



CURRENT AFFAIRS



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DIPHTHERIA

This article covers "Daily Current Affairs" and the topic details "Diphtheria". This topic has relevance in the Social Issue section of the UPSC CSE exam.

For Prelims:

About Diphtheria?

For Mains:

GS 2: Social Issue

Complications of Diphtheria?

Diagnosis of Diphtheria?

Why in the news?

The World Health Organization (WHO) has announced the occurrence of a diphtheria outbreak, which is a severe infection caused by specific bacteria known as *Corynebacterium diphtheria*.

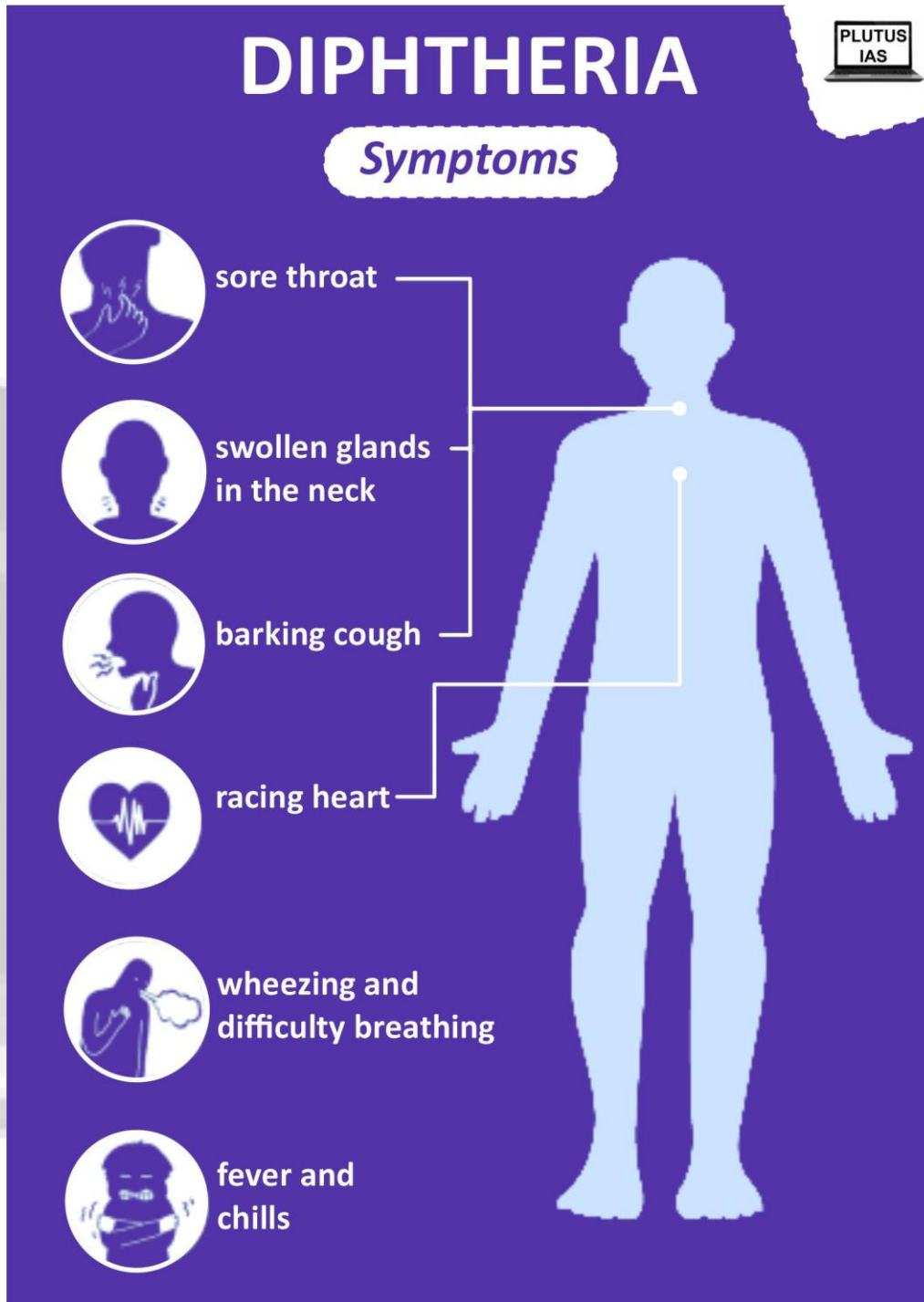
About Diphtheria

Diphtheria is a severe and potentially life-threatening bacterial infection that primarily impacts the mucous membranes of the nose and throat, and in some cases, it can affect the skin as well. It is caused by the bacterium *Corynebacterium diphtheriae*, which produces a toxin capable of causing damage to various tissues and organs within the body.

