of others. They form the basis for your interactions with other people.

Values may be classified as extrinsic or intrinsic. Extrinsic values originate outside the person by observing other people’s actions and the result of those actions. Intrinsic values are formulated within the person’s psyche as they interact with other people and also with their environment – as in the physical law “every action has an equal and opposite reaction”. The individual notes these reactions to his/her actions and sets a premium on those actions that bring the greatest reward or self-satisfaction. They then inculcate these into daily actions in any given similar situation. Over time, they develop a belief of guaranteed reactions to some of these actions, which in turn become part of their value system.

Values formation, modification and re-affirmation occur throughout a person’s life. The developments in a person’s life influences which values are learned, maintained and passed on. Values are also transmissible. During the formative years, young people acquire values mostly by observation. They assimilate and internalise those behaviours that seem desirable to them. These are behaviours that they feel will be of benefit to them in their daily interactions with other people.

Although values are not a acquired by choice they can be modified or even changed consciously. Values are assimilated during the socialization process as the individual interacts with the family, friends, at school, work, religious activity and other social groupings.

Influencers are sometimes not even aware that they are value transmitters. Other people, in their roles as parents and teachers, may deliberately try to transmit their values. They can do this through the examples they set, and the behaviour they enact. They can also do this through instruction and admonition. Insisting that other people adhere to a set of moral principles is referred to as moralizing. Through the values clarification exercise, we come to realise that one set of values is to a large extent determined by time and circumstance, and that trying to impose your values on other people is destructive and pointless.

Values change over time as a response to changes in one’s life experiences. Recognising these changes as they occur and how they affect one’s actions and behaviour is the goal of the values clarification process.
4. **Are you Body Ys?**

You need to encourage young people to be “Body Ys” – that means that they love themselves, they love their bodies, and they are prepared for “healthy sexuality”.

Below is a quick cheat sheet for school health nurses on how to name the parts of the body accurately, and discuss with learners the changes their bodies are doing through.

The point of this exercise is to agree:
- To call the parts of the reproductive system by their proper names;
- To remember that all parts of the body are important parts of the whole – there is no such thing as a shameful body part or health problem;
- To collectively get over our own embarrassment as adults so that we can talk very openly and honestly with young people about puberty, sex, sexuality, and relationships.

1. **The Male Reproductive System**
2. **The Female Reproductive System**
5. **What is the SRH service package in schools?**

The Integrated School Health Programme service package includes three core components:

1. Screening
2. On-site Services
3. Health Education

The key on-site service as defined in the service package that will be delivered by School Health Nurses is **counselling and referral** for sexual and reproductive health, as needed. This service will be rolled out to learners in Grades 4, 8, and 10.

Studies have shown conclusively that education on its own will not stop HIV. School Health Nurses need to understand their role as more broad than just health education. For the duration of the consultation with the young person, the nurse becomes an **adult ally** to the young person. In that role, your impact can be far greater. You can persuade young people to not give up on their futures, to avoid conforming to negative social norms, and to identify ways that they can access opportunity and help themselves get ahead in life. Health is socially determined: and as a School Health Nurse you can have a massive impact on the social context for health, reducing the burden on the primary healthcare system, and improving health outcomes for young people.

In this manual, we include a high level of detail on the various aspects of adolescent sexual and reproductive health, that might be useful to the school health nurse. Each section starts with guidelines on the service as it needs to be provided in schools, as well as how to talk to young people about the issue discussed, and then goes into detail on key bits of information that might be relevant to educating learners about their bodies and their health.

**Routine screening**

Routine screening and on-site services for sexual and reproductive health should start from Grade 7/8 learners (or equivalent age 12). The next screening will take place at Grade 10. More frequent contact with learners may occur due to teacher referral or pupil self-referral.

**Some key pointers**

1. Information on abstinence, contraception and dual protection
   - Provide this information to all learners

2. Information about contraception
   - Provide to all learners
3. Offer of male and/or female condoms
   - Check first whether this is allowed by the School Governing Body

4. Information about HIV Counselling and Testing, and referral to the nearest clinic or testing of partner
   - Provide to all learners

5. STIs screening and referral
   - Screen with some key questions about their health, but do not conduct physical examinations

6. Medical and traditional male circumcision
   - Discuss with all learners (male and female); refer uncircumcised male learners to appropriate male circumcision service providers

7. Menstruation
   - Discuss with all learners (male and female)

8. Pregnancy (ANC and CTOP)
   - Discuss with all learners (male and female) – refer to clinic as appropriate

Some general considerations for SRH services

- The learner may have approached you regarding certain worrying symptoms he/she is experiencing or be anxious regarding recent unprotected sexual activity
- These issues are particularly sensitive and create great anxiety about the learner’s health and also may raise problems within the adolescent’s relationship or family life.
- Ensure absolute privacy at all times, that the door is closed and reassure that the consultation and service will be kept confidential.
- Your attitude must convey trust within the learner, so that the learner can feel at ease to comfortably communicate their needs, questions and personal concerns
- You must be non-judgemental
The following diagram gives you a plan for how to structure your conversation with young people:

The rest of this manual provides you with content on what you should be discussing with young people at each stage of the process, as well as some DO and DON’T guidelines for how to address some of these very sensitive issues.
As a School Health Nurse, you need to commit to the following eight principles:

<table>
<thead>
<tr>
<th>The 8 Commitments of Youth Friendly School Health Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I will implement processes that specifically support the rights of young people.</td>
</tr>
<tr>
<td>2. I will ensure that the right service is available and accessible.</td>
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<tr>
<td>3. I will create a physical environment conducive to the provision of youth friendly health services.</td>
</tr>
<tr>
<td>4. I will ensure that when I refer young people I can be sure they will have access to the drugs, supplies and equipment necessary for their health.</td>
</tr>
<tr>
<td>5. I will inform and educate young people about healthy sexual behaviour.</td>
</tr>
<tr>
<td>6. I will provide proper psychosocial and physical assessments of learners.</td>
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<tr>
<td>7. I will ensure young people receive individualized care based on standard case management guidelines/protocols.</td>
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<tr>
<td>8. I will put mechanisms in place that ensure continuity of care for young people.</td>
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</table>
6. Talking about puberty

Puberty is a time of great physical and emotional change for young people. It can be quite distressing. As a School Health Nurse, you will need to approach the subject in a mature and matter-of-fact way. The things to remember in your conversations with young people are:

**DO**

Be informed about what happens during puberty (see the content below) and give young people the FACTS about puberty

Use the RIGHT NAMES for body parts and the processes that take place during puberty

Use this conversation as an entry point to discussing with young people their hopes for the FUTURE: Do they want a family of their own? What will they need to make sure their family is prosperous and healthy?

Use this as an opportunity to build the SELF ESTEEM of young people. Find something to compliment them about, or explore their interests and hobbies. Puberty is a crucial life stage where many aspects of our IDENTITY is formed: so ask young people about who they are, and find something nice to say about the person they are becoming.

**DON’T**

Start to giggle or laugh

Talk around the issues by using childish names for body parts.

Use this conversation as an entry point to lecturing young people about abstaining from sex until they are married.

Criticise young people for their eating habits, their obesity, their skin problems, their body odour, etc., or get upset because the young person seems sullen or depressed.

a. Recommended schedule

Your role as a school nurse is to provide information regarding puberty to Grades 4, 8 and 10 male and female learners. Some young people will already have started puberty, while others will have already been through it completely. Your role is to make them feel at ease in their bodies, and not to fear the changes that they are going through or feel ashamed about them. You do however need to refer learners where you suspect that there have been some complications with puberty.
Puberty is the process of physical changes by which a child’s body matures into an adult body capable of reproduction. The process of puberty is initiated by hormonal signals from the brain to the gonads; the ovaries in a girl, the testes in a boy. In response to the signals, the gonads produce hormones that stimulate the growth, function, and transformation of the brain, bones, muscle, blood, skin, hair, breasts, and sexual organs. Physical growth — height and weight — accelerates in the first half of puberty and is completed when the child has developed an adult body.

Adolescence is the period of mental transition from childhood to adulthood, which overlaps much of the body’s period of puberty.
FACT SHEETS: PUBERTY

Timing of the onset of puberty

The age at which puberty begins varies between individuals; usually, puberty begins between 10 and 13 years of age. The age at which puberty begins is affected by both genetic factors and by environmental factors such as nutritional state and social circumstances.

Puberty in Boys

In boys, testicular enlargement is the first physical manifestation of puberty. Testes in pre-pubertal boys change little in size from about 1 year of age to the onset of puberty, averaging about 2–3 cm in length and about 1.5–2 cm in width. Testicular size continues to increase throughout puberty, reaching maximal adult size about 6 years after the onset of puberty. After the boy's testicles have enlarged and developed for about one year, the length and then the breadth of the shaft of the penis will increase and the glans penis and corpus cavernosus will also start to enlarge to adult proportions.

During puberty, a male's scrotum will become larger and begin to dangle or hang below the body as opposed to being up tight. This is to accommodate the production of sperm because the testicles need to be below body temperature to be fertile.

In uncircumcised men, the tip and opening of a boy's foreskin becomes wider during puberty, progressively allowing for retraction down the shaft of the penis and behind the glans, which ultimately should be possible without pain or difficulty. The membrane that bonds the inner surface of the foreskin with the glans penis disintegrates and allows the foreskin to separate from the glans. The foreskin then gradually becomes retractable.

Once a boy is able to retract his foreskin, penile hygiene should become an important feature of his routine body care. Regular washing under the foreskin was found to reduce the risk of numerous penile disorders.

Pubic hair often appears on a boy shortly after the external genitalia begin to grow. The pubic hairs are usually first visible at the dorsal (abdominal) base of the penis. The first few hairs are described as stage 2. Stage 3 is usually reached within another 6–12 months, when the hairs are too many to count. By stage 4, the pubic hairs densely fill the pubic triangle.

Stage 5 refers to the spread of pubic hair to the thighs and upward towards the navel as part of the developing abdominal hair.

In the months and years following the appearance of pubic hair, other areas of skin that respond to androgens may develop androgenic hair.

The usual sequence is:

a. underarm (axillary) hair
b. perianal hair
c. upper lip hair
d. sideburn (pre-auricular) hair
e. Peri-areolar hair; and
f. The beard area.

As with most human biological processes, this specific order may vary among some individuals. Arm, leg, chest, abdominal, and back hair become heavier more gradually. There is a large range in amount of body hair among adult men, and significant differences in timing and quantity of hair growth among different racial groups. Facial hair is often present in late adolescence, but may not appear until significantly later. Facial hair will continue to get coarser, darker and thicker for another 2–4 years after puberty. Some men do not develop full facial hair for up to 10 years after the completion of puberty.

Still under the influence of androgens, the larynx (voice-box) grows in both sexes. This growth is more rapid in boys than it is in girls, causing the male voice to drop and deepen, sometimes abruptly because the longer and thicker vocal folds in males are able to generate lower voice frequencies. Before puberty, the larynx of boys and girls are about equal in size.

Occasionally, voice change is accompanied by unsteadiness and straining of the voice, the so-called falsetto voice. Most of the voice change happens during stage 3-4 of male puberty around the time of peak growth. Full adult pitch is attained at an average age of 15 years. It usually precedes the development of significant facial hair by several months to years.

By the end of puberty, adult men have heavier bones and nearly twice as much skeletal muscle. Some of the bone growth (e.g. shoulder width and jaw) is disproportionately greater, resulting in noticeably different male and female skeletal shapes. The average adult male has about 150% of the lean body mass of an average female, and about 50% of the body fat.

This muscle develops mainly during the later stages of puberty, and muscle growth can continue even after boys are biologically adult.

Often, the fat pads of the male breast tissue and the male nipples will develop during puberty; sometimes, especially in one breast, this becomes more apparent and is termed gynecomastia. It is usually not a permanent phenomenon.

Rising levels of androgens can change the fatty acid composition of perspiration, resulting in a more adult body odour. Another androgen effect is increased secretion of oil (sebum) from the skin and this usually results in the eruption of acne especially around the face. Acne cannot be prevented or diminished easily, but it typically fully diminishes at the end of puberty. However, it is not unusual for a fully grown adult to suffer the occasional bout of acne, though it is normally less severe than in adolescents.
Physical Changes in Girls

The first physical sign of puberty in girls is usually a firm, tender lump under the centre of the areola of one or both breasts, occurring on average at about 10 years of age. This is referred to as thelarche. By the widely used Tanner staging of puberty, this is stage 2 of breast development (stage 1 is a flat, pre-pubertal breast). Within six to 12 months, this swelling increases in both breasts, but the firmness disappears and merges with the surrounding soft tissue but can still be felt and seen extending beyond the edges of the areolae. This is stage 3 of breast development.

By another 12 months (stage 4), the breasts are approaching mature size and shape, with areolae and papillae forming a secondary mound. In most young women, this mound disappears into the contour of the mature breast (stage 5), although there is so much variation in sizes and shapes of adult breasts that stages 4 and 5 are not always separately identifiable.

