

Rx for change®

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Registered Nurses Referral to Quitlines: Helping Smokers Quit (RNQL-HSQ) in KENTUCKY

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"Registered Nurses Referral to Quitlines: Helping Smokers Quit"
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Developed in collaboration with Rx for Change®: Clinician-Assisted Tobacco Cessation

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CHANGING WHAT A "GOOD NURSE" DOES

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HELPING SMOKERS QUIT: The RNQL-HSQ Project

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GOALS

The RNQL-HSQ project aims to:

- Provide information to improve nurses' day-to-day clinical practice in helping smokers quit
- Educate nurses about the negative health impact of tobacco use and the health benefits of quitting smoking for patients **in Kentucky**
- Provide current evidence-based information about tobacco dependence and effective interventions to help smokers quit
- Improve nurses' confidence in helping hospitalized smokers quit
- Disseminate resources to support nurses' efforts in helping smokers quit

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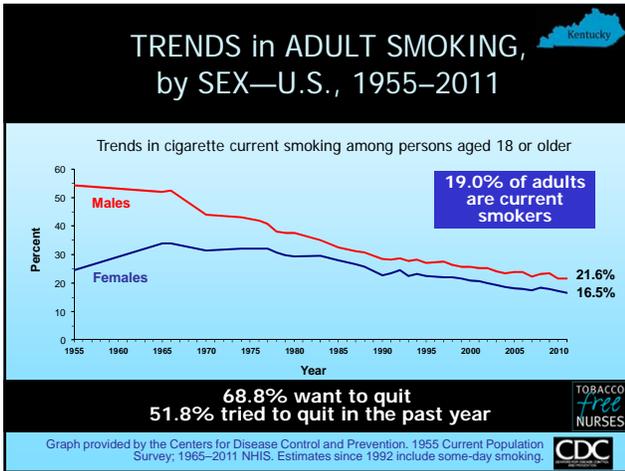
U.S. ANNUAL DEATHS ATTRIBUTABLE to SMOKING, 2000–2004

		Percent of all smoking-attributable deaths
Cardiovascular diseases	128,497	29%
Lung cancer	125,522	28%
Respiratory diseases	103,338	23%
Second-hand smoke	49,400	11%
Cancers other than lung	35,326	8%
Other	1,512	<1%

U.S. TOTAL: 443,595 deaths annually
Kentucky: 7,848 every year

Centers for Disease Control and Prevention (CDC), (2008). *MMWR* 57:1226–1228.

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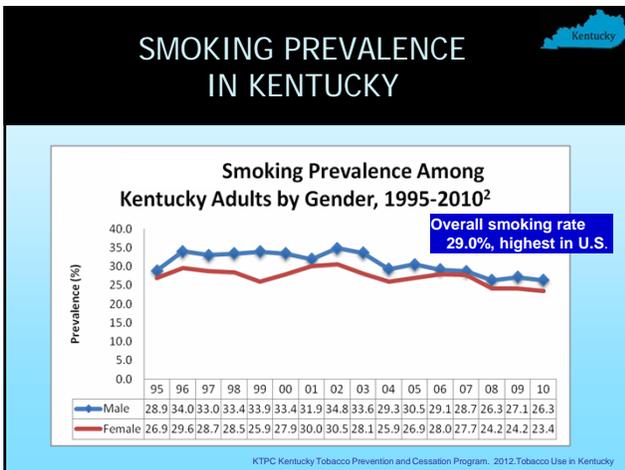


COMPOUNDS in TOBACCO SMOKE

An estimated 4,800 compounds in tobacco smoke, including 11 proven human carcinogens

Gases	Particles
<ul style="list-style-type: none"> ■ Carbon monoxide ■ Hydrogen cyanide ■ Ammonia ■ Benzene ■ Formaldehyde 	<ul style="list-style-type: none"> ■ Nicotine ■ Nitrosamines ■ Lead ■ Cadmium ■ Polonium-210

Nicotine is the addictive component of tobacco products, but it does NOT cause the ill health effects of tobacco use.



