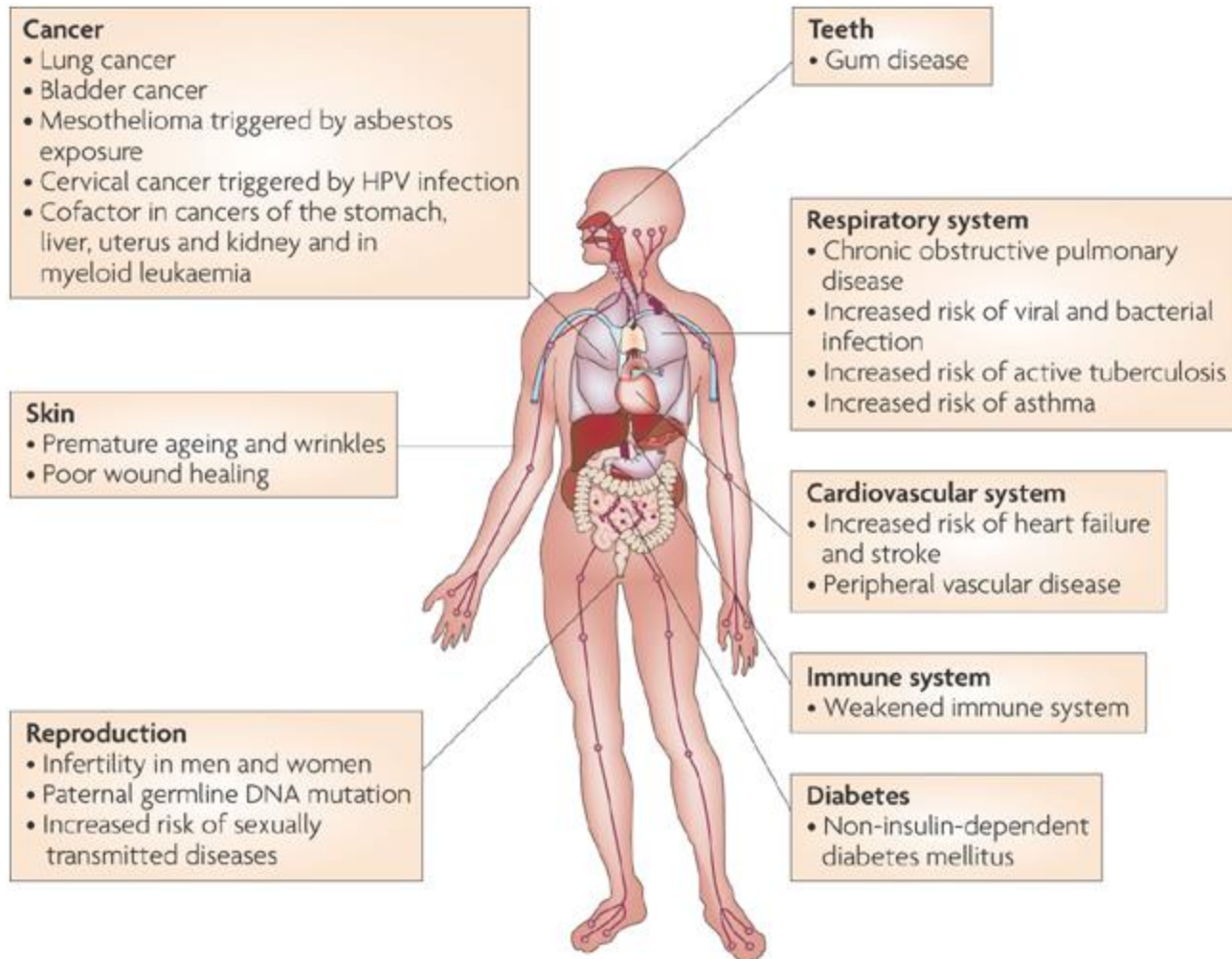


After the Last Cigarette

Treatment Options for Quitting Tobacco

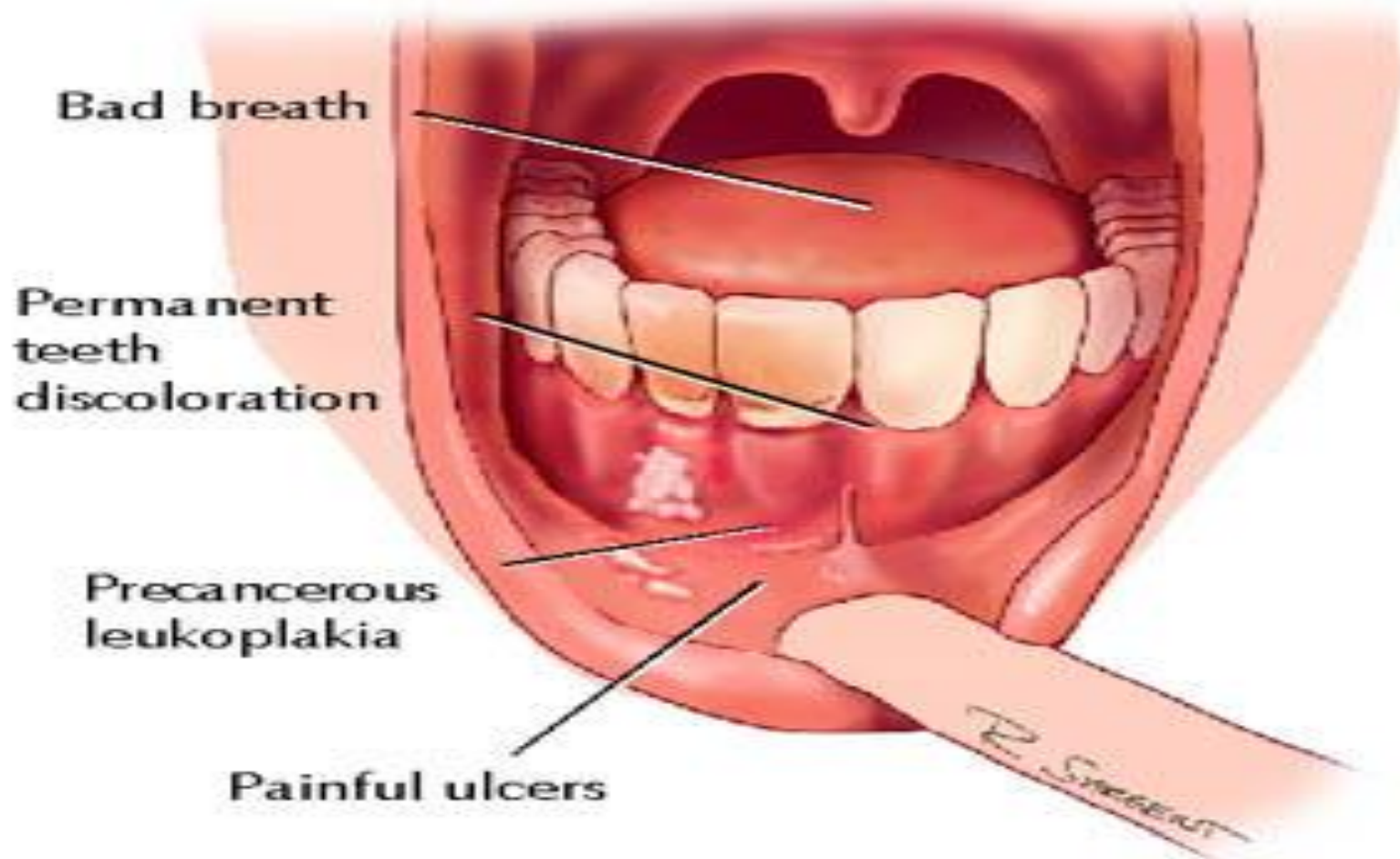
By Susan Kahler, MBA, CTTS

Risks from Smoking

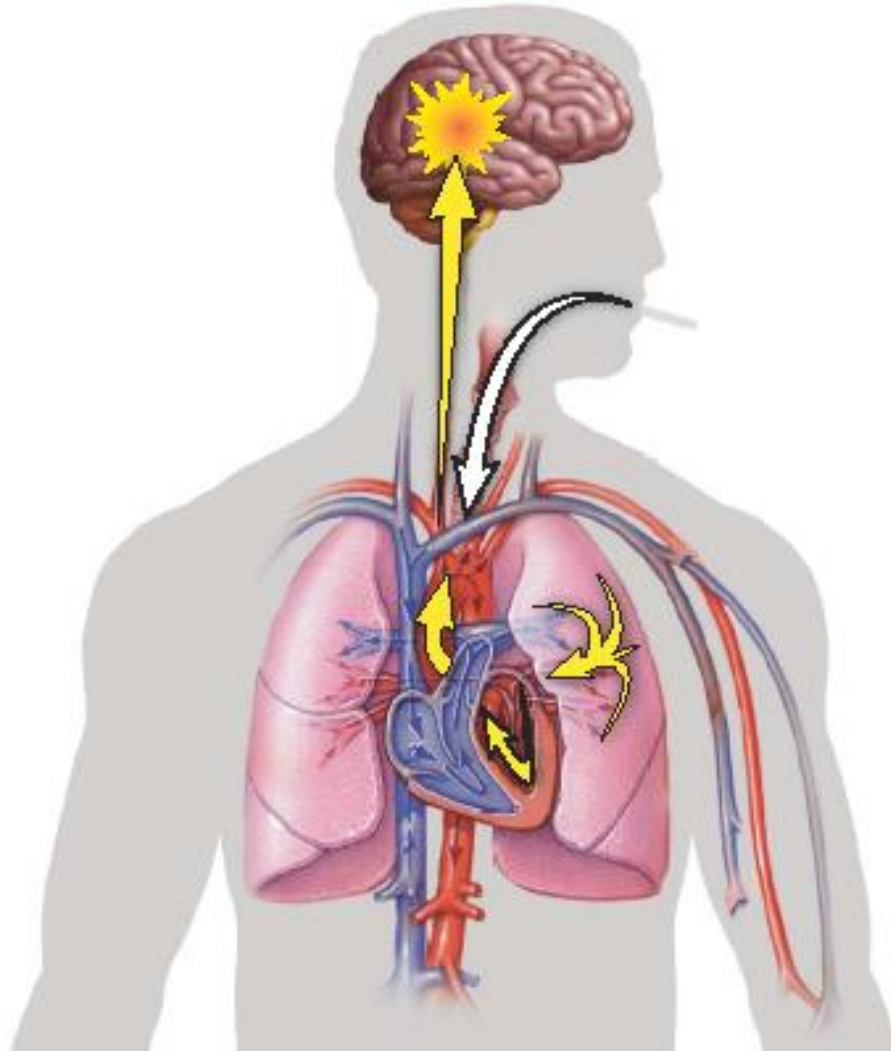