Pubic hair is often the second noticeable change in puberty, usually within a few months of thelarche. It is referred to as pubarche. The pubic hairs are usually visible first along the labia. The first few hairs are described as Tanner stage 2. Stage 3 is usually reached within another 6–12 months, when the hairs are too numerous to count and appear on the mons pubis as well. By stage 4, the pubic hairs densely fill the pubic triangle. Stage 5 refers to spread of pubic hair to the thighs and sometimes as abdominal hair upward towards the navel. In about 15% of girls, the earliest pubic hair appears before breast development begins.

The mucosal surface of the vagina also changes in response to increasing levels of oestrogen, becoming thicker and duller pink in colour (in contrast to the brighter red of the prepubertal vaginal mucosa). Whitish secretions (physiologic leucorrhoea) are a normal effect of oestrogen as well. In the two years following thelarche, the uterus, ovaries, and the follicles in the ovaries increase in size. The ovaries usually contain small follicular cysts visible only by ultrasound. The first menstrual bleeding is referred to as menarche, and typically occurs about two years after thelarche. The average age of menarche is 12 years. Most girls experience their first period at 11, 12 or 13 years of age but some experience it earlier than their 11th birthday and others after their 14th birthday. In fact anytime between 8 and 16 is normal. Ovulation is necessary for fertility, but may or may not accompany the earliest menses. In post-menarche girls, about 80% of the cycles were anovulatory in the first year after menarche, 50% in the third year and 10% in the sixth year. Initiation of ovulation after menarche is not inevitable. A high proportion of girls with continued irregularity in the menstrual cycle several years from menarche will continue to have prolonged irregularity and anovulation, and are at higher risk for reduced fertility.

During the pubertal period, as a response to rising levels of oestrogen, the lower half of the pelvis and the hips widen (providing a larger birth canal). Fat tissue increases to a greater percentage of the body composition than in males, especially in the typical female distribution of breasts, hips, buttocks, thighs, upper arms, and pubis. Progressive differences in fat distribution as well as sex differences in local skeletal growth contribute to the typical female
body shape by the end of puberty. On average, at 10 years, girls have 6% more body fat than boys.

Rising levels of androgens can change the fatty acid composition of perspiration, resulting in a more adult body odour. This often precedes thelarche and pubarche by one or more years. Another androgen effect is increased secretion of oil (sebum) from the skin. This change increases the susceptibility to acne, a skin condition that is characteristic of puberty. Acne varies greatly in its severity between individual girls.

Nutritional factors are the strongest and most obvious environmental factors affecting timing of puberty. Girls are especially sensitive to nutritional regulation because they must contribute all of the nutritional support to a growing foetus. Surplus calories (beyond growth and activity requirements) are reflected in the amount of body fat, which signals to the brain the availability of resources for initiation of puberty and fertility.

Much evidence suggests that for most of the last few centuries, nutritional differences accounted for the majority of variation of pubertal timing between different populations, and even among social classes in the same population. Recent worldwide increased consumption of animal protein, other changes in nutrition, and increases in childhood obesity have resulted in falling ages of puberty, mainly in those populations with the higher previous ages. In many populations the amount of variation attributable to nutrition is shrinking.

Although available dietary energy (simple calories) is the most important dietary influence on timing of puberty, quality of the diet plays a role as well. Lower protein intakes and higher dietary fibre intakes, as occur with typical vegetarian diets, are associated with later onset and slower progression of female puberty.

Scientific researchers have linked early obesity with an earlier onset of puberty in girls. They have cited obesity as a cause of breast development before nine years and menarche before twelve years. Early puberty in girls can be a harbinger of later health problems.

The average level of daily physical activity has also been shown to affect timing of puberty, especially in females. A high level of exercise, whether for athletic or body image purposes, or for daily subsistence, reduces energy calories available for reproduction and slows puberty. The exercise effect is often amplified by a lower body fat mass and cholesterol.

Issues around puberty

Chronic diseases can delay puberty in both boys and girls. Those that involve chronic inflammation or interfere with nutrition have the strongest effect. In the western world, inflammatory bowel disease and tuberculosis have been notorious for such an effect in the last century, while in areas of the underdeveloped world, chronic parasite infections are widespread.
Mental illnesses occur throughout our lives but there are specific risks during puberty. The brain undergoes significant development by hormones which can contribute to mood disorders such as major depressive disorder, bipolar disorder, dysthymia and schizophrenia. Girls aged between 15 and 19 make up 40% of anorexia nervosa cases.

Some of the least understood environmental influences on timing of puberty are social and psychological. In comparison with the effects of genetics, nutrition, and general health, social influences are small, shifting timing by a few months rather than years. Mechanisms of these social effects are unknown, though a variety of physiological processes, including pheromones, have been suggested based on animal research.

The most important part of a child's psychosocial environment is the family, and most of the social influence research has investigated features of family structure and function in relation to earlier or later female puberty. Most of the studies have reported that menarche may occur a few months earlier in girls in high-stress households, whose fathers are absent during their early childhood, who have a stepfather in the home, who are subjected to prolonged sexual abuse in childhood, or who are adopted from a developing country at a young age. Conversely, menarche may be slightly later when a girl grows up in a large family with a biological father present.

More extreme degrees of environmental stress, such as wartime refugee status with threat to physical survival, have been found to be associated with delay of maturation, an effect that may be compounded by dietary inadequacy.

Conclusion of puberty

In a general sense, the conclusion of puberty is reproductive maturity. Criteria for defining the conclusion may differ for different purposes: attainment of the ability to reproduce, achievement of maximal adult height, maximal gonadal size, or adult sex hormone levels. Maximal adult height is achieved at an average age of 15 years for an average girl and 18 years for an average boy. Potential fertility (sometimes termed nubility) usually precedes completion of growth by 1–2 years in girls and 3–4 years in boys. Stage 5 typically represents maximal gonadal growth and adult hormone levels.
7. Talking about menstruation

A young woman’s first period can be an unpleasant experience. Not least of her worries are what her friends will think of her. Young men need to be educated about menstruation just as much as young women do, as they place a lot of the social pressure on young women that makes them feel uncomfortable in their bodies.

**DO**

Explain to young women what is happening to them, using clear language.

Explain to young men what menstruation is and what young women must go through, using clear language.

Establish whether there are any menstrual disorders (see below). If there are complications, you will need to refer her to the clinic.

Establish whether the young woman has access to sanitary pads, towels, or tampons. If she does not, you will need to refer her to the appropriate service.

**DON’T**

Create a sense of mystery around menstruation.

Avoid talking with menstruation with men.

Leave a young woman who is in need of referral for complications, or hygiene, without a clear place and time she can access services.

a. **Recommended schedule**

Your role as a school nurse is to provide information regarding menstruation to Grades 4, 8 and 10 female learners, and to identify complications before or after first menarche. You should also sensitise young men to what their female peers are going through. Some learners may self-refer or be referred by their teacher for information about menstruation.
b. **Considerations**

- Starting their periods can be an anxious and even embarrassing time for girls, made worse by lack of knowledge about what to expect and hearing negative stories from other children or even their families.

- Sensitivity is very important when dealing with this issue, as well as full information about why this happens and how to be prepared at school.

- It is very helpful for you to have examples of sanitary towels (pads) and tampons to illustrate what you are talking about.

**FACT SHEETS: MENSTRUATION**

**Information: some key messages for girls**

- Menstruation (a period) is a major stage of puberty in girls; it's one of the many physical signs that a girl is turning into a woman.

- When girls begin to go through puberty (usually starting between the ages of 8 and 13), their bodies and minds change in many ways. The hormones in their bodies stimulate new physical development, such as growth and breast development. About 2 to 2½ years after a girl's breasts begin to develop; she usually gets her first menstrual period.

- Just as some girls begin puberty earlier or later than others, the same applies to periods. Some girls may start menstruating as early as age 10, but others may not get their first period until they are 15 years old.

- A period is when blood and tissue leaves the body because it's no longer needed. It comes from the uterus (the "womb"), the organ inside a woman's body where a baby grows. Each month, blood and tissue build up in the uterus in case the woman becomes pregnant. That
lining would be needed if the woman's egg was fertilized by a man's sperm cell. A fertilized egg attaches to that cushiony lining and begins growing into a baby.

- If a sperm cell does not fertilize the egg, the unfertilized egg and the lining from the uterus leave the body. In other words, a girl has her period. The cycle then begins again. The lining of the uterus will start building up, and about 2 weeks after the last period, another egg will be release.

- The amount of time between a girl's periods is called her menstrual cycle (the cycle is counted from the start of one period to the start of the next). Some girls will find that their menstrual cycle lasts 28 days, whereas others might have a 24-day cycle, a 30-day cycle, or even longer. Following menarche, menstrual cycles last 21-45 days. After a couple of years, cycles shorten to an adult length of 21-34 days.

- There are two main options for a girl to use when she has her period. These will catch the blood and prevent leakage and staining on clothes
  - A sanitary towel (or pad), which sticks in the underwear
  - A tampon, which is inserted into the vagina

- Sometimes periods can be painful, this is normal and is part of the natural process whereby the lining of the girl's womb shed (hence the blood) and makes way for a new month of re-growth. Mild pain killers, such as paracetemol, can normally help to alleviate the pain if necessary.

- Older adolescents may experience heavy periods, or "Menorrhagia". Some of the following symptoms could mean Menorrhagia:
  - Her periods have become heavier than usual and are disrupting normal life
  - She feels that she is using an unusually high number of tampons or pads
  - She experiences flooding (heavy bleeding) through to her clothes or bedding
  - Clots are visible in the menstrual blood.
  - She needs to use tampons and pads together

**Referral**

- If the adolescent is experiencing menorrhagia, especially if accompanied by anaemia (see guidelines for Hb screening)
- If the periods have stopped and pregnancy is suspected.
Amenorrhea (with no pregnancy suspected) and the learner is not using an injectable contraceptive method.

Menstruation is the most visible phase of the **menstrual cycle**, and corresponds closely with the hormonal cycle, and is therefore used as the limit between cycles. Menstrual cycles are counted from the first day of menstrual bleeding, a point in time commonly termed last menstrual period (LMP). The time from LMP until ovulation is, on average, 14 days, but with substantial variation both between women and between cycles in any single woman.

### The Menstrual Cycle

The **menstrual cycle** is the scientific term for the physiological changes that can occur in fertile **women**. This article focuses on the human menstrual cycle.

The menstrual cycle, under the control of the **endocrine system**, is necessary for **reproduction**. It is commonly divided into three phases:

1. **the follicular phase**,
2. **ovulation**, and
3. **The luteal phase**.

Menstrual cycles are counted from the first day of menstrual bleeding. **hormonal contraception** interferes with the normal hormonal changes with the aim of preventing reproduction.

Stimulated by gradually increasing amounts of **oestrogen** in the follicular phase, discharges of blood (menses) slow then stop, and the lining of the **uterus** thickens. Follicles in the **ovary** begin developing under the influence of a complex interplay of hormones, and after several days one or occasionally two become dominant (non-dominant follicles atrophy and die). Approximately mid-cycle, 24–36 hours after the Luteinizing Hormone (LH) surges, the dominant follicle releases an **ovum or egg** in an event called ovulation. After ovulation, the egg only lives for 24 hours or less without fertilization while the remains of the dominant follicle in the ovary become a **corpus luteum**. This corpus luteum has a primary function of producing large amounts of **progesterone**.

Under the influence of progesterone, the endometrium (uterine lining) changes to prepare for potential **implantation** of an embryo to establish a **pregnancy**. If implantation does not occur within approximately two weeks, the corpus luteum will shrink and “die”, causing sharp drops in levels of both progesterone and oestrogen. These hormone drops cause the uterus to shed its lining and egg in a process termed menstruation.

In the menstrual cycle, changes occur in the **female reproductive system** as well as other systems which may, for example, lead to **breast tenderness** or **mood** changes.
The length of a woman's menstrual cycle will typically vary, with some having shorter cycles and others having longer cycles. A woman who experiences variations of less than eight days between her longest cycles and shortest cycles is considered to have regular menstrual cycles. It is unusual for a woman to experience cycle length variations of less than four days. Length variation between eight and 20 days is considered as moderately irregular cycles. Variation of 21 days or more between a woman's shortest and longest cycle lengths is considered very irregular.

**The Fertile Window**

The most fertile period (the time with the highest likelihood of pregnancy resulting from sexual intercourse) covers the time from some 5 days before until 1–2 days after ovulation. In a 28 day cycle with a 14-day luteal phase, this corresponds to the second and the beginning of the third week. A variety of methods have been developed to help individual women estimate the relatively fertile and the relatively infertile days in the cycle: these systems are called fertility awareness.

