

WHO FCTC
Knowledge Hub for
Articles 17 and 18



WHAT DOES ARTICLE 18 OF THE FRAMEWORK CONVENTION ON TOBACCO CONTROL (WHO FCTC) DEAL WITH?

Article 18 of the WHO FCTC states: “In carrying out their obligations under this Convention, the Parties agree to have due regard to the protection of the environment and the health of persons in relation to the environment in respect of tobacco cultivation and manufacture within their respective territories.”¹

TOBACCO PRODUCTION CYCLE HEALTH IMPACTS

CULTIVATION AND HARVEST

Those involved - including children, pregnant women, and the elderly - are susceptible to injuries and illnesses. **The main ones are:**

- Green Tobacco Sickness
- Acute and chronic pesticide intoxications
- Osteomuscular disorders, such as tendonitis and lower back pain
- Mental and behavioral disorders
- Cancer
- Respiratory problems
- Injuries resulting from accidents

The population near tobacco cultivation areas may experience health problems due to exposure to air, water, soil, and food contaminated with pesticides.



Between 2010 and 2019

760 cases of *Green Tobacco Sickness* and **1,823 cases** of pesticide poisoning were reported in tobacco farming in Brazil.²

Children and adolescents accounted for **12,2%** of those affected.²

Tobacco farming is on Brazil's list of the worst forms of child labor, established in 2008.³

Of the registered cases of pesticide poisoning due to agricultural work, **11.2%** occurred in **tobacco cultivation** - the crop with the highest number of records.²



GREEN TOBACCO SICKNESS (GTS) Do you know?

- It is an acute poisoning caused by the absorption of nicotine from tobacco leaves through the skin. It mainly occurs during the harvest.²

COMMON SYMPTOMS:²

- headache
- dizziness
- nausea and vomiting
- weakness
- pallor
- increased sweating and salivation
- chills
- abdominal cramps
- diarrhea

MORE SEVERE SYMPTOMS:²

- severe prostration
- difficulty breathing
- insomnia
- changes in blood pressure and heart rate
- abnormal body temperature
- high frequency of vomiting leading to dehydration

The symptoms start from **15 minutes to 17 hours** after exposure, and the average duration is **21 hours**.²



Pesticide poisoning

Farmers and their families, due to exposure to these toxic components, become more **susceptible to developing tumors, blood diseases, neurological, endocrine, respiratory, dermatological, and psychological conditions**, among other health problems.⁴



CURING AND CLASSIFICATION OF LEAVES⁵

- Issues arise from exposure to smoke from wood burning in curing barns and dust from dried tobacco.
- Workers face forced postures, lifting, and carrying heavy loads for task completion.
- The task involves prolonged working hours.

MANUFACTURING AND DISTRIBUTION⁶

- In 2022, **220** workplace accident reports were issued related to “**industrial processing of tobacco**” and “**manufacture of tobacco products.**”
- Of these, **169** occurred in the **Southern region.**

TOBACCO PRODUCTS USE⁷

- Exposure to smoke from cigarette products and vapors from vapes, electronic cigarettes, and hookahs can lead to respiratory diseases and other health issues.
- Smokers are at a higher risk of developing various types of cancer, lung diseases, and cardiovascular diseases.



SOME EVIDENCE ON THE IMPACTS OF THE TOBACCO PRODUCTION CYCLE ON HEALTH

- At least **25% of workers** involved in tobacco cultivation suffer from Green Tobacco Sickness every year.⁷
- In a single day of tobacco harvesting a farmer can absorb the same amount of nicotine found in **50 cigarettes.**⁸



ENVIRONMENTAL IMPACTS

CULTIVATION

- **Deforestation** for the release of areas for tobacco cultivation
- **Contamination** of water and soil due to pesticide use
- **Soil degradation**
- **Threat** to biodiversity

! Tobacco production requires up to **eight times more water** than the production of tomatoes or potatoes.⁷

CURING AND
CLASSIFICATION
OF LEAVES

Air pollution due to wood burning for drying.

MANUFACTURING⁴

- The WHO estimates that the manufacturing of tobacco products emits over **8 million metric tons** of CO₂ equivalent every year.
- In **2015**, a single company – BAT – was responsible for emitting **876,000 metric tons** of CO₂ equivalent. It is the same volume emitted by **3 million** transatlantic flights.

