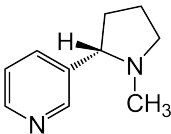
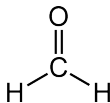
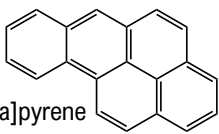
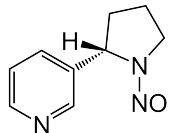
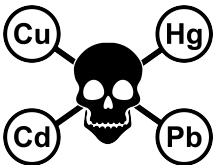


## CONCEPT: TOBACCO OVERVIEW

### Components of Tobacco Products

- ◆ Tobacco has numerous chemicals that contribute to its \_\_\_\_\_ and damaging effects on overall health.
  - These chemicals can be delivered through cigarettes, cigars, vaping, \_\_\_\_\_, or chewing tobacco.

Components of Tobacco Products			
<b>1. Nicotine</b>		<b>2. Carbon Monoxide</b>	
	<ul style="list-style-type: none"><li>▸ Highly addictive substance.</li><li>▸ Short-term exposure: _____.</li><li>▸ Long-term exposure: _____.</li></ul>	$C \equiv O$	<ul style="list-style-type: none"><li>▸ Harmful, colorless gas that blocks _____ uptake.</li></ul>
<b>3. Formaldehyde</b>		<b>4. Polycyclic Aromatic Hydrocarbons (PAHs)</b>	
	<ul style="list-style-type: none"><li>▸ Carcinogen used as a _____.</li><li>▸ _____ lung function.</li></ul>	 Benzo[a]pyrene	<ul style="list-style-type: none"><li>▸ A group of _____ carcinogens produced from burning.</li><li>▸ _____ risk of cardiovascular disease.</li></ul>
<b>5. Tobacco-Specific Nitrosamines (TSNAs)</b>		<b>6. Inorganic Toxins</b>	
 Nitrosonornicotine (NNN)	<ul style="list-style-type: none"><li>▸ _____ potent carcinogens.</li><li>▸ Formed during _____ process.</li></ul>		<ul style="list-style-type: none"><li>▸ _____ metals such as Cd or Pb.</li><li>▸ Neurological damage &amp; _____ risk of cancer.</li></ul>

### EXAMPLE

Nickel is an element that is similar to cadmium. It can cause respiratory issues as well as dermal allergies when exhaled from tobacco smoke. Based on this information how would nickel be classified?

- a) PAH                      b) Inorganic Toxin                      c) TSNA                      d) Macronutrient

## CONCEPT: TOBACCO OVERVIEW

### Nicotine Addiction

- ◆ **Nicotine** is a major addictive component that makes the smoker physically dependent to smoking.
  - Triggers the release of \_\_\_\_\_ that leads to feelings of happiness, satiety and pleasure.
  - Nicotine withdrawals can lead to restlessness, irritability, \_\_\_ hunger, & anxiety for \_\_\_ to \_\_\_ weeks after quitting.
- ◆ **Vaping:** The act of inhaling vaporized nicotine using a device called an \_\_\_-cigarette.
  - Uses nicotine cartridges that deliver \_\_\_ [nicotine] more rapidly than regular cigarettes.



### EXAMPLE

Which of the following statements could be a reason for smoking being associated with weight loss?

- a) Nicotine decreases a person's appetite.
- b) Nicotine decreases a person's basal metabolic rate.
- c) People who smoke have an increase in ghrelin production.
- d) People who stop smoking have increased cravings for high-fat, high-sugar and salty foods.

CONCEPT: TOBACCO OVERVIEW

Trends in Smoking

- ◆ Although approximately \_\_\_ in 8 U.S. adults engage in smoking, the overall use rate has been decreasing since 2005.
  - Men tend to smoke at \_\_\_\_\_ rates than women.
  - More formal education = \_\_\_ knowledge of dangers of smoking.

Smoking-related Deaths  
\_\_\_ out of every 5 adult deaths

Trends in Traditional Smoking							
Race/Ethnicity	Men	Women	Total	Education	Men	Women	Total
	(Percentages)				(Percentages)		
Non-Hispanic American Indian	19.0	24.0	21.9		38.3	29.4	34.1
Non-Hispanic Black	21.0	13.2	16.7	12th Grade (Not Graduated)	27.5	25.0	26.3
Non-Hispanic White	17.0	16.0	16.6	High School Graduate	21.8	18.0	19.8
Hispanic	13.1	7.1	10.1	Bachelor's Degree	8.2	6.6	7.4
Non-Hispanic	12.0	2.6	7.0	Degree	3.9	3.4	3.6
* Traditional Smoking: Smoking that excludes e-cigarettes and nicotine pouches.							

EXAMPLE

Which of the following person is *most* likely to engage in traditional smoking?

- a) A person with a masters in psychology.
- b) A non-Hispanic person of Asian descent.
- c) A person with less than 12 years of education.
- d) A person with an associate's degree in dental hygiene.

PRACTICE

If a reported 2.85 million adults died in the U.S. in 2024, how many could have potentially been smoking-related?

- a) 570,000
- b) 465,000
- c) 2,280,000
- d) 500,000

## **CONCEPT: TOBACCO OVERVIEW**

### **PRACTICE**

Which of the following is true when it comes to the trend in smoking for college students?

---

- a) Increasing.
- b) Decreasing.
- c) Have remained constant for the past 25 years.
- d) Have remained constant for the past decade.

### **PRACTICE**

Which of the following statements about nicotine exposure is true?

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- a) Short-term nicotine use acts as a depressant to decrease a person's appetite.
- b) Nicotine is a non-addictive colorless substance that is one of many substances in tobacco smoke.
- c) After 3 months a person's withdrawal from nicotine will be more intense than the third week.
- d) It can lead to an increase in blood pressure and heart rate.

### **PRACTICE**

Which of the following statements would not be a likely reason for the decrease in smoking in the past 20 years?

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- a) Changes in social environments and accepted norms.
- b) Creation and passage of public health initiatives that bring awareness to its health effects.
- c) The complete removal of the additive components found within tobacco products.
- d) The passage of legislation in 2019 by the U.S. government that raised the age to 21.