

Country-Level Policies Regulating Nicotine Strength and Liquid Volumes for Electronic Nicotine Delivery Systems (ENDS)

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Significance

The amount of nicotine that a person who uses ENDS is exposed to is determined by many factors including frequency and volume of puffing, as well as nicotine formulation and quantity in the liquid. It is valuable to know what or how nicotine strength (mg/ml, or % nicotine) is being regulated for ENDS, and if/how policies limit the volume of liquid sold for ENDS.

Methods

The Institute for Global Tobacco Control's E-cigarette Policy Scan tracks country-level policies regulating ENDS across the globe. The scan, which is updated twice a year, includes 130 countries. In-country contacts provide specific policy information and documents. Policy details were collected as recently as December 2022. Countries with policies regulating nicotine strength and liquid volumes for ENDS were identified, and their regulatory approaches were reviewed.

Most countries are **not**
regulating **nicotine strength**
or **liquid volumes** in ENDS.

Of those that are, **most are in the EU**
and **limit nicotine strength to 20mg/mL.**



◀ Access the
E-cigarette
Policy Scan

globaltobaccocontrol.org

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Results

Of the 130 countries, we identified n=36 countries regulating nicotine strength:

- Most of these (n=27) are EU member states and follow the Tobacco Product Directive requirement of liquid used for ENDS having a nicotine strength of 20mg/mL, single-use devices not exceeding 2mL, and refillable bottles not exceeding 10mL.
- Other countries have adopted these regulations (UK, Albania, Moldova, Saudi Arabia); Iceland and Israel have a set maximum nicotine strength of 20mg/mL, but their policies do not regulate liquid volumes.
- Jordan limits the nicotine concentration to max 20mg/ml for freebase and 25g/ml for products that use nicotine salts; refill bottle sizes are limited to a maximum of 10 ml, and refill tanks for e-cigarettes are limited to a maximum of 2 ml.
- Canada limits the concentration of nicotine in e-cigarette liquid to a maximum of 20 mg/mL.
- In Australia, when the nicotine is in base form the concentration of nicotine must be not more than 100 mg/mL; when the nicotine is in salt form the equivalent base form concentration of nicotine must be not more than 100 mg/mL.

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