The Highly Engineered Product

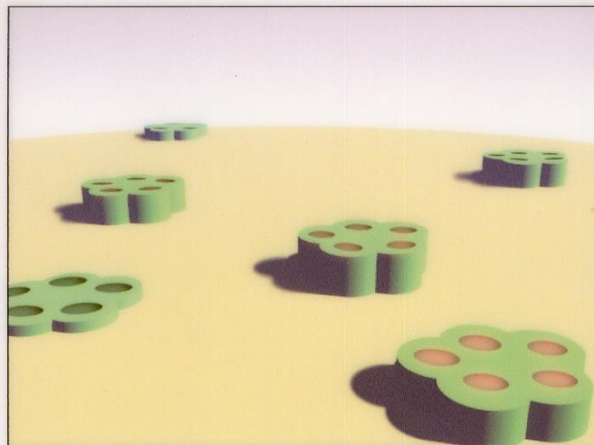
Effects of smokeless tobacco



Nicotine Delivered by Inhalation



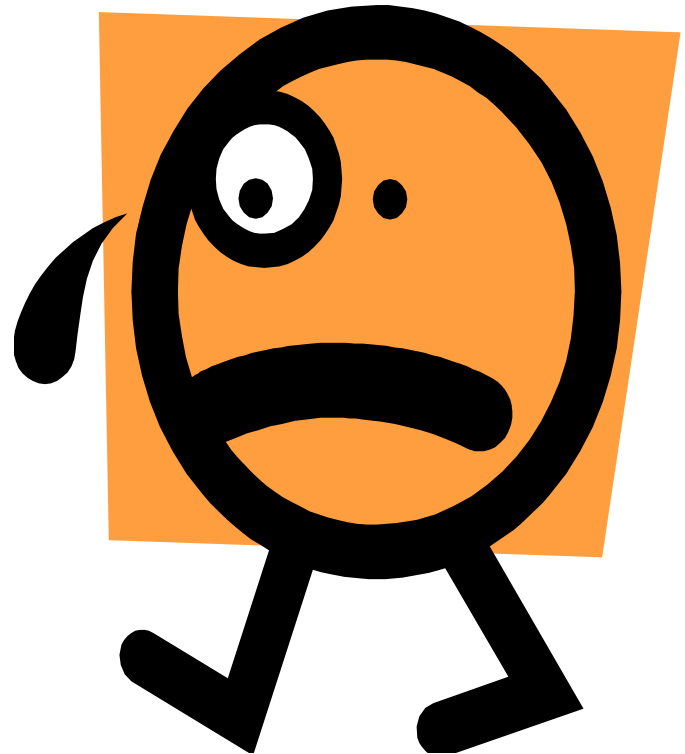
Characteristics of Nicotine lead to Reinforcement of Use & Addiction



DSM-IV