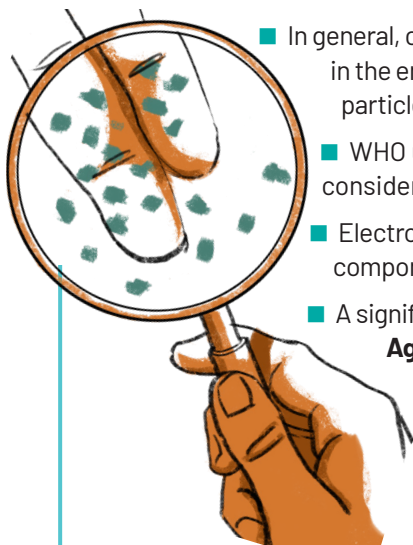
TOBACCO PRODUCTS
USE

- Air pollution caused by cigarette smoke, which releases thousands of compounds and chemicals.
- Cigarette smoke contains nicotine, tar, carbon monoxide, ammonia, ketones, formaldehyde, acetaldehyde, and acrolein, among other toxic, carcinogenic substances, and **greenhouse gases**.^{4,9}
- It is estimated that **80 million tons** of CO₂ are released into the environment every year. This number is equivalent to the amount of CO₂ released by **17 million** gasoline-powered cars annually.⁷

DISPOSAL

- Cigarette butts contain more than **7,000 toxic chemicals**, which can accumulate in the environment and pollute the soil and water resources, impacting aquatic life.⁴
- Each year, **4.5 trillion cigarette butts** are discarded globally. This volume is 26.5 million cubic meters, enough to cover Central Park in New York.¹⁰
- The decomposition time of cigarette filters can vary from **18 months to 10 years**. However, as the components are toxic, environmental damage is independent of this time.¹¹
- Electronic cigarettes contain batteries with lithium ions, cartridges, circuits, liquid chemicals, plastic, and metal materials. Their disposal generates toxic waste, plastic waste, and microplastics.⁴
- The disposal of cigarette butts and lit matchsticks can lead to fires.

MICROPLASTICS: What is their relationship with tobacco products?



- In general, cigarette filters are made of cellulose acetate. This material is non-biodegradable and remains in the environment for extended periods in the form of microplastics – extremely small plastic particles that can accumulate in the environment, being absorbed by ecosystems.⁷
- WHO urges lawmakers to treat cigarette filters the same way as other disposable plastics and consider banning them to protect public health and the environment.⁷
- Electronic cigarettes and vapes also generate microplastics from the degradation of their plastic components.⁴
- A significant step in addressing this issue was the approval of the resolution for the **Global Treaty Against Plastic Pollution** in 2022 – an international agreement proposed by the United Nations Environment Programme (UNEP). The legally binding resolution addresses the complete life cycle of plastic. The treaty aims to regulate the production and use of plastics, to establish measures to ensure responsible waste management, and to promote the transition to sustainable alternatives, among other points.¹²

Globally

- It is estimated that one tree needs to be cut down for the production of **300 cigarettes**.⁴
- The production, consumption, and disposal of one kilogram of tobacco use the same volume of water that an individual needs to meet their needs for an entire year.⁷
- Every year, the tobacco industry:
 - kills more than **8 million** people.¹³
 - deforests **200 thousand hectares of land**.⁷
 - uses **22 billion tons of water**.⁷



In Brazil

- It is estimated that Brazil incurs a cost of **US\$ 202.7 million per year** for cleaning up waste generated after the consumption of tobacco products, such as cigarette butts. These costs fall on taxpayers and not on the industry responsible for the problem.¹⁴



Sustainable Development Goals (SDGs) and Agenda 2030

The fulfillment of Article 18 is related to the following SDGs:

- **Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- **Goal 12.** Ensure sustainable consumption and production patterns
- **Goal 13.** Take urgent action to combat climate change and its impacts
- **Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



The information and views set out on this document are those of the author(s) and do not necessarily reflect the opinion of the Parties to the WHO Framework Convention on Tobacco Control (WHO FCTC), the Parties to the Protocol to Eliminate Illicit Trade in Tobacco Products, or the Secretariat of the WHO FCTC.

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