Fertility awareness methods that rely on cycle length records alone are called calendar-based methods. Methods that require observation of one or more of the three primary fertility signs (basal body temperature, cervical mucus, and cervical position) are known as symptoms-based methods. Urinetest kits are available that detect the LH surge that occurs 24 to 36 hours before ovulation; these are known as ovulation predictor kits (OPKs). Computerized devices that interpret basal body temperatures, urinary test results, or changes in saliva are called fertility monitors.

A woman's fertility is also affected by her age. As a woman's total egg supply is formed in foetal life, to be ovulated decades later, it has been suggested that this long lifetime may make the chromatin of eggs more vulnerable to division problems, breakage, and mutation than the chromatin of sperm, which are produced continuously during a man's reproductive life. However, despite this hypothesis, a similar paternal age effect has also been observed.

**Effect of the Menstrual Cycle on Other Systems**

Some women with neurological conditions experience increased activity of their conditions at about the same time during each menstrual cycle. For example, drops in oestrogen levels have been known to trigger migraines, especially when the woman who suffers migraines is also taking the birth control pill. Many women with epilepsy have more seizures in a pattern linked to the menstrual cycle; this is called "catamenial epilepsy". Recently, studies have shown that high doses of oestrogen can cause or worsen seizures, whereas high doses of progesterone can act like an antiepileptic drug. Studies by medical journals have found that women experiencing menses are 1.68 times more likely to commit suicide.
Oestrogen levels may affect thyroid behaviour. For example, during the luteal phase (when oestrogen levels are lower), the velocity of blood flow in the thyroid is lower than during the follicular phase (when oestrogen levels are higher).

Menstrual Cycle Abnormalities and Disorders

Infrequent or irregular ovulation is called oligo-ovulation. The absence of ovulation is called anovulation. Normal menstrual flow can occur without ovulation preceding it: an anovulatory cycle. In some cycles, follicular development may start but not be completed; nevertheless, oestrogens will form and will stimulate the uterine lining. Anovulatory flow resulting from a very thick endometrium caused by prolonged, continued high oestrogen levels is called oestrogen breakthrough bleeding. Anovulatory cycles commonly occur before menopause (perimenopause) and in women with polycystic ovary syndrome.

Very little flow (less than 10 ml) is called hypomenorrhea. Regular cycles with intervals of 21 days or fewer are polymenorrhea; frequent but irregular menstruation is known as metrorrhagia. Sudden heavy flows or amounts greater than 80 ml are termed menorrhagia. Heavy menstruation that occurs frequently and irregularly is menometrorrhagia. The term for cycles with intervals exceeding 35 days is oligomenorrhea. Amenorrhoea refers to more than three to six months without menses (while not being pregnant) during a woman's reproductive years.

Seminal Emissions/Nocturnal Emissions in Boys

Nocturnal or seminal emissions in boys are a sensitive topic that is usually accompanied by feelings of guilt. Seminal emissions were previously termed wet dreams. It was felt then that erotic dreams were the cause of nocturnal ejaculations in males. Research has proved this not to be so. Sexual arousal and seminal ejaculation are in the domain of the autonomic nervous system. Like all processes under this system, arousal and ejaculation are not strictly under the will of the individual. This is more so in puberty, where this system is in primeval mode. The body responds to innate mechanisms which ensure that produced semen is expended to make way for new sperm.

It is also for this reason that young pubertal boys experience uncontrolled erections, be it during the day or night. Seminal emissions, though commonly occur at night while the subject is asleep, can also occur during daytime while the subject is wide awake. It is for this reason that education and knowledge dissemination is essential in this age group so that they understand their physiology. The guilt feelings that usually accompany both the seminal emissions and uncontrolled erections can thus be assuaged.
8. Talking about contraception

Contraception is an especially tough subject in South Africa today. While many people are keen to take action to prevent teenage pregnancy, very few are willing to provide young people with the tools they will need to prevent pregnancy. In many studies around the world it has been shown that encouraging abstinence is not a successful strategy. Instead of trying to get young people to avoid sex, your job is to help them to reduce the unintended negative consequences of sex, and referring for contraception is a key part of that.

**DO**

Check whether the School Governing Body allows on-site provision of condoms

Establish whether the learner is sexually active in a sensitive and caring way.

Remember that open, honest, and early discussion of sex and sexuality protects young people from sexually transmitted infections, HIV, and unwanted pregnancies

Mention the different contraceptive methods and their benefits such as dual protection for both prevent pregnancy and the transmission of STI's

**DON’T**

Contravene any provisions of legislation governing parental consent for medical procedures, or the SGB ruling on whether condoms can be provided in schools.

Be judgemental about the learner’s sexual activity

Promote emergency contraception as protection against STI’s or as a long-term contraceptive method.

Routine advice on contraceptives, and the on-site provision of condoms where the School Governing Body has approved this, should start from Grade 8 learners (or equivalent age 12). The second formal assessment session will take place in Grade 10. More frequent contact with learners may occur due to teacher referral or learner self-referral.

In the clinical setting, children over the age of 14 are allowed any form of medical contraceptive without the consent of their parents. Girls under the age of 14 years need the consent of their parents/guardians before receiving the pill or other prescription forms of contraception, as these are regarded to be medical treatment. However, children under the
age of 14 years, who may be sexually active and/or are requesting contraception, but are unwilling or unable to obtain their parents'/guardians' consent, should have their health and social needs met. In such cases, accurate records should be kept.

a. **Equipment**
   - Male and female condoms (where School Governing Body has approved this)
   - Youth-Friendly Brochures (such as loveFacts)

b. **Considerations for advice**
   - The learner may have approached you because he/she has become sexually active
   - This can be a particularly sensitive issue:
   - Ensure privacy at all times, that the door is closed and reassure that the consultation will be kept confidential
   - Your attitude must convey trust within the learner so that the learner can feel at ease to comfortably communicate their needs, questions and personal concerns
   - You must be non-judgemental
   - Establish if the learner is sexually active or not.
   - If the learner is not sexually active, advice can still be given regarding abstinence and contraception methods
   - If the learner is sexually active, give contraception advice, offer contraception or advise where the most appropriate method can be obtained

c. **A note on abstinence**

Abstinence, or the avoidance of sexual intercourse, offers complete dual protection. Providers should appreciate the role of abstinence in the prevention of pregnancy and STIs/HIV, as well as in the personal development of adolescents and young people who have not yet initiated sexual activity (and even for those who are already sexually active).
Unbiased, sensitive counselling about postponing the sexual debut should be provided, in a non-judgemental way. This should include how to say 'No' and alternative forms of intimacy. All learners should also be given information on and access to reliable back-up contraceptive options, particularly condoms and emergency contraception.
FACT SHEET: CONTRACEPTION

Contraceptive methods

**Barrier methods (and dual protection):** Male and female condoms are particularly appropriate for young people - they are usually accessible without prescription, immediately effective, user-controlled and only need to be used when required. In addition, condoms offer dual protection i.e. against both pregnancy and against HIV and other Sexually-transmitted Infection (STIs). When used correctly and consistently, they are relatively effective in preventing pregnancy. Apart from abstinence and mutual monogamy with an uninfected partner, condom-use provides the best protection against STIs/HIV. Condoms can be used alone or in combination with other more effective methods of contraception (i.e. dual protection).

**Emergency contraception:** For many young people, sexual activity can be sporadic, unplanned, and, hence, often unprotected. Knowledge about, access to and use of emergency contraception can prevent many unwanted pregnancies following unprotected intercourse. In addition, emergency contraception is very useful after contraceptive accidents, such as condom breakage or missed pills. Emergency contraception is not recommended as a regular contraceptive method, and does not prevent against transmission of STIs/HIV.

**Oral contraception:** There are few contra-indications for hormonal methods in young women. Oral contraceptives (Combined Oral Contraceptives COC, and Progesterone Only Pills, POP) are suitable, but require careful instruction to ensure correct and consistent use. Providers should encourage young women to link pill-taking to some daily routine (e.g. teeth brushing at night) to assist with regular compliance. POPs are less effective than COCs, require more rigid compliance and are more likely to cause irregular bleeding. Hence they should only be used in the rare situations that oestrogen is contra-indicated. The quick loss of contraceptive effect with oral contraception can be a problem for those in unstable relationships who stop pill-taking when they are not having intercourse. Stopping pill-taking following the break-up of a relationship and then resuming again at the start of a new relationship or resumption of the former one, will result in a delay in contraceptive cover and an increase in side effects.

**Injectables:** Progestogen-only injectables are popular among young women as they require only periodic clinic visits and no 'supplies' need to be kept at home. Both DMPA (Depo-Medroxy Progestogen Acetate- DMPA) and Net-En are safe, highly effective and suitable for young women. Injectable often result in irregular bleeding, spotting or amenorrhoea, which may worry some clients. A delay in return to fertility (6-9 months) is common after discontinuation. Clients need thorough counselling about the side effects in order to ensure informed choice of method, and to reduce method dissatisfaction and early discontinuation. Changes in Bone density is a transient effect.

**Intra-uterine contraceptive devices:** Young women who are in stable, mutually monogamous relationships may safely use IUCDs. However, mutual monogamy is a very hard thing to ensure, and condoms should therefore still be offered and suggested at all times. IUCDs are not recommended for
clients who are at risk of exposure to STIs/HIV. Young nulliparous women have a higher incidence of spontaneous IUCD expulsion and removal because of excessive pain and bleeding. Hence the IUCD is seldom the first method of choice for this group of learners.

Provision of contraception: Male and female condoms can be provided free of charge on site by the school nurse if this has been approved by the School Governing Body

- A Youth-Friendly Brochure on Contraception (e.g. loveFacts)
- Advise other places where free condoms are available e.g. Clicks Pharmacy

Referral

- Refer the learner to the local health clinic if their chosen method of contraception is:
  - Oral contraception
  - Injectable
  - Intra-uterine device
- However, it is important to advise learners regarding dual contraceptive methods to avoid the transmission of HIV and other STI.
9. Screening for sexually transmitted infections

**DO**

- Highlight that having an STI increases the likelihood of becoming HIV infected
- Offer HCT but ensure the learner is aware that this is completely voluntary
- Discuss dual protection contraception
- Refer if any STI symptoms are present

**DON’T**

- Ignore STI symptoms
- Put undue pressure on the learner to have HCT
- Promote symptomatic treatment of STI’s as an alternative to adequate contraception.

**Recommended schedule**

Routine screening for STIs should start from Grade 8 learners (or equivalent age 12). The next screening will take place at Grade 10. More frequent contact with learners may occur due to teacher referral or pupil self-referral.

**Considerations for screening**

- The learner may have approached you regarding certain worrying symptoms he/she is experiencing
- These issues are particularly sensitive and create great anxiety, especially because it might raise problems within the adolescent’s relationship, family life and also raise the issue of HIV infection risk.
- Ensure privacy at all times, that the door is closed and reassure that the consultation will be kept confidential
- Your attitude must convey trust within the learner so that the learner can feel at ease to comfortably communicate their needs, questions and personal concerns
- You must be non-judgemental
- You should also offer HCT, but it is the right of the learner to accept or decline and they must not be forced into HCT
c. **Procedure for screening**

- School nurses are not expected to examine or treat patients for STI, unless previous clinical experience renders them capable and confident. These guidelines are specifically intended for screening to identify potential STIs.

- The first step is to determine if the learner is sexually active.

- If the learner is sexually active, ask questions to understand the specific problems that they are experiencing.

- If the learner is not sexually active, they may still have health issues which need investigating. Take time to listen to the symptoms and consider if they need a referral. This is also a good opportunity to discuss dual protection if the learner is considering becoming sexually active (refer to the dual protection guidelines).

- If you suspect an STI, it is important to find out about:
  - The presenting complaint.
  - Past STIs and if there has been any treatment recently.
  - Other illness and known drug allergies.
  - Contraception, menstruation and symptoms of pregnancy.
  - Risk factors.
  - Offer HCT to the learner (see HCT guidelines).
  - Ask questions regarding symptoms as follows:
    - Generally, females with a suspected STI may present with vaginal discharge, lower abdominal pain and genital sores.
    - Male learners may present with genital sores, penile discharge, urethral discharge or dysuria (painful urination).

- Use the following table as a guide to symptoms which could potentially be a STI:
<table>
<thead>
<tr>
<th>Sex</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Specific</td>
<td>Urethral discharge or dysuria</td>
</tr>
<tr>
<td></td>
<td>Scrotal swelling/pain</td>
</tr>
<tr>
<td>Female Specific</td>
<td>Vaginal discharge or vulval itching/burning</td>
</tr>
<tr>
<td></td>
<td>Lower abdominal pain (with or without vaginal discharge)</td>
</tr>
<tr>
<td>Male or female</td>
<td>Genital sore or ulcer with/without pain</td>
</tr>
<tr>
<td></td>
<td>Soreness/itching of glans, inability to retract foreskin, malodour</td>
</tr>
<tr>
<td></td>
<td>Hot tender inguinal swelling with surrounding erythema and/or oedema</td>
</tr>
</tbody>
</table>

**Target:**

**Step 5:**

If you suspect an STI:

1. Referral

   - If any of the above symptoms or STIs are suspected
10. **Discussing HIV and HCT**

**DO**

Discuss HIV openly and honestly. It is just a virus, and you should make a serious effort to demystify it. Having HIV is not shameful.