2004 & 2010 REPORTS of the SURGEON GENERAL: HEALTH CONSEQUENCES OF SMOKING

FOUR MAJOR CONCLUSIONS:

- Smoking harms nearly every organ of the body, causing many diseases and reducing the health of smokers in general.
- Quitting smoking has immediate as well as long-term benefits, reducing risks for diseases caused by smoking and improving health in general.
- Smoking cigarettes with lower machine-measured yields of tar and nicotine provides no clear benefit to health.
- The list of diseases caused by smoking has been expanded.

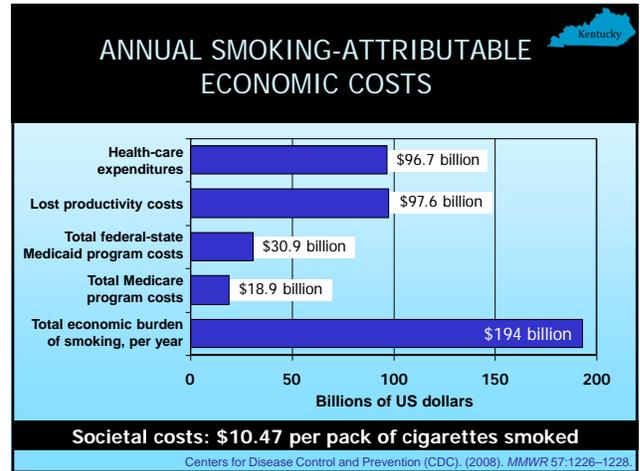
U.S. Department of Health and Human Services. (2004). *The Health Consequences of Smoking: A Report of the Surgeon General*.
 U.S. Department of Health and Human Services. (2010) *How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General*.

HEALTH CONSEQUENCES of SMOKING

- Cancers
 - Acute myeloid leukemia
 - Bladder and kidney
 - Cervical
 - Esophageal
 - Gastric
 - Laryngeal
 - Lung
 - Oral cavity and pharyngeal
 - Pancreatic
- Pulmonary diseases
 - Acute (e.g., pneumonia)
 - Chronic (e.g., COPD)

- Cardiovascular diseases
 - Abdominal aortic aneurysm
 - Coronary heart disease
 - Cerebrovascular disease
 - Peripheral arterial disease
- Reproductive effects
 - Reduced fertility in women
 - Poor pregnancy outcomes (e.g., low birth weight, preterm delivery)
 - Infant mortality
- Other effects: cataract, osteoporosis, periodontitis, poor surgical outcomes

U.S. Department of Health and Human Services. (2004). *The Health Consequences of Smoking: A Report of the Surgeon General*.



2006 REPORT OF THE SURGEON GENERAL INVOLUNTARY EXPOSURE TO TOBACCO SMOKE

- Second-hand smoke causes premature death and disease in all nonsmokers
- Children:
 - Increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma
 - Respiratory symptoms and slowed lung growth if parents smoke
- Adults:
 - Immediate adverse effects on cardiovascular system
 - Increased risk for coronary heart disease and lung cancer
- Millions of Americans are exposed to smoke in their homes/workplaces
- Indoor spaces: eliminating smoking fully protects nonsmokers
 - Separating smoking areas, cleaning the air, and ventilation are **not** effective

There is no safe level of exposure to second-hand smoke.

U.S. Department of Health and Human Services. (2006). *The Health Consequences of Involuntary Exposure to Tobacco Smoke: Report of the Surgeon General*.



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FORMS of TOBACCO

- Cigarettes
- Pipes
- Cigars
- Clove cigarettes
- Bidis
- Smokeless tobacco (chewing tobacco, snus, oral snuff)
- Hookah (waterpipe smoking)
- Electronic cigarettes (“e-cigarettes”)*



*e-cigarettes are devices that deliver nicotine and are not regulated as form of tobacco.
Image courtesy of the Centers for Disease Control and Prevention / Rick Ward

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ELECTRONIC CIGARETTES

- Battery operated devices that deliver vaporized nicotine
 - Cartridges contain nicotine, flavoring agents, and other chemicals
- Battery warms cartridge; user inhales nicotine vapor or ‘smoke’
- Available on-line and in shopping malls
- Not labeled with health warnings
- Preliminary FDA testing found some cartridges contain carcinogens and impurities (e.g., diethylene glycol)
- No data to support claims that these products are a safe alternative to smoking or a quitting aid
- Increase in use among teens

