

E-cigarettes

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Source: *The Hindu*

Manifest pedagogy: Health as a topic has to be studied from two dimensions

1. Science and Technology aspects
2. Governance aspects

In this topic science behind E – cigarettes and the governance problems need to be studied. The former is important for prelims and the latter for mains.

In news: Centre to bring ordinance to ban e- cigarettes in country.

Placing it in syllabus: Social issues (explicitly mentioned)

Static dimensions:

- What are E- cigarettes ?
- Their advantages over regular cigarettes
- Issues surrounding them

Current dimensions:

- Present status of e-cigarettes in India
- How right is the ban?

Content: The Union Cabinet is likely to approve an ordinance prohibiting the manufacture and sale of e-cigarettes in the country. The law would make production, manufacture, import, export, transport, sale, distribution or advertisements of e-cigarettes a cognizable offence.

E-cigarettes:

- An electronic cigarette(also known as electronic

nicotine delivery systems, vaporizer cigarettes, and vape pens) is a **battery-operated device** that emits **doses of vaporized nicotine, or non-nicotine solutions**, for the user to inhale.

- Aims to provide a similar sensation to inhaling tobacco smoke, without the smoke.
- Are sold as aids to reduce or quit smoking.
- It was invented by Hon Lik, a Chinese pharmacist.

How they work:

Most e-cigarettes have:

- a mouthpiece, or cartridge
- a heating element
- a rechargeable battery
- electronic circuits



As the user sucks on the mouthpiece, a sensor activates a heating element that vaporizes a flavored, liquid solution held in the mouthpiece. The person then “vapes,” or inhales, the aerosol solution.

The **solution, also known as e-liquid** or e-juice, is made by extracting **nicotine from tobacco and mixing it with a base, usually propylene glycol**, and flavoring. The nicotine content varies from zero to “extra-high,” or 24 to 36 milligrams (mg) per milliliter (ml).

Advantages of e-cigarettes over regular cigarettes:

- They may be less hazardous than tobacco for existing smokers.
- They claim to offer a more healthful alternative to cigarettes and other conventional forms of nicotine intake.

- They can help some smokers quit.
- They claim to bypass many of the health risks of tobacco smoking.

Issues related to e-cigarettes:

- Most e-cigarettes contain **nicotine**, which is addictive and **triggers changes in the adolescent brain**.
- It is hazardous during pregnancy as it can affect fetal development.
- The **aerosol** contains solvents, flavorings, and toxicants, which are **“potentially harmful.”**
- E-cigarettes expose the lungs to different substances such as **dicetyl**, which can **cause “popcorn lung,”** a severe and irreversible lung disease.
- According to the studies carried out in 2018, **nitrosamines** present in e-cigarettes **can damage DNA**.
- The researchers have found that the **ability of lung cells to repair** after exposure to e-cigarette smoke significantly **reduces**.
- Those who use or who have used e-cigarettes are **less likely to stop smoking** altogether.
- Teens who use e-cigarette products are **more likely to start using regular tobacco** as well. (Vaping” is now the most popular form of tobacco use among teenagers in the U.S where it’s use rose by 900 percent among high school students from 2011 to 2015).
- Continued use of nicotine can make other drugs, such as cocaine, more pleasurable.
- **Second-hand smoking is not eliminated** by vaping, as vaping releases carcinogenic emissions.

The U.S Food and Drug Administration (**FDA**) **has not approved e-cigarettes as a smoking aid**. Even if vaping can help people quit smoking, there is no evidence that it works in the long term. Several countries, including Mauritius, Australia, Singapore, South Korea and Thailand, have banned the devices.

Present status of e-cigarettes in India:

- In 2018, Delhi High Court urged the centre to come up with regulatory measures to tackle the “new emerging threat” of e-cigarettes in the country.
- Following this, the Health ministry in **August, 2018**, issued an **advisory to the states to ban Electronic Nicotine Delivery Systems (ENDS)** including e-cigarettes, Vape, e-Sheesha, e-Hookah etc...
- As such, the states/Union Territories are advised that any ENDS and like devices are not sold (including online sale), manufactured, distributed, traded, imported and advertised in their jurisdictions, except for the purpose & in the manner approved under the *Drugs and Cosmetics Act, 1940 and Rules*.
- **In India, 13 states have already banned e-cigarettes and Odisha and Haryana are planning to follow suit.**
- According to a recent study by Delhi-based **NGO Consumer Voice**, over 36 e-cigarette companies are operating in India when officially there is no permission to any of them.
- The government recently came up with a **draft ordinance seeking to ban** the production, import, distribution and sale of electronic cigarettes.
- The draft ordinance called the “**Prohibition of E-cigarettes Ordinance 2019**” is being vetted by a **Group of Ministers (GoM)** comprising the finance minister as well as health, commerce, agriculture, chemicals and petrochemicals and food processing ministries.
- The draft ordinance has proposed a **maximum punishment of up to one-year imprisonment** along with a **penalty of Rs 1 lakh** against first-time violators, and a maximum of up to three years of jail and a penalty of Rs 5 lakh for repeat offenders.
- **Storage of e-cigarettes shall also be punishable** with imprisonment up to six months or fine up to ₹50,000 or both.

How right is the ban?

India has the **second largest number of tobacco users** (268 million) in the world – of these at least 12 lakh die every year from tobacco-related diseases. **Nicotine** is the major cause of the predominant behavioral effects of tobacco. It influences and reinforces all tobacco-use behavior. It binds to receptors in the brain where it **influences the cerebral metabolism. e-liquid** has nicotine content varying from zero to “extra-high”.

The consumption of e-cigarettes and vapes, are much less in India compared to other countries, but it is catching up with the younger population. In 2017, the market research firm Euromonitor International projected India’s vaping market dominated by imported brands to grow 60 percent annually until 2022.

Enforcing a blanket ban on ENDS, instead of regulating them, while cigarettes and other tobacco products continue to be sold in the country under the ambit of **Cigarettes and Other Tobacco Products Act, 2003** (COTPA), (*E-cigarettes do not fall within the scope of existing COTPA*) would **violate Article 14 and Article 19(1)(g)** of the Constitution.

Experts from various fields have welcomed the move and urged the government to pass the ordinance in the larger interest of public health. Anti-tobacco health experts are calling it a move in the right direction.

But the Trade Representatives of ENDS in India (TRENDS), comprising importers, distributors and marketers of alternative smoking devices, has also urged the government to initiate a consultative process so that opinion of all stakeholders can be heard and facts placed in the correct perspective.

The ordinance could be a strong deterrent but will not be of much use until it has provisions for a total ban as the e-

cigarette companies will continue to operate illegally. People would start using conventional tobacco products. Hence the ordinance should not leave any loopholes for e-cigarette companies to operate and stringent laws are required.