Discuss all the ways that HIV can be transmitted from one person to another.

Make learners aware of their rights to accept or refuse HCT

Ensure that all learners over 12 years of age complete an assent form before being referred for HCT

Be clear about the benefits of knowing your HIV status

**DON’T**

Talk about HIV as a mysterious, shameful, or scary disease. It is a virus, like the flu virus.

In any way say that HIV is only transmitted through “irresponsible” sex.

Force learners to take an HIV test against their will

Make the HIV status of a learner known to other learners

Promote anxiety of knowing your HIV status

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a. **Recommended schedule**

Any learner who is sexually active, no matter how old they are, should be targeted for discussions around HIV. Learners should be encouraged to voluntarily go for HIV Counselling & Testing during assessment services.

b. **Consent/assent forms**

In the clinical setting, learners of 12 years and above can give their assent to HCT. In the school setting the provider should refer the case on, and provide for appropriate follow-up.

c. **Considerations for informing learners about HCT**

- Testing is voluntary and all learners have the equal right not to test
- The learner may have approached you regarding certain worrying symptoms he/she is experiencing or be anxious regarding recent un-protected sexual activity
• These issues are particularly sensitive and create great anxiety about the learner’s health and also may raise problems within the adolescent’s relationship or family life.

• Ensure absolute privacy at all times, that the door is closed and reassure that the consultation and HCT will be kept confidential.

• Your attitude must convey trust within the learner, so that the learner can feel at ease to comfortably communicate their needs, questions and personal concerns.

• You must be non-judgemental.

d. **Preparation for HCT**

• Pre and post-test counselling must also focus on HIV prevention education.

• Counselling for those who are positive must focus on both access to treatment, care and support and positive prevention.

e. **Procedure**

Explain to the learner that once they arrive at the clinic, the following will happen:

1. Clean finger with antiseptic and cotton wool.
2. Prick finger with lancet device to obtain blood.
3. Test blood with the Rapid Testing Kit (confirm specific instructions).

**Target:**

**Step 6:**

- **Discussion about HIV**
- **Encouraging uptake of HIV Counselling and Testing**

**For all learners:**

- **Promote HCT**
The Human Immunodeficiency Virus (HIV)

HIV is a lentivirus (a member of the retrovirus family) that causes acquired immunodeficiency syndrome (AIDS), a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells. The four major routes of transmission are

- Unsafe sex,
- Contaminated needles,
- Breast milk; and
- Transmission from an infected mother to her baby at birth (perinatal transmission).

HIV infection in humans is considered pandemic by the World Health Organization (WHO). Nevertheless, complacency about HIV may play a key role in HIV risk. From its discovery in 1981 to 2006, AIDS killed more than 25 million people. A disproportionate number of AIDS deaths occur in Sub-Saharan Africa, retarding economic growth and exacerbating the burden of poverty. In 2005, it was estimated that HIV would infect 90 million people in Africa, resulting in a minimum estimate of 18 million orphans. Treatment with antiretroviral drugs reduces both the mortality and the morbidity of HIV infection.

HIV infects vital cells in the human immune system such as helper T cells (specifically CD4+ T cells), macrophages, and dendritic cells. HIV infection leads to low levels of CD4+ T cells through three main mechanisms: First, direct viral killing of infected cells; second, increased rates of apoptosis in infected cells; and third, killing of infected CD4+ T cells by CD8 cytotoxic lymphocytes that recognize infected cells. When CD4+ T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections.

Most untreated people infected with HIV-1 eventually develop AIDS. These individuals mostly die from opportunistic infections or malignancies associated with the progressive failure of the immune system. HIV progresses to AIDS at a variable rate affected by viral, host, and environmental factors. Most infected individuals will progress to AIDS within 10 years of HIV infection while some will have progressed much sooner and some will take much longer. Treatment with anti-retrovirals increases the life expectancy of people infected with HIV. Even after HIV has progressed to diagnosable AIDS, the average survival time with antiretroviral therapy was estimated to be more than 5 years as of 2005. Without antiretroviral therapy, someone who has AIDS typically dies within a year.
Two types of HIV have been characterized: HIV-1 and HIV-2. HIV-1 is the virus that was initially discovered and termed both LAV and HTLV-III. It is more virulent, more infective and is the cause of the majority of HIV infections globally. The lower infectivity of HIV-2 compared to HIV-1 implies that fewer of those exposed to HIV-2 will be infected per exposure. Because of its relatively poor capacity for transmission, HIV-2 is largely confined to West Africa.

Signs and symptoms

A generalized graph of the relationship between HIV copies (viral load) and CD4 counts over the average course of untreated HIV infection; any particular individual's disease course may vary considerably.

Infection with HIV-1 is associated with a progressive decrease of the CD4+ T cell count and an increase in viral load, the level of HIV in the blood. The stage of infection can be determined by measuring the patient's CD4+ T cell count and viral load.

The stages of HIV infection are:
  o acute infection (also known as primary infection)
  o Latency; and
  o AIDS.

Acute infection:

- Lasts for several weeks and may include symptoms such as fever, lymphadenopathy (swollen lymph nodes), pharyngitis (sore throat), rash, myalgia (muscle pain), malaise, and mouth and oesophageal sores.

- The latency stage

- Involves few or no symptoms and can last anywhere from two weeks to twenty years or more, depending on the individual.
• AIDS (the final stage of HIV infection)

• AIDS is defined by low CD4+ T cell counts (fewer than 200 per microliter), various opportunistic infections, cancers and other conditions.

• A small percentage of HIV-1 infected individuals retain high levels of CD4+ T-cells without antiretroviral therapy. However, most have detectable viral load and will eventually progress to AIDS without treatment, albeit more slowly than others. These individuals are classified as HIV controllers or long-term non-progressors (LTNP). People who maintain CD4+ T cell counts and also have low or clinically undetectable viral load without anti-retroviral treatment are known as elite controllers or elite suppressors (ES).

Main symptoms of acute HIV infection

Infection with HIV generally occurs by introduction of bodily fluids from an infected person into the body of an uninfected person. A period of rapid viral replication ensues, leading to an abundance of virus in the peripheral blood. During primary infection, the level of HIV may reach several million virus particles per millilitre of blood.

This response is accompanied by a marked drop in the numbers of circulating CD4+ T cells. This acute viremia is associated in virtually all patients with the activation of CD8+ T cells, which kill HIV-infected cells, and subsequently with antibody production, or sero-conversion. The CD8+ T cell response is thought to be important in controlling virus levels, which peak and then decline, as the CD4+ T cell counts rebound. A good CD8+ T cell response has been linked to slower disease progression and a better prognosis, though it does not eliminate the virus.

During this period (usually 2–4 weeks post-exposure) many individuals develop an influenza or mononucleosis-like illness called acute HIV infection. The most common symptoms of Acute HIV infection may include fever, lymphadenopathy, pharyngitis, rash, myalgia, malaise, mouth and
oesophageal sores, and may also include, but less commonly, headache, nausea and vomiting, enlarged liver/spleen, weight loss, thrush, and neurological symptoms. Infected individuals may experience all, some, or none of these symptoms. The duration of symptoms varies, averaging 28 days and usually lasting at least a week. [27]

Because of the nonspecific nature of these symptoms, they are often not recognized as signs of HIV infection. Even if patients go to their doctors or a hospital, they will often be misdiagnosed as having one of the more common infectious diseases with the same symptoms. As a consequence, these primary symptoms are not used to diagnose HIV infection, as they do not develop in all cases and because many are caused by other more common diseases. However, recognizing the syndrome can be important because the patient is much more infectious during this period.

**Chronic infection**

A strong immune defence reduces the number of viral particles in the bloodstream, marking the start of secondary or chronic HIV infection. The secondary stage of HIV infection can vary between two weeks and 20 years. During this phase of infection, HIV is active within lymph nodes, which typically become persistently swollen, in response to large amounts of virus that become trapped in the follicular dendritic cells (FDC) network. The surrounding tissues that are rich in CD4+ T cells may also become infected, and viral particles accumulate both in infected cells and as free virus. Individuals who are in this phase are still infectious. During this time, CD4+ CD45RO+ T cells carry most of the proviral load. During this stage of infection early initiation of antiretroviral therapy significantly improves survival, as compared with deferred therapy.

**AIDS**

When CD4+ T cell numbers decline below a critical level of 200 cells per µL, cell-mediated immunity is lost, and infections with a variety of opportunistic microbes appear. The first symptoms often include moderate and unexplained weight loss, recurring respiratory tract infections (such as sinusitis, bronchitis, otitis media, pharyngitis), prostatitis, skin rashes, and oral ulcerations.

Common opportunistic infections and tumours, most of which are normally controlled by robust CD4+ T cell-mediated immunity then start to affect the patient. Typically, resistance is lost early on to oral Candida species and to Mycobacterium tuberculosis, which leads to an increased susceptibility to oral candidiasis (thrush) and tuberculosis. Later, reactivation of latent herpes viruses may cause worsening recurrences of herpes simplex eruptions, shingles, Epstein-Barr virus-induced B-cell lymphomas, or Kaposi's sarcoma.

Pneumonia caused by the fungus Pneumocystis jirovecii is common and often fatal. In the final stages of AIDS, infection with cytomegalovirus (another herpes virus) or Mycobacterium avium complex is
more prominent. Not all patients with AIDS get all these infections or tumours, and there are other tumours and infections that are less prominent but still significant.

**Blood products**

In general, if infected blood comes into contact with any open wound, HIV may be transmitted. This transmission route can account for infections in intravenous drug users, haemophiliacs, and recipients of blood transfusions (though most transfusions are checked for HIV in the developed world) and blood products. It is also of concern for persons receiving medical care in regions where there is prevalent substandard hygiene in the use of injection equipment, such as the reuse of needles in Third World countries. Health care workers such as nurses, laboratory workers, and doctors have also been infected, although this occurs more rarely. Since transmission of HIV by blood became known medical personnel are required to protect themselves from contact with blood by the use of universal precautions. People giving and receiving tattoos, piercings, and scarification procedures can also be at risk of infection.

HIV has been found at low concentrations in the saliva, tears, and urine of infected individuals, but there are no recorded cases of infection by these secretions and the potential risk of transmission is negligible. It is not possible for mosquitoes to transmit HIV.

**Mother-to-Child**

The transmission of the virus from the mother to the child can occur in utero (during pregnancy), intrapartum (at childbirth), or via breast feeding. In the absence of treatment, the transmission rate up to birth between the mother and child is around 25%. However, where combination antiretroviral drug treatment and Caesarean section are available, this risk can be reduced to as low as one percent. Postnatal mother-to-child transmission may be largely prevented by complete avoidance of breast feeding; however, this has significant associated morbidity. Exclusive breast feeding and the provision of extended antiretroviral prophylaxis to the infant are also efficacious in avoiding transmission. UNAIDS estimate that 430,000 children were infected worldwide in 2008 (19% of all new infections), primarily by this route, and that a further 65,000 infections were averted through the provision of antiretroviral prophylaxis to HIV-positive women.

**Multiple Infections**

Unlike some other viruses, infection with HIV does not provide immunity against additional infections, in particular, in the case of more genetically distant viruses. Both inter- and intra-clade multiple infections have been reported and even associated with more rapid disease progression. Multiple infections are divided into two categories depending on the timing of the acquisition of the second strain. Co-infection refers to two strains that appear to have been acquired at the same time (or too
Reinfection (or super-infection) is infection with a second strain at a measurable time after the first. Both forms of dual infection have been reported for HIV in both acute and chronic infection around the world.

**Prevention**

A course of antiretroviral treatment administered immediately after exposure, referred to as post-exposure prophylaxis, reduces the risk of infection if begun as quickly as possible. In July 2010, a vaginal gel containing tenofovir, a reverse transcriptase inhibitor, was shown to reduce HIV infection rates by 39 percent in a trial conducted in South Africa. Early treatment of HIV-infected people with antiretrovirals protected 96% of partners from infection. Testing post exposure is recommended initially and at six week, three months, and six months.

There is currently no publicly available vaccine for HIV or AIDS. However, a vaccine that is a combination of two previously unsuccessful vaccine candidates (ALVAC-HIV and AIDSVAX) was reported in September 2009 to have resulted in a 30% reduction in infections in a trial conducted in Thailand. Further trials of the vaccine are on-going.
11. Discussing Medical Male Circumcision (MMC)

**DO**

- Provide information about medical and traditional male circumcision
- Promote the health benefits of circumcision including reduction in HIV transmission. Stress that is **DOES NOT** eliminate the risk.
- Highlight the safety of the procedure if done by a trained medical professional
- Stress informed choice.