The components of a typical e-cigarette are illustrated below:



Sources: CDC, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm>
Legacy for Health, 2013 <http://www.legacyforhealth.org/content/download/582/6926/version/5/file/LEG-FactSheet-eCigarettes-JUNE2013.pdf>

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HOOKAH (WATERPIPE SMOKING)

- Also known as
 - Shisha, Narghile, Goza, Hubble bubble
- Tobacco flavored with fruit pulp, honey, and molasses
- Increasingly popular among young adults in coffee houses, bars, and lounges
 - An estimated 7-10% of U.S. college students currently smoke hookah
- Nicotine, tar and carbon monoxide levels comparable to or higher than those in cigarette smoke

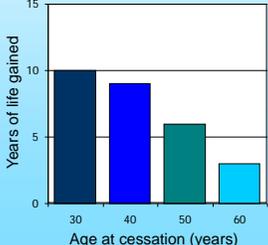


http://www.cdc.gov/tobacco/data_statistics/factsheets/tobacco_industry/hookah/ Image courtesy of Mr. Sami Romman / www.hookah-shisha.com

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SMOKING CESSATION: REDUCED RISK of DEATH

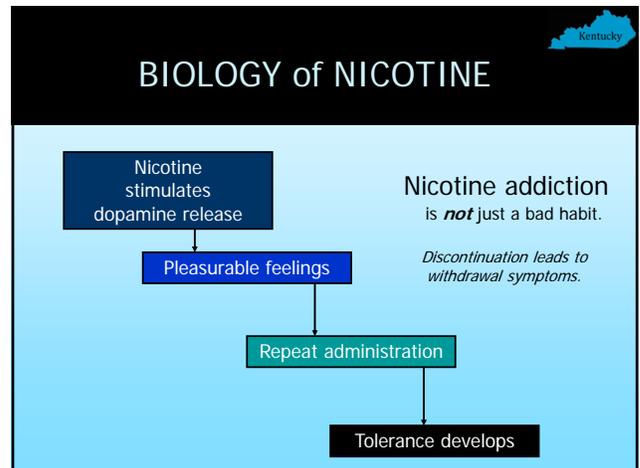
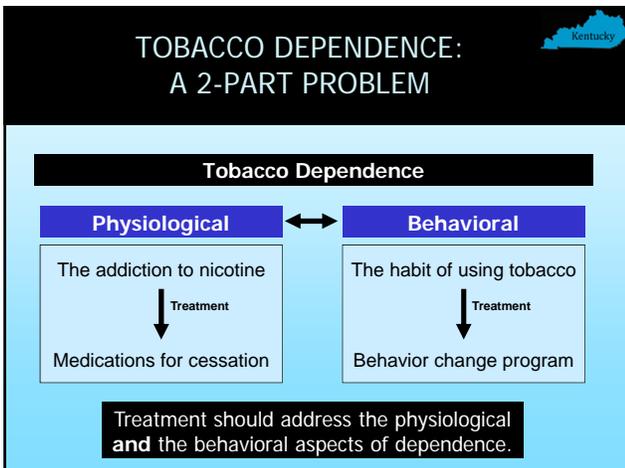
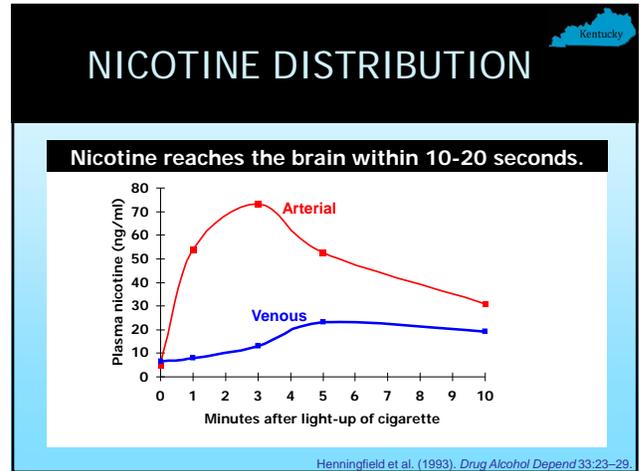
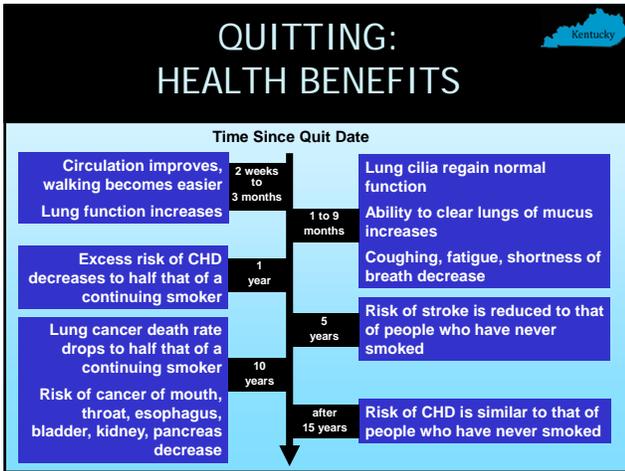
- Prospective study of 34,439 male British doctors
- Mortality was monitored for 50 years (1951–2001)



