



Hepatitis B, Tuberculosis and other required medical tests for migrant workers before going to receiving country

Through every destination country has separate designated medical centres in Bangladesh and different procedures, in general, an aspirant migrant worker from Bangladesh needs to undergo the following medical tests, before being allowed to go to the receiving country.



1. Important diseases and medical tests for migrant workers



1.a. Hepatitis B (HBsAg):

HBsAg as a Disease

Hepatitis B is a viral infection that attacks the liver and can cause both acute and chronic disease.

Hepatitis B is a liver infection caused by the hepatitis B virus. Some people with hepatitis B are sick for only a few weeks (known as "acute" infection), but for others, the disease progresses to a serious, lifelong illness known as chronic hepatitis B.¹

HBV is one of 5 hepatitis viruses. The others are hepatitis A, C, D, and E. Most hepatitis infections are caused by these 5 viruses. HBV is spread through blood, seminal fluid, and vaginal secretions. It can take several months to develop symptoms of hepatitis B after you become infected. The virus causes an infection in the liver. In most cases, this virus clears up on its own within 6 months. But in a small portion of



adults and a larger portion of children, the virus doesn't go away. This is especially true for newborns. This is called having a chronic infection. It may lead to liver cell damage, scarring, cirrhosis, or liver cancer.²

HBsAg Test

Hepatitis B surface antigen (HBsAg) test is done with a blood sample. A needle is used to draw blood from a vein in arm or hand. This test looks for hepatitis B surface antigens in blood. The test is used to find out whether someone has a recent or long-standing infection from the hepatitis B virus (HBV).

HBV has proteins called antigens on its surface that cause the immune system to make antibodies. Hepatitis B surface antigens can be found in blood within several weeks after the infection starts. They are one of the earliest signs of a hepatitis B infection.

Hepatitis B surface antigens are an early sign of an acute infection, and they are also present during chronic, or long-term, infection.³



1.b. Tuberculosis:

TB as a Disease

Tuberculosis (TB) is a bacterial infection spread through inhaling tiny droplets from the coughs or sneezes of an infected person.

It mainly affects the lungs, but it can affect any part of the body, including the tummy (abdomen), glands, bones and nervous system.

TB is a potentially serious condition, but it can be cured if it's treated with the right antibiotics.⁴

TB Test

There are two kinds of tests that are used to detect TB bacteria in the body: the TB skin test (Mantoux tuberculin skin test-TST) and TB blood tests (interferongamma release assays or –IGRAs). If a person is found to be infected with TB bacteria, other tests, such as a chest x-ray and a sample of sputum, are needed to see if the person has latent TB infection or TB disease.

TB blood tests are the preferred TB test for:

- People who have received the TB vaccine bacille Calmette–Guérin (BCG).
- People who have a difficult time returning for a second appointment to look for a reaction to the TST.⁵

1.c. HIV/AIDS:

HIV/AIDs as a Disease

HIV (human immunodeficiency virus) is a virus that damages the cells in the immune system and weakens your ability to fight everyday infections and disease.⁶

HIV Test

There are three types of tests available: nucleic acid tests (NAT), antigen/antibody tests, and antibody tests. HIV tests are typically performed on blood or oral fluid. They may also be performed on urine.

• A NAT looks for the actual virus in the blood and involves drawing blood from a

vein. The test can either tell if a person has HIV or tell how much virus is present in the blood (known as an HIV viral load test).

- An antigen/antibody test looks for both HIV antibodies and antigens. Antibodies are produced by immune system when someone is exposed to viruses like HIV. Antigens are foreign substances that cause the immune system to activate.
- HIV antibody tests only look for antibodies to HIV in blood or oral fluid. In general, antibody tests that use blood from a vein can detect HIV sooner after infection than tests done with blood from a finger prick or with oral fluid.⁷

1.d. Syphilis:

Syphilis as a Disease

Syphilis is a sexually transmitted disease caused by bacteria, namely, "Treponema pallidum". It spreads if a person comes in direct contact with a syphilitic lesion (chancre). It has three possible stages which include primary syphilis, secondary syphilis, and late or tertiary syphilis.⁸

VDRL Test

The venereal disease research laboratory (VDRL) test is used to detect if a person has been infected with the bacteria causing syphilis, which is a sexually transmitted disease. The test detects the presence of antibodies against the bacteria Treponema pallidum. This test is only indicative, and if positive, it must be followed up with another blood test to make a definitive diagnosis of syphilis.⁹

TPHA:

Treponema Pallidum Hemagglutination (TPHA) test is used to detect antibodies in the blood against syphilis.¹⁰



2. Other medical tests for migrant workers, which are not directly associated with diseases

2.a. X-ray:



An X-ray is a quick and painless procedure commonly used to produce images of the inside of the body¹¹. Actually a chest Xray is included in the mandatory medical test for aspirant migrant workers for all destination countries for indication of possible TB cases and/or lung damages.

2.b. Serum bilirubin test:



Bilirubin is a yellow pigment that is in everyone's blood and stool. A bilirubin blood test determines the levels of bilirubin in the body.¹²

2.c. Pregnancy test:

If any female person misses a period and recently had unprotected sex, she may be pregnant. Pregnancy tests are most reliable from the first day of the missed period.¹³

3. Why Hepatitis B awareness, test and treatment are critically important in the context of migration?

3.a Aspirant Migrant workers of Bangladesh and Hepatitis B:

General health status of Bangladeshi workers is under enormous risk at home and abroad, specifically, because of increasing predominance of HBV in Bangladesh.¹⁴

Hepatitis B virus (HBV) is encountered sporadically the year round in Bangladesh. It results in a wide range of liver diseases, with asymptomatic acute hepatitis at one end to hepatocellular carcinoma (HCC) at the other end of the spectrum. $^{^{15}}$

Bangladesh, together with the Indian subcontinent, is recognized as a country with moderate prevalence of Hepatitis B infection.¹⁶

The HBV test is very critical for Bangladeshi migrant workers as the test is part of the mandatory medical examination for all the destination countries. If any of the possible migrant workers is found to be HBV positive, he/she will not be able to go to the destination country as a migrant worker. Thus, it is extremely important for the possible migrant workers to be aware of the HBV and its infection risks.