- **Recommended schedule**
  
  Advice regarding MMC should take place during on-site services for sexual and reproductive health starting from Grade 8 learners (or equivalent age 12). Next screening will take place at Grade 10. More frequent contact with learners may occur due to teacher referral or pupil self-referral.

- **Considerations**
  
  - Your role as a school nurse is to provide information regarding medical and traditional male circumcision to male learners, regarding the benefits of having such a procedure.
  - You should have a positive approach which encourages the learner that they should undergo the procedure, but the ultimate decision lies with them/their parents.
  - MMC can be a sensitive issue and therefore privacy and confidentiality is very important during the consultation.

**DON’T**

- Over-state the benefits of circumcision. It only benefits men in the context of HIV transmission from women, and the protective effect is only 60%
- Promote circumcision as a cure for HIV or a 100% protection.
- Increase fear of the procedure by misrepresenting the risks.

-**Provide information about medical and traditional male circumcision**
- **Over-state the benefits of circumcision. It only benefits men in the context of HIV transmission from women, and the protective effect is only 60%**
- **Promote circumcision as a cure for HIV or a 100% protection.**
- **Increase fear of the procedure by misrepresenting the risks.**

**Promote the health benefits of circumcision including reduction in HIV transmission. Stress that is DOES NOT eliminate the risk.**

**Highlight the safety of the procedure if done by a trained medical professional**

**Stress informed choice.**

**Explain to young women that there is no protection to them from sleeping with circumcised men: condoms must be worn at all times to eliminate risk.**
c. **Information to provide the learner**

- There is now good evidence that male circumcision can reduce the risk of a man contracting HIV from unprotected sex with an infected woman by 60 percent.
- There is also some protection from STIs.
- Medical Circumcision is a 30 minute procedure where the foreskin is cut off, the fold of skin that covers the tip of a boy’s penis.
- Circumcision does not act as a “natural condom.” Circumcised men and their partners must still practise safe sex such as condom use. While circumcision may reduce the likelihood of HIV infection, **it does not eliminate it**.

**d. Referral**

- Inform the learner where he may have this procedure performed locally.

---

**Target:**

**Step 7:** Discussion about MMC

- **Interested male learners:** Refer for MMC
- **All female learners:** Explain no protection
Numerous medical studies have examined the effects of male circumcision with mixed opinions regarding the benefits and risks of the procedure. Opponents of circumcision say it is medically unnecessary, is unethical when performed on new-borns, is painful even when performed with anaesthetic, adversely affects sexual pleasure and performance, and is a practice defended by myths. Advocates for circumcision say it provides important health advantages which outweigh the risks, that it improves on sexual function, has a complication rate of less than 0.5% when carried out by an experienced physician, and is best performed during the neonatal period.

The World Health Organization (WHO; 2007), the Joint United Nations Programme on HIV/AIDS (UNAIDS; 2007), and the Centres for Disease Control and Prevention (CDC; 2008) state that evidence indicates male circumcision significantly reduces the risk of HIV acquisition by men during penile-vaginal sex, but also state that circumcision only provides partial protection and should not replace other interventions to prevent transmission of HIV.

Circumcision removes the foreskin from the penis. For infant circumcision, clamps, such as the Gomco clamp, Plastibell, are often used. Clamps cut the blood supply to the foreskin, stop bleeding and protect the glans. Before use of a clamp, the foreskin and the glans are separated with a blunt probe and/or curved haemostat. Adult circumcisions are often performed without clamps, and require 4 to 6 weeks of abstinence from masturbation or intercourse after the operation to allow the wound to heal.

Immediate Complications
Blood loss and infection are the most common complications, but most bleeding is minor and can be stopped by applying pressure. These complications are less likely with a skilled and experienced circumciser.

Infection
Infections are usually minor and local, but sometimes they have led to urinary tract infection, life-threatening systemic infections, meningitis or death.

Haemorrhage
Bleeding after circumcision is usually minor and easily controlled, but on rare occasions it has led to shock from blood loss. Coagulation disorders affect from 2 to 4 per cent of the population and the condition is underdiagnosed. Severe bleeding following circumcision may be a sign of haemophilia.

Surgical mishap
Mistakes can happen with any surgery. Surgical mistakes from circumcision include documented cases of penile denudation, cutting off part or all of the glans penis, urethral fistula, and several types of injury associated with certain types of circumcision clamps used and penile necrosis which results in loss of the entire penis.
12. **Discussing pregnancy with young people**

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<td>Let other learners know that someone is pregnant</td>
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<tr>
<td>Refer pregnant learner for a pregnancy test and HCT</td>
<td>Infer pregnancy without appropriate tests</td>
</tr>
<tr>
<td>Discuss options including adoption, termination and ANC</td>
<td>Encourage an illegal (or backstreet) abortion</td>
</tr>
<tr>
<td>Discuss the legality of abortions and the dangers of illegal (backstreet) abortions.</td>
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a. **Introduction**

There is no recommended schedule for pregnancy testing and advice. Currently, it is not recommended that pregnancy tests are conducted in schools. However, as a result of referral by a teacher, or self-referral by the learner herself, you may be approached. You could also pick it up during a routine screening session.

b. **Considerations for screening**

- The learner may have approached you regarding symptoms she is experiencing and/or missing periods
- The issue of teenage pregnancy is particularly sensitive and can create great anxiety, especially because it might raise problems within the adolescent’s relationship, family life and also raise the issue of HIV infection risk.
- Ensure privacy at all times, that the door is closed and reassure that the consultation will be kept confidential
- Your attitude must convey trust within the learner so that the learner can feel at ease to comfortably communicate their needs, questions and personal concerns
- You must be non-judgemental.
• You should refer the learner for the pregnancy test at the closest clinic.
• You should also refer the learner for HCT, but it is the right of the learner to accept or decline and they must not be forced into HCT (and this can be done during ANC at the Health Clinic).

c. **Procedure**

• Refer the learner for a pregnancy test if you suspect pregnancy.
• If the learner is obviously pregnant, discuss and counsel the learner the choices and her wishes for the pregnancy
• Keeping the baby: Referral for ANC, aim for booking at 14 weeks at least
• Adoption of the baby: Referral for ANC, aim for booking at 14 weeks at least
• Referral for CTOP

d. **Additional information messages for CTOP**

- If you have an unwanted pregnancy, having the foetus removed by means of an abortion is one of the options that you have, apart from having the baby or having it adopted.
- According to the law, (Abortion has been legal in South Africa since 1994), this is your decision and you do not have to inform anyone of your intention. According to the law you are entitled to have a free abortion at a government hospital or clinic during the first three months of pregnancy.
- So what do you do and where can you go? A good start would be your GP, gynaecologist or local clinic. Most family planning clinics also can tell you what you need to know. They should be able to give you the information you need about which hospital or clinic you can go to in your area.
- The nurse or doctor should also be able to explain the procedure to you in detail. Ask about things like the use of anaesthetics, what you can expect afterwards, possible complications, where you can go for counselling and how soon you can return to school.
• If you are less than twelve weeks pregnant, the abortion is done under local or general anaesthetic. If all goes well, you could return to school within a day.

• If you are more than 20 weeks pregnant, however, medication is given to induce contractions of the uterus, as in a normal birth. After this the uterus has to be evacuated. If there are no complications, you will be absent from school for at least 3 days to a week. Depending on your state of health, you may be required to stay in hospital for a day or two.

• Do not consider having a backstreet abortion. They are dangerous, are often performed in unhygienic conditions and can lead to very serious complications such as infertility, or even death. It is much better, and in the long run, a lot cheaper to go to a registered clinic or hospital to have an abortion done. Make informed decisions about your body and your life.
FACT SHEETS: PREGNANCY

Ovulation
Each month, in one of a woman's two ovaries, a group of immature eggs start to develop in small fluid-filled cysts called follicles. Normally, one of the follicles is selected to complete development (maturation). This "dominant follicle" suppresses the growth of all of the other follicles, which stop growing and degenerate. The mature follicle ruptures and releases the egg from the ovary (ovulation). Ovulation generally occurs about two weeks before a woman's next menstrual period begins.

Development of Corpus Luteum
After ovulation, the ruptured follicle develops into a structure called the corpus luteum, which secretes two hormones, progesterone and oestrogen. The progesterone helps prepare the endometrium (lining of the uterus) for the embryo to implant by thickening it.

Release of Egg
The egg is released and travels into the fallopian tube where it remains until a single sperm penetrates it during fertilization (the union of egg and sperm). The egg can be fertilized for about 24 hours after ovulation. On average, ovulation and fertilization occurs about two weeks after the last menstrual period.

Menses
If no sperm is around to fertilize the egg, it and the corpus luteum will degenerate, removing the high level of hormones. This causes the endometrium to slough off, resulting in menstrual bleeding. Then the cycle repeats itself.

Fertilization
If sperm does meet and penetrate a mature egg after ovulation, it will fertilize it. When the sperm penetrates the egg, changes occur in the protein coating around it to prevent other sperm from entering. At the moment of fertilization, the foetus' genetic make-up is complete, including its sex. Since the mother can provide only X chromosomes (she's XX), if a Y sperm fertilizes the egg, the foetus will develop into a boy (XY); if an X sperm fertilizes the egg, the foetus will develop into a baby girl (XX).
Implantation

Within 24-hours after fertilization, the egg begins dividing rapidly into many cells. It remains in
the fallopian tube for about three days. The fertilized egg (called a zygote) continues to divide
as it passes slowly through the fallopian tube to the uterus where it will attach to the
endometrium (a process called implantation). First the zygote becomes a solid ball of cells- the
morulla, then it becomes a hollow ball of cells called a blastocyst. Before implantation, the
blastocyst breaks out of its protective covering. When the blastocyst establishes contact with
the endometrium, an exchange of hormones helps the blastocyst attach. Some women will
notice spotting (or slight bleeding) for one or two days around the time of implantation. At the
time of implantation, the endometrium becomes thicker and the cervix is sealed by a plug of
mucus.

Within three weeks, the blastocyst cells begin to grow as clumps of cells within that little ball,
and the baby's first nerve cells form. The developing baby is called an embryo from the
moment of conception to the eighth week of pregnancy. After the eighth week and until the
moment of birth, your developing baby is called a foetus.
### SECTION 4: Procedural Guidelines for Individual Learner Assessments

#### iii. Health Education key Messages

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1. **Personal hygiene**

   i. **Hand Washing**

   - Keeping your hands clean is one of the best ways to prevent sickness and illnesses from spreading
   - Cleaning your hands gets rid of the germs that you pick up from other people, from surfaces you touch, from your own body and from animals you come into contact with
   - Washing hands with soap and water removes germs from the hands. Rinsing the fingers with water is not enough—both hands need to be rubbed with soap and then rinsed. Only this will remove germs and dirt
   - Wash your hands:
     - After you have been to the toilet
     - Before and after preparing, serving and eating food
     - After touching anything that might be dirty or contaminated e.g. animals, rubbish, nappies
     - If you are ill, e.g. after wiping or blowing your nose, after coughing or sneezing, after you or someone close has vomited.

   ii. **Body washing**

   - Washing our bodies everyday cleans germs and dirt off our skins
   - Some bodily waste products exit our skin in sweat and are left on the surface of the skin, e.g. the areas under arms and around our private parts are quite prone to this
   - These waste products must be removed by washing with soap and water to stop germs growing
   - Washing the face with soap and water every day helps to prevent eye infections. A dirty face attracts flies, which spread the germs from many sources.
   - Nails should be kept clean and short so that germs cannot lie underneath them

   iii. **Care of the hair**

   - Hair must also be cared for and cleaned regularly
   - Frequent brushing or combing and washing are essential to keep hair looking healthy, remove dead skin and oil and to prevent infestation with lice or fleas
   - You should make sure that your hair is rinsed well after it is washed to remove soap and dirt.

   iv. **Tooth brushing**

   - Regular tooth brushing will help to reduce the chance of tooth decay, caused by germs in the mouth that ferment sugars and starches from foods.
- Clean your teeth well by brushing them twice a day, this will remove germs that live in the plaque on your teeth and also bits of food which remain on teeth after eating
- Use toothpaste which has fluoride, which is very protective for teeth against decay
- Have your teeth regularly checked to see if you are developing tooth decay

For more information:
Schools That Shine, a Unilever publication

2. Good Nutrition (for children older than 7 years)

i. Everyone should aim to eat 3 to 4 mixed meals a day, enjoying a variety of foods
   - Drink lots of safe, clean water
   - Make starchy foods the basis of most meals
   - Eat plenty of fruit and vegetable every day
   - Eat dry beans, peas, lentils, soy regularly
   - Chicken, fish, milk, meat or eggs could be eaten daily
   - Eat fats sparingly
   - Use salt sparingly
   - Use foods containing sugar sparingly and not between meals
   - Children and adolescents should not drink alcohol
   - Be active!