Symptoms of Diphtheria:

- Symptoms of diphtheria usually manifest 2 to 5 days after exposure to the bacteria. The most common and distinctive symptom is the development of a thick, greyish membrane that covers the throat and tonsils, obstructing the airway and making it difficult to breathe and swallow. Additional symptoms may include:
 - Sore throat and hoarseness
 - Swelling of the glands in the neck
 - Fever and chills
 - Nasal discharge
 - Cough and wheezing
 - Fatigue
- Some individuals infected with diphtheria may experience mild or even no symptoms at all, but they can still serve as carriers of the disease, potentially spreading it to others.
- Diphtheria can also manifest as a skin infection, resulting in ulcers covered by a grey membrane, along with symptoms like redness, swelling, and pain. This form of diphtheria is more commonly

observed in tropical climates and among populations with inadequate hygiene practices and crowded living conditions.



Complications of Diphtheria:

Diphtheria can lead to severe complications if left untreated or if treatment is delayed. The toxin produced by the bacterium can affect various organs and systems in the body, resulting in the following complications:

- **Myocarditis:** This is inflammation of the heart muscle, which can cause abnormal heart rhythms, heart failure, and, in some cases, death.
- **Peripheral Neuropathy:** Diphtheria can damage the nerves, leading to paralysis of limbs, eye muscles, and the diaphragm (the muscle essential for breathing), potentially resulting in respiratory failure.
- **Kidney Problems:** Diphtheria can affect the kidneys, causing proteinuria (the presence of protein in the urine), kidney failure, and, in severe cases, death.
- **Bleeding Problems:** Due to reduced levels of platelets (blood cells responsible for clotting), individuals with diphtheria may experience symptoms such as bruising, bleeding gums, nosebleeds, and internal bleeding.

It's important to note that the risk of death from diphtheria is higher in children under 5 years old and adults over 60 years old.

Diagnosis of Diphtheria:

Diphtheria is diagnosed through a combination of physical examinations and laboratory tests using samples taken from the throat or skin. The diagnostic tests include:

- **Throat Culture:** A swab is used to collect a sample from the throat or membrane, which is then cultured in a specialized medium to identify the presence of the diphtheria-causing bacteria.
- **Elek Test:** This test is employed to detect the presence of the toxin produced by the diphtheria bacteria.

Treatment of Diphtheria:

- Diphtheria is treated using two main types of medications:
 - **Diphtheria Antitoxin:** This medication neutralizes the toxin produced by the diphtheria bacteria. It is administered as an injection as soon as possible after diagnosis.
 - **Antibiotics:** Medications such as erythromycin and penicillin are used to kill the bacteria or inhibit their growth. These antibiotics are given either orally or intravenously and are typically administered for 10 to 14 days.
- Individuals with diphtheria must be isolated in a hospital, often in an intensive care unit, to prevent the further spread of the infection and to closely monitor their condition. Supportive care, including oxygen therapy, fluids, pain relief, and, in some cases, a tracheostomy (a surgical procedure to create an opening in the windpipe) to aid breathing, may also be necessary.
- Close contacts of individuals with diphtheria may require preventive treatment with antibiotics and vaccination.

Prevention of Diphtheria:

- The most effective way to prevent diphtheria is through vaccination. The diphtheria vaccine is typically administered as part of a combination vaccine that also protects against tetanus and pertussis (whooping cough). It is recommended for various age groups, with booster doses every 10 years for adolescents and adults.
- The vaccine is generally safe, with mild side effects such as pain, redness, swelling at the injection site, fever, headache, and fatigue, and serious allergic reactions are extremely rare.