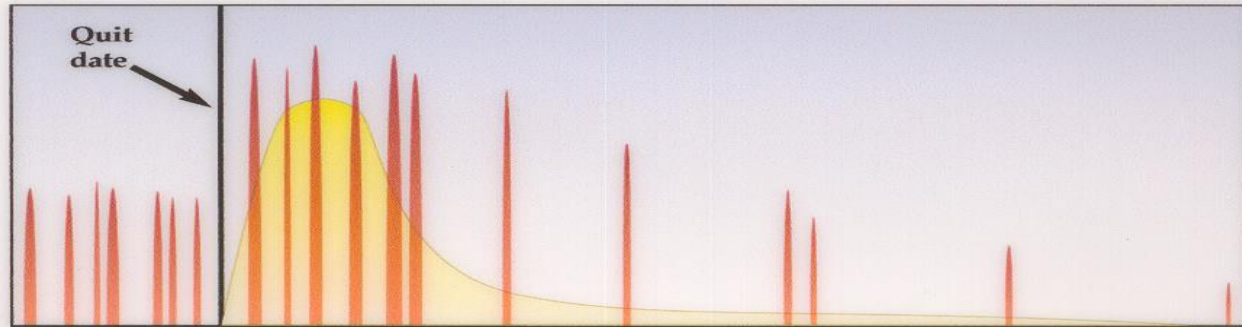
Withdrawal Symptoms

- Insomnia
- Restlessness
- Anxiety, Irritability, Frustration, Anger
- Difficulty concentrating
- Sad, depressed mood
- Increased appetite
- Decreased heart rate

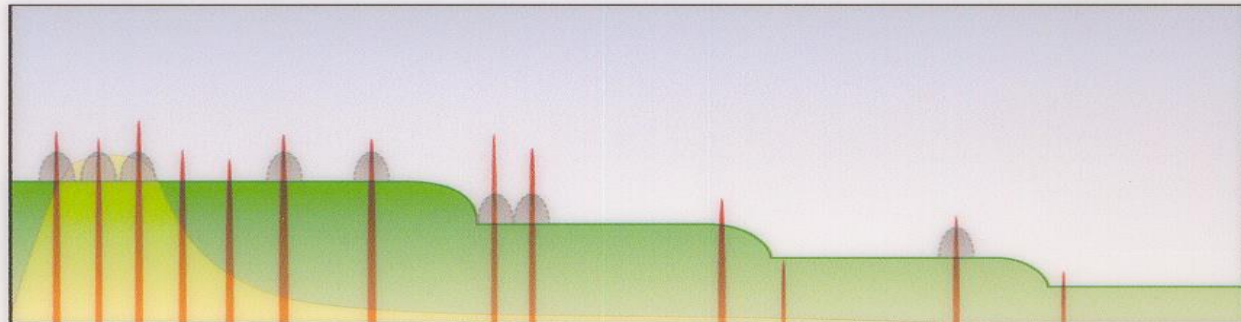




Timeline of withdrawal symptoms and urges



Medication effects on withdrawal symptoms and urges



Treatment of Tobacco Dependence

- Address the Addiction
- Medications to help
- Behavioral Therapy or Counseling
- Relapse Prevention