For more information:
Schools that Shine (Unilever)
The South African Guidelines for Healthy Eating

ii. Protect the quality and safety of your food and water
   - Keep hot foods hot and cold foods cold until eaten or cooked
   - Be sure temperature controls in refrigerators and freezers work properly
   - Wash counters, cutting boards and utensils frequently with soap and hot water, especially after preparing poultry and other meats
   - Wash fresh fruits and vegetables before eating
   - Cook mincemeat and chicken until you can no longer see any pink

For more information:
Schools that Shine (Unilever)

iii. Exercise regularly

   - Daily physical activity in addition to eating healthy foods will help to improve your health and fitness.
   - Activities can include: running, chasing, playing outdoors, hide and seek, skipping, ball games and sports such as football, rugby, swimming and netball.
- Being outdoors is best! You should make the most of each play time at school and be outside with your friends.
- Walking is good for everyone, try to walk to school with your friends or parents (if less than 10), unless it's too far away and not safe for you to walk
- Use stairs instead of lifts.
- Parents, brothers & sisters should be good role models. Plan time on the weekends for all the family to be active together. If you have a dog, walk him every day!
- Organise activities around the house with your friends e.g. a ball in the backyard, but keep away from the main roads!

iv. **Body Image for adolescents**

- **Is your body shape ‘right’?**
  - Lots of body shapes are ‘right.’ No one shape is better than another. Your body shape is a unique characteristic that helps you be you.
  - Bodies come in many shapes and sizes. As you grow and develop, your body will begin to take on a shape that has been mainly determined by your family genes.
  - Remember that weight gain is normal during adolescent growth spurts and this weight gain will cause changes to your body shape.
  - Your height and weight are not the only things that make up your body shape. Other factors that affect your body shape include the amount of muscle and body fat that you have. The amount of fat and muscle differs between boys and girls, and from person to person. No two people are alike. You need to accept your own body shape. Every shape can be healthy if you make physical activity and healthy eating part of your daily routine.

- **Change your body image, not your body shape!**
  - The way you see your body is called body image. It is the mental picture that you have of your appearance and your feelings about that picture.
  - Some people are comfortable and happy with this picture. Others are unhappy and may try to change their appearance based on their mental picture.
  - At times, your body image may have nothing to do with what your body actually looks like. It is possible for others to think you are attractive, while you feel ‘ugly and unattractive.’
  - In extreme cases, poor body image can lead to eating disorders such as anorexia nervosa and bulimia, or excessive exercise routines. You can struggle with these disorders your whole life and, in some cases, they can be life threatening; therefore, it is very important that you talk to an adult, such as a parent or your family doctor, if you think that you might have an eating disorder.

- **A poor body image can go hand in hand with low self-esteem.**
  - Self-esteem is the confidence or satisfaction that you feel about yourself. It comes from inside you. Things that may help you feel good about yourself include intellect, a sense of humour, physical abilities and artistic talents. These
factors are more important than your body shape because they help you feel more positive about yourself. This could improve your mental picture of your appearance and your feeling about that picture.

- **Create variety!**
  - We are all different. Accept a wider variety of sizes and shapes for yourself and those around you. Look at body weight and shape from a positive point of view

- **Strive for a healthy lifestyle!**
  - Get hooked on healthy eating! Choose more whole wheat foods. Enjoy vegetables and fruit, lower-fat milk products and leaner meat and alternatives every day. Allow treats once in a while - not at every meal.
  - Be physically active. You are more likely to feel good about your body and have better self-esteem if you are physically active. Choose to be active every day. Pick activities that you find fun to do. Avoid strict weight loss programs or crash diets. If you feel/think you need to lose weight, talk to your family doctor.

- **Learn to like and respect your body the way it is meant to be. Make the most of what you have. Be confident about yourself. When you feel good on the inside, you’ll look great on the outside!**

For more information:
Schools that Shine (Unilever)

3. **Prevention of communicable diseases**

- Make sure that all your recommended immunizations are kept up-to-date
- Washing of hands (according to the guidelines above) is an essential daily habit
- Protect the quality and safety of your food and water (refer to the food hygiene guidelines above)
- After any animal bite, clean your skin with soap and water and then seek medical care immediately.
- If your Doctor has prescribed antibiotics for an illness you must complete the full course.
  - You must only take them when they are prescribed by a Doctor. Your body can become resistant to antibiotics if they are not used according to instructions.
  - Report to your doctor any quickly worsening infection or any infection that does not get better after you take a prescribed antibiotic.
- If you have a cough or cold, cough or sneeze into a tissue or your shirt sleeve – not into your hands. Remember to throw away the tissue and wash your hands
- Avoid areas of insect infestation.
Use insect repellents on skin and clothing when in areas where ticks or mosquitoes are common.

If you have visited wooded or wilderness areas and are now sick, your doctor needs all the details to diagnose both rare and common illnesses quickly.

Breastfeeding provides strong natural protection for babies. Infants younger than six months should be exclusively breastfed to gain these benefits. Breastfeeding can continue until the age of two years or beyond.

Formula feeding does not provide this same natural protection for your baby.

i. Special considerations for prevention of Tuberculosis

The prevention of the spread of TB is mainly the responsibility of those people who are infected. When people with untreated TB cough, sneeze or spit the air is filled with droplets containing the bacteria. People who breathe in these bacteria may become infected.

Prevention is improved when people with symptoms of TB go to be tested and start (and stick to) their treatment. The treatment will continue for months, but they will no longer be infectious.

People who are in the infectious stage of TB and are at home should protect themselves and others as follows:

- Wash hands after sneezing or coughing.
- Cover their mouth with a tissue when they cough, sneeze or laugh. Discard used tissues in a plastic bag, then seal and throw it away.
- Do not attend school.
- Avoid close contact with others.
- Sleep in a room away from other family members.
- Make sure the sleeping room has fresh air coming in. TB spreads in small closed spaces.

ii. Special considerations for prevention of Diarrhoea

To prevent diarrhoea, all faeces, including those of infants and young children, should be disposed of in a latrine or toilet or buried.

Good hygiene practices and drinking or cooking with safe, clean water protect against diarrhoea.

Hands should be washed thoroughly with soap and water after going to the toilet, after contact with faeces and before preparing food, feeding children or eating.

Exclusive breastfeeding for the first six months of life and continued breastfeeding afterwards can reduce the risks associated with diarrhoea.

Immunisation against rotavirus is available in South Africa and reduces deaths from diarrhoea caused by this virus.

Vitamin A and zinc supplementation reduce the risk of diarrhoea (when prescribed by health workers).
iii. Special considerations for prevention of worms (STH)
- To be infected with worms, someone must come into contact with worm eggs or larvae or eat food that is contaminated with worm eggs.
- Encourage children to use a toilet or potty from an early age. When they make a mess on the ground, clean it up well and place it in a toilet.
  - Keep toilet seats clean
  - Do not pollute the soil with sewage or sludge
- Everyone must wash their hands well before eating and after they go to the toilet; this will reduce the risk of eggs spreading to their mouths.
  - Keep finger nails short
- Make sure all food is clean before it is eaten, because this will reduce the risk of transferring eggs from soil.
- Wear shoes wherever possible (to prevent hookworm and thread worm infection)

iv. Special considerations to prevent Bilharzia (in addition to iii. Above)
- If bilharzia is very common where you live, educate the community to avoid contaminated water and infection
- Do not urinate or pass faeces near water used for drinking, washing or bathing
- Do not swim in contaminated lakes/river water (if not sure, then avoid swimming)
- Collect water from rivers and dams at sunrise when the risk if infection is lowest
- Boil all water before use

For more information:
Schools that Shine (Unilever)

4. Road and Car Safety
- Always wear a seat belt when travelling in a car, whether sitting at the front or back seat
- Do not play near the road or moving traffic
- Children less than 10 years old should be accompanied by an adult when crossing the road or walking near a road with busy traffic. This includes pedestrian crossings and robots (traffic lights). Many people are killed or injured by crossing the road carelessly. There are simple rules for people crossing the road:
  - Always Stop And Look Before You Cross
  - Look right, left and right again for oncoming traffic.
  - Cross only when the road is clear, looking in both directions and listening for oncoming traffic while crossing
  - When you cross, walk briskly but don’t run (you may trip over!)
  - Do not cross behind a stationary bus, as it will block your view of oncoming traffic. When you get off a bus, wait until it has departed before you cross to the other side of the road.
• Always walk on the pavement rather than the road. Where there is no pavement, walk as far as possible to the right-hand side of the road, facing oncoming traffic. In this way you can see the traffic coming towards you (rather than from behind).

5. Avoiding Poisoning

i. Food Poisoning:

• Protect the quality and safety of your food and water
• Keep hot foods hot and cold foods cold until eaten or cooked
• Be sure temperature controls in refrigerators and freezers work properly
• Wash food preparation surfaces, cutting boards and utensils frequently with soap and hot water, especially after preparing poultry and other meats
• Wash fresh fruits and vegetables before eating in clean water
• Cook mince-meat, meat products (eg sausages or beef burgers) and chicken until you can no longer see any pink

ii. Poisonous plants

• Plants that could be harmful have 3 ways in which they can hurt you
  o Prickles, thorns or barbs when brushed against can cause cuts or scratches to the skin
  o Tree or plant sap that can be harmful if it gets onto the skin, especially if you have a cut or scratch already
  o Some plants or their berries are poisonous if eaten and cause illness
• Avoid running through bushes where plants or bushes could have contact with your skin
• Avoid touching or eating any plant which you do not recognise
• Avoid picking and eating berries from plants or trees because often they will make you ill
• Do not throw plants onto fires because they may release smoke that can be harmful if breathed in
• If animals do not eat certain plants then you can know for sure that they are harmful to humans!
iii. **Insect bites**

- It may be impossible to completely avoid bites. However, the less you are bitten, the less likely that you will be exposed to sore bites or diseases that insects may pass onto you.
- Insects like wooded areas, ground water, swamps and rain forests, so you must be careful and protect yourself in these places.
- Most insects bite between dusk and dawn, so it’s therefore even more important to be careful of bites at this time.
  - Malaria mosquitoes are most active after dark, so it’s important to be vigilant about covering up in the evenings in malarial regions.
  - Bed nets will help to keep mosquitoes away at night, especially those that have been treated with insect repellents.
- Wear loose fitting clothes (insects can get to your skin through tight clothing), long trousers and long sleeves. Don’t go barefoot.
- In tick infested areas, avoid shorts/skirts and tuck your trousers into your socks. This stops ticks crawling up your legs.
- Spray an insect repellent on your exposed skin e.g. arms, legs, ankles, neck area.
- Insecticide coils are circles of solid insecticide that can be burnt outside.

iv. **Snake bites**

- Wear long boots, or long socks and trousers (which in rainforests also provide some protection against leeches).
- Beat and bash with a long branch or twig in the area three to five paces ahead, and stand still for a short time before taking the next step.
- Avoid going out in a snake area in darkness. If it's necessary to do so, then take a strong torch with you. Snakes don’t like bright light and vibrations.
- If you see a snake, try not to provoke it. It will instinctively prefer to go away and most snakes predominantly attack moving targets.
- Do not put your hands down into dark holes or cracks in rock, even if something of yours has fallen down it (if you need it, you can attempt to fish it out with a stick, standing well away from the hole). Creepy-crawlies other than snakes (for example scorpions) may also be poisonous, and they are all lightning fast.
- The best possible advice is not to touch a snake. The worst thing you can do is try to pick one up. If you see a 'dead' snake, you should keep well clear. Many people have been bitten two or three times by 'dead' snakes. Only if someone has been bitten should you make sure that the snake is killed and take it along for identification, but hold it by its tail and continue to watch out for its head, or preferably put it in a sack that can be held away from the body.
- If you are bitten by a snake, get medical attention as soon as possible.
6. Recognising Child abuse

If Child Abuse is suspected, what steps does the School Nurse/School Teacher need to take?

- Watch over and protect children from abuse and neglect, and give them loving care so that they can grow and develop well.
- Inform children of what they can do if they are being abused, or even suspect that a friend or relative is being abused in the school or their community.
- When a child has been abused, take urgent steps to comfort and take the child to the nearest clinic or crisis centre.
- Report the matter to the school teacher and school head.
- Refer/take the child to the clinic.
- Contact the Social Worker of Crisis centre if this exists in the community.

For more help, contact “Child-line” Toll-Free 0800055555 (website below)

http://www.childlinesa.org.za/
http://www.childwelfaresa.org.za/

7. Drug and alcohol abuse

Statistics shows that 1 in every 3 South African Children have experimented with drugs by the time they reach grade 12.

The following warning signs could indicate to the school nurse/school teacher/school friend that a child may be abusing drugs or has a problem with alcohol:

- A drop in grades
- Smell of alcohol on breath
- Behaviour and discipline problems in school
- Losing interest in activities the child once enjoyed, and becoming withdrawn
- Dropping old friends and the sudden influence of a new crowd
- Sudden mood changes
- Appearing listless, tired, hung over
- Increased forgetfulness
- Increased secretiveness
- Withdrawal from the family
- Red eyes
- Weight loss
- Fatigue or hyperactivity
If drug or alcohol abuse is suspected, what steps does the school nurse/school teacher need to take?