SOURCE:

[Diphtheria outbreak in Guinea: 538 cases and 58 deaths reported; Know all about this disease - News Healthcare | The Financial Express](#)

Q.1 Consider the following statements about Diphtheria:

1. Diphtheria primarily affects the skin and is caused by a toxin produced by Streptococcus bacteria.
2. Diphtheria is not a severe infection and rarely leads to life-threatening complications.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

ANSWER: D

Q.2 Consider the following statements about Diphtheria:

1. Diphtheria antitoxin is administered to neutralize the diphtheria toxin.
2. The most effective method for preventing diphtheria is through vaccination with the diphtheria vaccine

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

ANSWER: C

Q.3 Analyze the challenges and achievements of recent vaccination campaigns, and propose recommendations for improving the effectiveness and accessibility of vaccination programs in the country.

Rishabh

ETHICS COMMITTEE

This article covers "Daily Current Affairs" and the topic details "Ethics Committee". This topic has relevance in the "Polity and Governance" section of the UPSC CSE exam.

For Prelims:

What are the functions and composition of the Ethics Committee?

For Mains:

GS2: Polity and Governance

Why in the news?

Recently, the Lok Sabha Speaker forwarded a complaint against a current Member of Parliament to the House Ethics Committee.

About Ethics Committee

- The establishment of Ethics Committees in the Parliament originates from a resolution passed during the Presiding Officers Conference in New Delhi in October 1996.
- Each house of Parliament has its own dedicated Ethics Committee.



Ethics Committee in Lok Sabha



Ethics Committee in Rajya Sabha



Established

2000

2000

Composition

15 Members
nominated by
the Speaker

10 Members nominated
by the Chair of RS

Term

One Year

One Year

Functions of the Committee on Ethics

- **Monitoring members' moral and ethical behaviour:** The committee assesses complaints regarding the unethical conduct of members, referred to by the Speaker. Subsequently, it provides recommendations.
- **Creating a Code of Conduct for members:** The committee is crafting a Code of Conduct for members and may propose adjustments or additions to this code periodically.
- **Upholding order and decorum in Parliament:** The committee plays a key role in preserving discipline and decorum within the Parliament.
- **Ensuring transparency and accountability:** It establishes protocols for lodging ethics-related complaints and guidelines for financial disclosures and the declaration of interests by members.

Procedure for Filing a Complaint with the Ethics Committee:

- **Any individual or member can submit a complaint** regarding the unethical behaviour of a Lok Sabha member.
- If an individual makes a complaint, it needs to be forwarded by a Lok Sabha member.
- An initial inquiry is conducted once a matter is referred to the Committee.

- If, after the **preliminary inquiry**, the Committee concludes that there is no apparent case, it may suggest that the matter be dropped, with the Chairperson notifying the Speaker accordingly.
 - If, following the preliminary inquiry, the Committee believes there is a prima facie case, it proceeds to examine the matter further.
 - The **Committee's recommendations** are presented in the form of a report.
 - The report is **presented to the Speaker**, who may instruct that the report be tabled in the House.
 - The report from the Committee may also outline the procedure the House should follow to implement the recommendations.
 - After the report has been presented, the Chairperson, a Committee member, or another member can propose that the House consider the report.
 - Before submitting the matter to the House, the Speaker may allow a debate on the motion, limited to a maximum of thirty minutes.
- **Whether or not the House accepts the recommendations in the report is at its discretion.**

Sources:

[Parliamentary Ethics Committee calls BJP MP Nishikant Dubey to prove his allegations against Trinamool's Mahua Moitra – The Hindu](#)

Q1. With reference to the Parliamentary Committee on Ethics, consider the following statements:

1. The Ethics Committee was first established in Lok Sabha in 2000, followed by Rajya Sabha later.
2. The Ethics Committee has 10 members in both houses of the Parliament.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None

Answer: (d)

Q2. Consider the following statements with respect to the Ethics Committee:

1. It receives complaints against unethical conduct of the members.
2. It examines every question involving a breach of privilege of the House or the members.
3. The recommendations of the ethics committee are binding on the House.

How many of the abovementioned statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Answer: (b)

Q3. Discuss the role and importance of the Ethics Committee in Parliament and highlight its challenges in carrying out its functions.