Resources

Type	Form	Availability
Nicotine Replacement Therapy	Gum	Over-the-counter (OTC)
	Patch	OTC
	Inhaler	Prescription
	Nasal Spray	Prescription
	Lozenge	OTC
Bupropion	Pill	Prescription
Chantix	Pill	Prescription



Nicotine Patch Use

- Use appropriate dose
- Apply once daily and wear 24 hours
- Common adverse effects: patch site reaction, nausea, vivid dreams
- Rotate patch sites to avoid overlap in less than 1 week.
- 7, 14, 21 mg. dose.



Nicotine Patch

Pro's:

- Achieve high levels of replacement
- Easy to use
- Only needs to be applied once a day
- Few side effects

Cons:

- Less flexible dosing
- Slow onset of delivery
- Mild skin rashes and irritation

Nicotine gum (2 or 4 mg)

- Use the “chew and park” method
- Each piece will last about 30 minutes
- No beverages with gum – altered pH
- Use at usual rate for 6 – 12 weeks, then taper by 1-2 pieces each week.
- Common side effects: sore jaws, hiccups, indigestion.
- Use up to 6 months.



Nicotine Lozenge (2 or 4 mg)

- Move from side to side periodically
- No beverages – altered pH
- Use at usual rate for 6 – 12 weeks, then taper by 1-2 pieces each week.
- Do not chew or swallow
- Common side effects: may cause nausea
- Use up to 6 months.
- Use for diabetics

Bupropion (Wellbutrin, Zyban)

Pro's

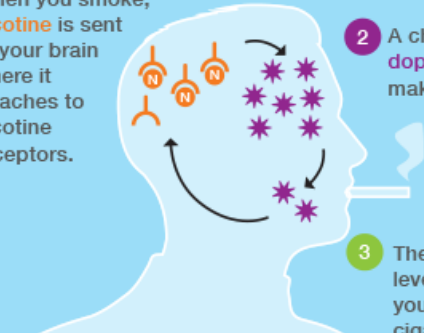
- Easy to use
- Few side effects
- May be used in combination with NRT

Cons

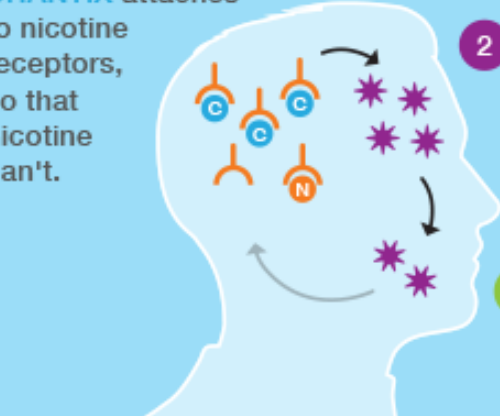
- Cannot be used by all patients with seizures and eating disorders
- Some side effects (insomnia, hypertension, dry mouth)

Chantix

THE CYCLE OF NICOTINE

- 1 When you smoke, **nicotine** is sent to your brain where it attaches to nicotine receptors.
 - 2 A chemical called **dopamine** is released, making you feel good.
 - 3 Then, your dopamine levels drop. This makes you **want** another cigarette.
- 
- A diagram of a human head in profile, facing right, with a cigarette in the mouth. Inside the head, orange Y-shaped receptors labeled 'N' are shown. Purple star-shaped molecules labeled 'D' are shown. Arrows indicate a cycle: nicotine (N) binds to receptors, which triggers the release of dopamine (D), which then leads to a drop in dopamine levels, creating a craving for more nicotine.