- Inform children of what they can do if they are abusing drugs or alcohol, or even suspect that a friend or relative is abusing drugs in the school or their community
- Report the matter to the school teacher and school head
- Refer/take the child to the clinic
- Contact the Social Worker of Crisis centre if this exists in the community
- Contact numbers for **drug addiction centres**:
  - Call Narcotics Anonymous on 088 130 0327
  - Drug Abuse Crisis Line on 088 129 6791.
  - A Narconon Counsellor ([http://www.stopaddiction.co.za](http://www.stopaddiction.co.za)) will answer all your questions. If you or someone you know is an addict in need of help, call
    - +27 (0) 11 024 5464 or
    - +27 (0) 11 024 7715 or
    - +27 (0) 84 474 1785, or
    - +27 (0) 72 586 8687 today
- Contact numbers for **Alcoholism family support**
  - Al-Anon Family groups: 0861 252666 (or email: help@alanon.org.za, website [http://www.alanon.org.za](http://www.alanon.org.za))
    - National Office Tel:  (021) 595 4508
    - Cape Town:                (021) 595 4517
    - KwaZulu Natal:          (031) 304 1826
    - Gauteng and Districts: (011) 683-8002

For more information, try the following websites:

- [http://www.drugaware.co.za/](http://www.drugaware.co.za/)
- [http://www.drugwise.co.za](http://www.drugwise.co.za)
- [http://www.stopaddiction.co.za](http://www.stopaddiction.co.za)

8. Prevention of Smoking

To help prevent children from using tobacco, try the following suggestions:

- It's important to keep talking to children about the dangers of tobacco use over. Even the youngest child can understand that smoking is bad for the body.
- Ask what children find appealing — or unappealing — about smoking. Be a patient listener.
- Encourage children to get involved in activities that prohibit smoking, such as sports.
Discuss ways to respond to peer pressure to smoke. The child may feel confident simply saying "no," but also offer alternative responses such as "It will make my clothes and breath smell bad" or "I hate the way it makes me look."

Encourage children to walk away from friends who don't respect their reasons for not smoking.

Explain how much smoking governs the daily life of kids who start doing it. How do they afford the cigarettes? How do they have money to pay for other things they want? How does it affect their friendships?

Establish firm rules that exclude smoking and chewing tobacco from schools and explain why: Smokers smell bad, look bad, and feel bad, and it's bad for everyone's health.

9. Depression/Suicide

If drug or alcohol abuse is suspected, what steps does the school nurse/school teacher need to take?

- Inform children of what they can do if they are abusing drugs or alcohol, or even suspect that a friend or relative is abusing drugs in the school or their community.
- Report the matter to the school teacher and school head.
- Refer/take the child to the clinic.
- Contact the Social Worker of Crisis centre if this exists in the community.

Key signs of depression:

- Loss of interest in things you like to do.
- Sadness that won’t go away.
- Irritability or feeling angry a lot.

Other signs include:

- Feeling guilty or hopeless.
- Feeling tense or worrying a lot.
- Crying a lot.
- Spending a lot of time alone.
- Eating too much or too little.
- Sleeping too much or too little.
- Having low energy or restless feelings.
- Feeling tired a lot.
- Missing school a lot.
- Hard time making decisions.
- Having trouble thinking or paying attention.
- Thinking of dying or killing yourself.
The **South African Depression and Anxiety Group** (SADAG) answer the National Toll Free Suicide Crisis Line which takes a huge number of calls from teens who are calling for themselves or on behalf of a friend. Contact numbers:

Suicide Crisis Line 0800 567 567 or SMS 31393

Mental Health Line 011 262 6396

For additional information:


10. **Sexual and reproductive health**

   i. **Puberty**

   ▪ When talking to children about puberty, it's important to offer reassurance that these changes are normal. Puberty brings about so many changes. It's easy for a child to feel insecure, and as if he or she is the only one experiencing these changes.

   ▪ Many times, adolescents will express insecurity about their appearance as they go through puberty, but it can help them to know that everyone goes through the same things and that there's a huge amount of normal variation in their timing.

   ▪ Acne, mood changes, growth spurts, and hormonal changes — it's all part of growing up and everyone goes through it, but not always at the same pace.

   ▪ Girls may begin puberty as early as grade two or grade three, and it can be upsetting if a girl is the first one to start these changes. She may feel alone and awkward or like all eyes are on her in the school changing room.

   ▪ With boys, observable changes include the cracking and then deepening of the voice, and the growth of facial hair. And just as with girls, if your son is an early bloomer, he may feel awkward or like he's the subject of stares from his classmates.

   ▪ Children should know the following about puberty:

   o Girls become more rounded, especially in the hips and legs.
   o Girls' breasts begin to swell and then grow, sometimes one faster than the other
   o Girls and boys get pubic hair and underarm hair, and their leg hair becomes thicker and darker.
Both girls and boys often get acne and start to sweat more.
Both girls and boys have a growth spurt.
Boys' penises and testicles grow larger.
Boys' voices change and become deeper.
Boys grow facial hair and their muscles get bigger
When a girl begins menstruating, once a month, her uterine lining fills with blood in preparation for a fertilized egg. If the egg isn't fertilized, she will have a period. If it is fertilized, she will become pregnant.
A girl's period may last 3 days to a week, and she can use sanitary napkins (pads) or tampons to absorb the blood.

ii. More about menstruation (and feminine hygiene)

- Menstruation (a period) is a major stage of puberty in girls; it's one of the many physical signs that a girl is turning into a woman.

- And like a lot of the other changes associated with puberty, menstruation can be confusing. Some girls can't wait to start their periods, whereas others may feel afraid or anxious.

- When girls begin to go through puberty (usually starting between the ages of 8 and 13), their bodies and minds change in many ways. The hormones in their bodies stimulate new physical development, such as growth and breast development. About 2 to 2½ years after a girl's breasts begin to develop, she usually gets her first menstrual period.

- About 6 months or so before getting her first period, a girl might notice an increased amount of clear vaginal discharge. This discharge is common. There's no need for a girl to worry about discharge unless it has a strong odour or causes itchiness.

- Just as some girls begin puberty earlier or later than others, the same applies to periods. Some girls may start menstruating as early as age 10, but others may not get their first period until they are 15 years old.

- The amount of time between a girl's periods is called her menstrual cycle (the cycle is counted from the start of one period to the start of the next). Some girls will find that their menstrual cycle lasts 28 days, whereas others might have a 24-day cycle, a 30-day cycle, or even longer. Following menarche, menstrual cycles last 21-45 days. After a couple of years, cycles shorten to an adult length of 21-34 days.
iii. **Family planning methods.**

There are many ways to prevent pregnancy, and a person must decide what is the most appropriate for them. Another consideration is that not all methods of contraception will prevent HIV infection or STIs. The following are more common methods of contraception:

- **The Pill:** contains a low dose of hormones which prevent the woman from producing an egg. It is 95 to 99% effective. It does not protect from HIV or STI.
- **Barrier methods:** Male and female condom (see below). These methods prevent the sperm entering the female reproductive system, and are 86 to 97% effective. This method prevents against HIV and STI.
- **The “Morning after Pill”:** this is an emergency contraception which should not be relied upon. It should be taken within 72 hours after unprotected sex, or in cases of the condom splitting. These pills can only be obtained at public health clinics or hospitals.
- **The “withdrawal method”:** The penis is removed from the woman’s vagina before ejaculation. It provides no protection against HIV and STI and is not very effective in preventing pregnancy.

iv. **More about the condom**

- Condoms are a barrier method of contraception. There are male condoms and female condoms. A male condom is a thin sheath (usually made of latex, a type of rubber) that is worn on the penis.

- Condoms work by keeping semen (the fluid that contains sperm) from entering the vagina. The male condom is placed on a guy’s penis when it becomes erect (and before any sexual contact). It is unrolled all the way to the base of the penis while holding the tip of the condom to leave some extra room at the end. This creates a space for semen after ejaculation and makes it less likely that the condom will break.

- After the guy ejaculates, he should hold the condom at the base of the penis as he pulls out of the vagina. He must do this while the penis is still erect to prevent the condom from slipping off when he gets soft. If this happens, sperm could enter the vagina.

- The female condom is inserted into the vagina using the closed-end ring. The other ring creates the open end of the condom. The sheath then lines the walls of the vagina, creating a barrier between the sperm and the cervix. The female condom can be inserted up to 8 hours prior to intercourse. It should be removed immediately after sex.
The male and female condoms should not be used at the same time because they can get stuck together and cause one or the other to slip during intercourse, making them ineffective.

v. HIV and AIDS

- AIDS (acquired immunodeficiency syndrome) is caused by HIV (human immunodeficiency virus). People who are infected with HIV can look and feel healthy and may not know for years that they are infected. However, they can infect other people no matter how healthy they seem.

- HIV slowly wipes out parts of the body's immune system, then the HIV-infected person gets sick because the body can’t fight off diseases. Some of these diseases can be fatal.

- Signs of HIV infection are like those of many other common illnesses, such as swollen glands, tiring easily, losing weight, fever, or diarrhoea. Different people have different symptoms.

- Because HIV is contained in people’s blood, semen, vaginal fluid, and breast milk, the only way to tell if someone is infected with HIV is with a blood test.

- There is no vaccine to prevent HIV infection and no cure for AIDS.

- There are treatments (anti-retroviral therapy ART), that can keep infected people healthy longer and prevent diseases that people with AIDS often get. Research is on-going.

- HIV transmission can occur when blood, semen, vaginal fluid, or breast milk from an infected person enters the body of an uninfected person.

- HIV can enter the body through a vein (e.g., injection drug use), the anus or rectum, the vagina, the penis, the mouth, other mucous membranes (e.g., eyes or inside of the nose), or cuts and sores.

- Intact, healthy skin is an excellent barrier against HIV and other viruses and bacteria.

- HIV infection is spread through shared use of un-sterilised skin or ear-piercing equipment eg tattooing

- These are the most common ways that HIV is transmitted from one person to another:
o By having unprotected sexual intercourse (anal, vaginal, or oral sex without a condom) with an HIV-infected person
o By sharing needles or injection equipment with an injection drug user who is infected with HIV
o From HIV-infected women to babies before or during birth

For more information:
http://www.soulcity.org.za

vi. Prevention of HIV infection

▪ There is no vaccine that will prevent HIV infection. Only the avoidance of risky behaviour can prevent HIV infection. Among teenagers HIV transmission is almost always the result of sexual contact with an infected person.

▪ Infection can be prevented by abstaining from oral, vaginal, or anal sex.

▪ Risk can be substantially reduced by always using condoms for all types of sexual intercourse, and avoiding contact with the blood, semen and vaginal fluids.

▪ Avoidance of alcohol and illegal drugs is also key in preventing the spread of HIV — not because a person can get HIV directly from drinking and taking illegal drugs, but because drinking and drug taking often lead to risky behaviour associated with an increased risk of infection (such as having unprotected sex).

▪ The most important means of preventing HIV/AIDS in infants is to test all pregnant women for the virus. If the result is positive, immediate treatment can begin before the baby is born to prevent HIV transmission

vii. Other Sexually Transmitted Illness

▪ There are many infections a man or woman can get in her genital area. Germs that live in or on a person's genitals cause these diseases. These germs can be passed from one person to another during sex. Practicing safer sex every time can help you avoid these infections.

▪ These are some common symptoms of genital infections:
  o Lower abdominal pain
  o Sores, itching, painful intercourse, frequent or painful urination
Unusual discharge from the vagina: this may be a fluid or mucus that is bloody, looks cloudy or smells bad.

- Even if you don't have any of these symptoms you can still have an infection. Even infections that have no symptoms can cause damage and may affect your ability to have children. Practice safer sex and have regular check-ups to protect your health.