- Birth (spread from an infected mother to her baby during birth)
- Sex with an infected partner
- Sharing needles, syringes, or drug preparation equipment
- Sharing items such as toothbrushes, razors, or medical equipment (like a glucose monitor) with an infected person
- Direct contact with the blood or open sores of an infected person
- Exposure to an infected person's blood through needle sticks or other sharp instruments

Hepatitis B is not spread through food or water, sharing eating utensils, breastfeeding, hugging, kissing, hand holding, coughing, or sneezing.¹⁸



3.b. The risk of Hepatitis B for migrant workers of Bangladesh:

- 1. Bangladeshi migrant workers face health risks from the environment and living condition.
- A significant number of Bangladeshi migrant workers also suffer from diseases including diabetes, dermatological problems, physical pain and weakness, eye and ear problem, heart disease, liver, lung and kidney problem, ulcer, tumor, Hepatitis B, HIV and cancer.
- Extreme variation between hot and cold weather results in different health problems including dermatological diseases and dehydration. Migrants tend to suffer almost regularly from diarrhea, tuberculosis, Hepatitis B and C, and these are aggravated due to overcrowded accommodation and unhygienic sanitation system.¹⁷

3.c. Hepatitis B Transmission

Hepatitis B is spread when blood, semen, or other body fluid infected with the hepatitis B virus enters the body of someone who is not infected. People can become infected with the virus from:

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3.d. Treatment for Hepatitis B:

Treatment for hepatitis B depends on how long you have been infected for:

- short-term (acute) hepatitis B does not usually need specific treatment, but may require treatment to relieve the symptoms
- long-term (chronic) hepatitis B is often treated with medication to keep the virus under control

Emergency treatment can also be given soon after possible exposure to the hepatitis B virus to stop an infection developing.

3.e. Emergency hepatitis B treatment

It is better to consult a doctor as soon as possible if someone feels exposed to the hepatitis B virus.

To help stop becoming infected, the doctor may give:

- a dose of the hepatitis B vaccine -2 further doses will be needed over the next few months for long-term protection
- hepatitis B immunoglobulin a preparation of antibodies that work against the hepatitis B virus and can

offer immediate but short-term protection until the vaccine starts to take effect

These are most effective if given within 48 hours after possible exposure to hepatitis B, but a person can still have them up to a week after exposure.¹⁹

3.f. Hepatitis B Prevention Measures

- Hepatitis B is a vaccine-preventable disease. More than 1 billion doses of the hepatitis B vaccine have been given worldwide, and it is considered to be a very safe and effective vaccine to protect infants, children and adults from hepatitis B..
- 2. All sexual partners, family and close household members living with a chronically infected person should be tested and vaccinated.
- 3. It is important to remember that hepatitis B is not spread casually. It is not spread by coughing, sneezing, hugging, cooking and sharing food.
- 4. It is spread through direct contact with infected blood and bodily fluids.²⁰



4. Importance of Tuberculosis awareness, test and treatment for Bangladeshi migrant workers

Another important disease, which is critical for aspirant migrant workers from Bangladesh, is Tuberculosis (TB). This is an airborne disease; common symptoms include cough with sputum and blood in some cases, chest pains, weakness, weight loss, fever and night sweats. TB can lead to the death of an infected person when left untreated.

Bangladesh is a high TB and MDR-TB burden country; it has one of the highest incidences of TB cases in the world. The national MDR-TB prevalence is estimated at 1.6% among new TB Cases and 29% among previously treated TB cases (WHO Global TB Report 2017)²¹

Bangladesh ranked sixth among high TB burden countries. Tuberculosis in Bangladesh kills more than 75,000 people every year.²²

4.a. TB Treatment

Early treatment and cure of infectious cases of tuberculosis cut the chain of transmission of TB infection in the community. Therefore, quick identification of presumptive TB cases, rapid diagnosis, early initiation of treatment and successful completion of treatment are the most effective ways of preventing TB.

The aims of treating TB are: a. To cure the patient of TB, b. To prevent death from active TB or its late effects (disability), c. To prevent relapse of TB, d. To decrease transmission of TB to others, and e. To prevent the development of acquired drug resistance.

The basic principles of effective TB treatment are: a. Appropriate combination of drugs to kill different bacterial populations, b. Drugs are given for the required duration (several months), and c. Drugs are given in the correct dosage to achieve the therapeutic effect.²³

4.b. TB test for migrant workers

TB test is also mandatory for aspirant Bangladeshi migrant workers for all destination countries. As such, it is important for the possible migrant workers to be aware of the TB and get properly treated before he/she prepares to apply to go abroad as a migrant worker.

5. Some policies and guidelines adopted by the Bangladesh Government to ensure migrant workers' health and safety:

1. The government adopted a Health Check-up Policy for Potential Bangladeshi Migrant Workers in 2008.

2. The policy concentrates on the quality of medical tests to uphold the labour outflow.

3. The policy document may elaborate further in future on the issues of counselling, care, treatment and confidentiality of the medical reports, with the aim to be more action-oriented.

4. Under the policy, provisions can be considered in future to document their health profiles and arrange follow up services for the migrants especially in case of infectious diseases like tuberculosis, Hepatitis, and HIV/AIDS. This value addition would be very helpful for the migrant workers.²⁴

Source

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