HOW CHANTIX IS BELIEVED TO WORK

- 1 **CHANTIX** attaches to nicotine receptors, so that nicotine can't.
 - 2 With **CHANTIX**, **dopamine** is still released, but less so than with nicotine.
 - 3 It is believed that these actions are how **CHANTIX** may help you **quit smoking**.
- 
- A diagram of a human head in profile, facing right, with a cigarette in the mouth. Inside the head, orange Y-shaped receptors are shown. Some are labeled 'C' (for Chantix) and some are labeled 'N' (for nicotine). Purple star-shaped molecules labeled 'D' are shown. Arrows indicate a cycle: Chantix (C) binds to receptors, preventing nicotine (N) from binding. This results in less dopamine (D) being released compared to the nicotine cycle.

Common side effect

- Nausea
- Trouble sleeping
- Changes in dreaming/vivid dreams
- Constipation/gas
- Depression/suicidal thoughts

Free



Mobile



Online



Phone



Resources

Approximately 45 percent of smokers attempted to quit in 2008.

Resources

To order NDQuits Materials click here: [NDQuits Materials Order Form](#)

[NDQuits Referral Form](#)

Fact Sheets

NDQuits Update

***April is National
Cancer Control
Month***

According to Centers for
Disease Control and
Prevention's (CDC)'s
Division of Cancer
Prevention and Control

North Dakota Tobacco Quitline

- 5 to 6 sessions
- Counselors staffed by Mayo Clinic and the UND Community Medicine Program.
- 1st call – 45 min
- 4 to 5 more calls, 10 to 15 min.
- Supplies such as workbooks and NRT products mailed.

What Else?

- Get ready
- Throw away cigarettes, lighters, ash trays
- Survival Kit
- Keep active – exercise
- Drink water
- Deep Breath
- Have a “fire plan”

Your individual “fire plan”

- Be prepared – Survival Kit



- Rehearse
- Have a plan to deal with stress
- Buddies help

Benefits of Quitting

20
minutes



Your heart rate drops

12
hours



The carbon monoxide level in your blood drops to normal

2 - 3
weeks months



Your heart attack risks begins to drop. Lung function begins to improve.

Benefits of Quitting

1-9
months



Coughing decreases in most people. Sinus congestion, fatigue, and shortness of breath decrease

1
year



Added risk of heart disease drops by half

5
years



Risk of stroke drops to that of people who have never smoked

IT IS A DISEASE

“Not a Bad Person with a Bad Habit, but a
Good Person with a Difficult Disease.”

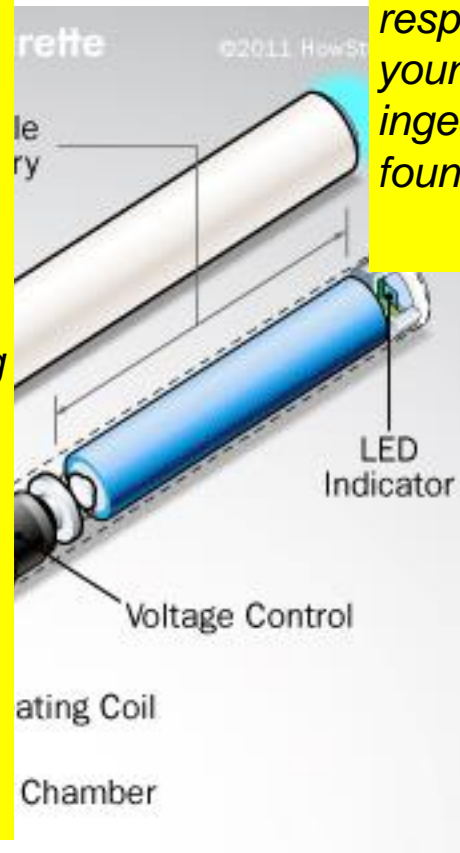
Tom Gavin, Mayo Nicotine Dependence Center, Counselor

E-cigarettes companies ARE tobacco companies!

- **Lorillard** bought Blue in 2012; also Acutied SkyCig, in 2013.
- **RJ Reyonlds** make Vuse and markets them with television ads in Colorado and Utah.
- **Altria Group** (Philip Morris) introduced MarkTen in June 2013 and is test-marketing it in Indiana; also acquired GreenSmoke, in 2014.
- **British American Tobacco** markets Vype in UK and has aquited CN Creative.
- **Swisher International** makes e-cigars.

ALARMING!