- **Common STIs**

  - Bacterial Vaginosis (Gardnerella)
  - Candidiasis
  - Chlamydia
  - Gonorrhoea
  - Genital Warts
  - Herpes
  - Pelvic Inflammatory Disease (PID)
  - Pubic Lice (crabs)
  - Scabies
  - Syphilis
  - Trichomonas

- For more information: [http://www.safersex.co.za/std.htm](http://www.safersex.co.za/std.htm)

viii. **Medical and Traditional Male circumcision**

- Circumcision is a 30 minute procedure where the foreskin is cut off, the fold of skin that covers the tip of a boy’s penis. Circumcision is usually done for cultural or religious reasons.
- There is now good evidence that male circumcision can reduce the risk of a man contracting HIV from unprotected sex with an infected woman by 60 percent.
- Circumcision does not act as a “natural condom.” Circumcised men and their partners must still practise safe sex such as condom use. While circumcision may reduce the likelihood of HIV infection, it does not eliminate it.

ix. **Breastfeeding**

Feeding recommendations for: ALL HIV negative and mothers of unknown HIV status and HIV positive mothers who chose to breastfeed:

- Exclusively breastfeed the baby for the first 6 months of life (i.e. give ONLY breastmilk)
- Put the child on the breast immediately after birth.
- Do not give other fluids or foods until 6 months of age
- Breastfeed whenever the baby wants (i.e. on demand) both day and night, at least 8 times in 24 hours
- Mothers who are HIV negative should be encouraged to BF their infant upto 24 months of age
- Mothers who are HIV positive should be encouraged to BF their infant for a maximum period of 12 months

x. Prevention of Mother to Child Transmission of HIV (PMTCT)

- South Africa adopts the 2010 WHO guidelines on HIV and Infant feeding, recommending that all HIV infected mothers should breastfeed their infants and receives anti-retroviral drugs to prevent HIV transmission through breastfeeding.
- Infants of HIV-infected women not on lifelong antiretroviral therapy who choose to breastfeed, must be given Infant nevirapine (NVP) daily to reduce HIV transmission through breastfeeding as per the National PMTCT protocol.
- HIV-infected women, who choose to breastfeed their infants, should breastfeed exclusively for the first 6 months of life, introducing appropriate complementary foods thereafter, and continuing to breastfeed up to age of 12 months.
- HIV-infected mothers who decide to stop breastfeeding at any time should stop gradually within one month, and infant ARV prophylaxis should continue for one week after breastfeeding is fully stopped.
- When HIV-infected mothers decide to stop breastfeeding at any time, infants should be provided with safe and adequate replacement feeds to enable normal growth and development.
- Breastfeeding beyond 12 months of age for women with HIV is not recommended.
- If infants and young children are known to be HIV-infected, mothers are strongly encouraged to exclusively breastfeed for the first six months of life and continue breastfeeding as per the recommendations for the general population that is up to two years or beyond.

xi. Teenage Pregnancy

It’s very important to discuss with the pregnant teenager, the essential lifestyle changes she'll have to make for the health of her baby, including:

- Not smoking (smoking while pregnant increases the risk of miscarriage, stillbirth, low birth weight, and sudden infant death syndrome)
- Not drinking (alcohol causes mental and physical birth defects)
- Not using illegal drugs (drugs are associated with pregnancy complications and fetal death). NB all medication must be prescribed by a Doctor and check with your pharmacist before buying over the counter medicines.
- Avoiding excess caffeine (too much caffeine has been linked to an increased risk of miscarriage)
- Eating right
- Getting enough rest
- Avoiding risky sexual behaviors (such as having unsafe sex)

**Nutrition is a special consideration** in teenage pregnancy, as often the pregnancy is unplanned.

- Fast food, soft drinks, sweets — teen diets are notoriously unbalanced.

- Eating well greatly increases the chances of having a healthy baby, so encourage her to maintain a well-balanced diet that includes plenty of fruits, vegetables and high fibre starchy foods

- Important nutrients include:
  - proteins (lean meat, fish, poultry, egg whites, beans, peanut butter, tofu)
  - calcium (milk and other dairy products)
  - iron (lean red meats, spinach, iron-fortified cereals)
  - folic acid (green leafy vegetables, beans, peas, fortified cereals)

- Drinking plenty of water is essential, too.

- Pregnancy is not the time for your teen to go on a diet. When pregnant, some teenagers might be tempted to counter normal pregnancy weight gain by cutting calories or exercising excessively — both of which can seriously harm their babies. If you suspect that your teen has an unhealthy preoccupation with her weight, talk to her health care provider.

[http://www.safersex.co.za/](http://www.safersex.co.za/)

**xii. CTOP (Choice on termination of pregnancy)**

- If you have an unwanted pregnancy, having the foetus removed by means of an abortion is one of the options that you have, apart from having the baby or having it adopted.
According to the law, (Abortion has been legal in South Africa since 1994), this is your decision and you do not have to inform anyone of your intention. However wherever possible it is best to inform your parents or another adult who will be able to assist and support you. According to the law you are entitled to have a free abortion at a government hospital or clinic during the first three months of pregnancy.

About a third of hospitals and clinics perform these operations.

So what do you do and where can you go? A good start would be your local clinic or general practitioner - in bigger towns specialised TOP clinics are also available. Most family planning clinics also can tell you what you need to know. They should be able to give you the information you need about which hospital or clinic you can go to in your area.

The nurse or doctor should also be able to explain the procedure to you in detail. Ask about things like the use of anaesthetics, what you can expect afterwards, possible complications, where you can go for counselling and how soon you can return to school.

If you are less than twelve weeks pregnant, the abortion is done under local or general anaesthetic. If all goes well, you could return to work within a day, feeling little else except a bit lightheaded from the anaesthetics and slight abdominal discomfort.

If you are more than 20 weeks pregnant, however, medication is given to induce contractions of the uterus, as in a normal birth. After this the uterus has to be evacuated. If there are no complications, you will be absent from school for at least 3 days to a week. Depending on your state of health, you may be required to stay in hospital for a day or two.

Do not consider having a backstreet abortion. They are dangerous, are often performed in unhygienic conditions and can lead to very serious complications such as infertility, or even death. It is much better, and in the long run, a lot cheaper to go to a registered clinic or hospital to have an abortion done. Make informed decisions about your body and your life.

(Health24, updated June 2010)

http://www.safersex.co.za/

http://www.health24.com/

Lifeline Johannesburg (counselling service) – 011 728 1347

Marie Stopes Clinics

Has 30 day clinics and 10 micro clinics around the country offering safe abortions, family planning services including birth control, pregnancy tests, male and female sterilisation, HIV testing and ante-natal services. Fees charged according to client's income bracket.

Toll free helpline: 080011 7785
National: (011) 838 3271
Website: http://www.mariestopes.org.za/home.aspx

**Emergency Contraception Hotline (Western Cape)**

24-hour toll-free hotline for information and referrals on emergency contraception. A public-private partnership between the provincial health department, the University of Stellenbosch, the World Population Foundation, and private clinic Medi-Challenge. Toll-free Helpline: 0800 246 432

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APPENDIX I

NUTRITIONAL ASSESSMENT

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Introduction

Stunting and underweight are the most common nutritional disorders amongst South African children affecting almost one out of five (stunting) and almost one out of ten children (underweight) respectively. More than half of SA children 9 years and younger are deficient in vitamin A and more than one out of ten are iron deficient. These deficiencies impact on the growth, development and performance at school of the children themselves but also the country as a whole.

On the other hand, overweight among our youth is a problem and is increasing with age.

Frequency

Weight and height measurements should always form part of school health screening.

Indicators

The following three indicators should be measured and plotted.

**Weight-for-age:** Weight-for-age reflects body weight relative to the child’s age on a given day. This indicator is used to assess whether a child is underweight or severely underweight, but it is not used to classify a child as overweight or obese. Because weight is relatively easily measured, this indicator is commonly used. Use weight for age in children < 10 years only.

**Height-for-age:** Length/height-for-age reflects attained growth in height. Stunting (length/height-for-age below −2 standard deviations) implies that for a long period the child received inadequate nutrients to support normal growth and/or that the child has suffered from repeated infections. A stunted child may have a normal weight-for-height, but have low weight-for-age due to shortness.

**Body-Mass-Index for age:** BMI-for-age is an indicator that is especially useful for screening for overweight and obesity. The BMI-for-age chart and weight-for-length/height chart tend to show very similar results. Use BMI for age in children >10 years only, also if If the weight is < -2SD or > + 2SD.
Interpretation of the standard anthropometric charts

<table>
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<tr>
<th>SD</th>
<th>Height for age</th>
<th>Weight for age</th>
<th>BMI for age</th>
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</thead>
<tbody>
<tr>
<td>Above 3 SD</td>
<td>Child very tall - rarely endocrine disorder</td>
<td>Assess BMI for age</td>
<td>Obese</td>
</tr>
<tr>
<td>Between 2 and 3 SD</td>
<td><strong>NORMAL</strong></td>
<td>Assess BMI for age</td>
<td>Overweight</td>
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<tr>
<td>Between 1 and 2 SD</td>
<td><strong>NORMAL</strong></td>
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<td>At risk of becoming overweight</td>
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<tr>
<td>Median*</td>
<td><strong>NORMAL</strong></td>
<td><strong>NORMAL</strong></td>
<td></td>
</tr>
<tr>
<td>Between -1 SD and -2 SD</td>
<td><strong>NORMAL</strong></td>
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<td></td>
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<tr>
<td>Between -2 SD and -3 SD</td>
<td>Stunted</td>
<td>Underweight (assess BMI for age)</td>
<td>Wasted</td>
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<tr>
<td>Below -3 SD</td>
<td>Severely stunted</td>
<td>Severely underweight</td>
<td>Severely wasted</td>
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</tbody>
</table>

*Between median and 1SD and median and -1 SD

Equipment

Equipment should comply with the following specifications:

**Scales**

Ideal specification for scales:

- Solidly built and durable
- Close to suppliers to carry out regular servicing and repairs to the scale.
- Be able to be set up easily
- Placed on a flat, stable surface.
- Placed where there is enough room for children to get on/off easily.
- Electronic (digital reading)
- Measures up to 150 kg
- Measures to a precision of 0.1 kg (100g)
- Be able to be zeroed
- Solar cell-on switch and long-life lithium batteries if electricity is not available
- Allows tared weighing (i.e. that the scale can be re-set to zero with the person just weighed still on it)
Positioning of scales

Be sure that the scale is placed on a flat, hard, even surface. It should not be placed on a loose carpet or rug, but a firm carpet that is glued down is acceptable. Since the scale is solar powered, there must be enough light to operate the scale.

To check/calibrate the scale

- Weigh known weights of 3, 5, 10, and 20 kg.
- Check tared weighing by weighing a 20 kg weight, taring the scale, and then adding a 3 kg weight. The 3 kg weight should be displayed.
- If the weights are not accurate, calibrate the scale if possible. Otherwise, if the error is consistent (e.g. off by +0.2 kg consistently), adjust measurements accordingly (e.g. by subtracting 0.2 kg). Monitor the situation, as the amount of error may change. If measurements are off by variable amounts, notify the responsible officer that the scale needs to be replaced.

Stadiometers

Ideal specification for stadiometers

- A good stadiometer should be made of smooth, moisture-resistant material (if wood is used it should be varnished or polished). The material should be durable, lightweight and have few moving parts.
- The horizontal and vertical pieces should be firmly joined at right angles.
- Unless there is a digital counter, a measuring tape should be fixed firmly in a groove along the length, so that moving parts do not scrape it and rub off the markings.
- The tape measure on the stadiometer should be durable with 0.1 cm increments and the numbers of the tape measure must be next to the markings.
- The stadiometer for measuring height in older children and adults must have a sturdy footplate and preferably a lock knob for the head piece to enable accurate reading.
- The headboard/headpiece must slide easily and not be loose or broken.

To check the length/height boards

- When assembling the length/height boards, measure rods of known length to check that they are assembled correctly.
- Check that the joints are tight and straight. If not, tighten or straighten them.
- Check that the measuring tape can be read. If it is too worn to be read, it should be replaced.
Procedure for weighing

- Be sure that the scale is placed on a flat, hard, even surface. There must be enough light to operate a solar-powered scale.
- Children should be weighed with minimal clothing. If it is socially unacceptable to undress the child, remove as much clothing as possible. Shoes and socks should be taken off.
- To turn on the scale, cover the solar panel for a second. When the number 0.0 appears, the scale is ready.
- Ask the child to stand in the middle of the scale, feet slightly apart (on the footprints, if marked), and to remain still until the weight appears on the display.
- Record the child’s weight to the nearest 0.1 kg.

Procedure for measuring height

- Ensure that the height board is on level ground. Check that shoes, socks and hair ornaments have been removed.
- Help the child to stand on the baseboard with feet slightly apart. The back of the head, shoulder blades, buttocks, calves, and heels should all touch the vertical board.
- The legs should be straight and the feet flat, with heels and calves touching the vertical board.
- Position the child’s head so that a horizontal line from the ear canal to the lower border of the eye socket runs parallel to the base board. To keep the head in this position, hold the bridge between your thumb and forefinger over the child’s chin.
- If necessary, push gently on the tummy to help the child stand to full height.
- Still keeping the head in position use your other hand to pull down the headboard/headpiece to rest firmly on top of the head and compress the hair.
- Read the measurement and record the child’s height in centimetres to the last completed 0.1 cm. This is the last line that you can actually see. (0.1 cm = 1 mm)
## An example of WHO standard reference chart
### Weight for Age Girls (chart 1 of 2)

#### Simplified field tables

**Weight-for-age GIRLS 5 to 10 years (z-scores)**

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An example of WHO standard reference chart
BMI for Age Boys (chart 1 of 6)

### Simplified field tables

**BMI-for-age BOYS**
5 to 19 years (z-scores)

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An example of WHO standard reference chart
Height for Age Girls (chart 1 of 6)

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Appendix III:
Monitoring and Evaluation with ISHP Standard Forms
data collection tools