Calls to poison control centers related to e-cigarettes are on a rapid rise, particularly with respect to cases involving young children who have ingested the liquid nicotine found in e-cigarette cartridge.



Mark Ten

- <http://www.youtube.com/watch?v=EBwnYG0ZFdl>

E-Cigarettes That Don't Look It

Like a cigarette, e-cigarettes, e-hookahs and vape pens can be nicotine delivery devices. Unlike a cigarette, these are unregulated by the F.D.A. They come in a variety of flavors, like Belgian waffle, vanilla cupcake, and peppermint blast.

Cigarette



e-Cigarettes



Njoy

Traditional Flavor



Blu

Regular

Flavors come in a variety of "smoke juices"

e-Hookahs



Imperial Hookah

Strawberry Margarita

Label states nicotine content



King eHookah

Grape Apple

Label says "This product contains nicotine" and later "no nicotine"

King eHookah

Grape Apple

Label says "This product contains nicotine" and later "no nicotine"

**Logic Hookah**

Blueberry

Label boasts "kissable breath" and "satisfies nicotine cravings"

**Excellent E-cig**

Melon

No indication of nicotine contents but warning label states, "Nictone is highly addictive"

Vape Pens

These come in a variety of shapes and designs and can be interchangeable with e-Hookahs. This particular device is advertised as an "electronic cigarette" and includes a battery and charger.



What is in e-cigarettes?

VOC's

1. Acetone
2. Cresol
3. Xylene
4. Styrene
5. Ethyl Alcohol
6. Acetaldehyde

**JUST
VAPE**

Cancer Causing Agent

1. B-nicotyrine
2. Formaldehyde
3. Nitrosamines
4. Nicotine

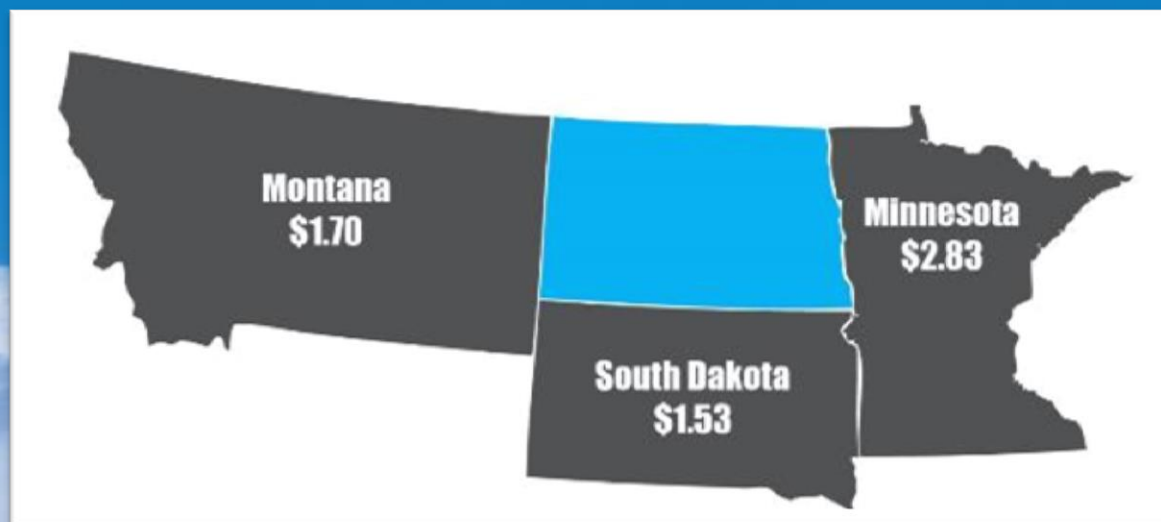
Chemicals

1. Diethylene glycol
2. Propylene glycol

**SMOKING
KILLS**

**7,000 chemicals,
69 cause cancer**

How do we compare to our neighbors?



- **Montana: \$1.70 = 3.9 times higher than ND**
- **Minnesota: \$2.83 (as of 7/1/13) = 6.4 times higher than ND**
 - **South Dakota: \$1.53 = 3.5 times higher than ND**
- **Saskatchewan: \$5.00 = 11.4 times higher than ND**

Questions?