On average, cigarette smokers die approximately 10 years younger than do nonsmokers.

Among those who continue smoking, at least half will die due to a tobacco-related disease.

Doll et al. (2004). *BMJ* 328(7455):1519–1527.



NICOTINE ADDICTION

- Tobacco users maintain a minimum serum nicotine concentration in order to:
 - Prevent withdrawal symptoms
 - Maintain pleasure/arousal
 - Modulate mood
- Users self-titrate nicotine intake by:
 - Smoking/dipping more frequently
 - Smoking more intensely
 - Obstructing vents on low-nicotine brand cigarettes

PHARMACOTHERAPY

“Numerous effective medications are available for tobacco dependence, and clinicians should encourage their use by all patients attempting to quit smoking—except when medically contraindicated or with specific populations* for which there is insufficient evidence of effectiveness.”

MEDICATIONS SIGNIFICANTLY IMPROVE SUCCESS RATES.

* Includes pregnant women, smokeless tobacco users, light smokers, and adolescents.

Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update, Clinical Practice Guideline*. Rockville, MD: USDHHS, PHS, May 2008.

NICOTINE PHARMACODYNAMICS: WITHDRAWAL EFFECTS

- Irritability/frustration/anger
- Anxiety
- Difficulty concentrating
- Restlessness/impatience
- Depressed mood/depression
- Insomnia
- Impaired performance
- Increased appetite/weight gain
- Cravings

Most symptoms manifest within the first 1–2 days, peak within the first week, and subside within 2–4 weeks.

Hughes. (2007). *Nicotine Tob Res* 9:315–327.

FDA-APPROVED MEDICATIONS for SMOKING CESSATION

Nicotine polacrilex gum

- Nicorette (OTC)
- Generic nicotine gum (OTC)

Nicotine lozenge

- Nicorette Lozenge (OTC)
- Nicorette Mini Lozenge (OTC)
- Generic nicotine lozenge (OTC)

Nicotine transdermal patch

- NicoDerm CQ (OTC)
- Generic nicotine patches (OTC, Rx)

Nicotine nasal spray

- Nicotrol NS (Rx)

Nicotine inhaler

- Nicotrol (Rx)

Bupropion SR (Zyban)

Varenicline (Chantix)

These are the only medications that are FDA-approved for smoking cessation.

NICOTINE REPLACEMENT THERAPY: RATIONALE for USE

- Reduces physical withdrawal from nicotine
- Eliminates the immediate, reinforcing effects of nicotine that is rapidly absorbed via tobacco smoke
- Allows patient to focus on behavioral and psychological aspects of tobacco cessation

COMBINATION PHARMACOTHERAPY

Regimens with enough evidence to be 'recommended' first-line

■ Combination NRT

Long-acting formulation (patch)

- Produces relatively constant levels of nicotine

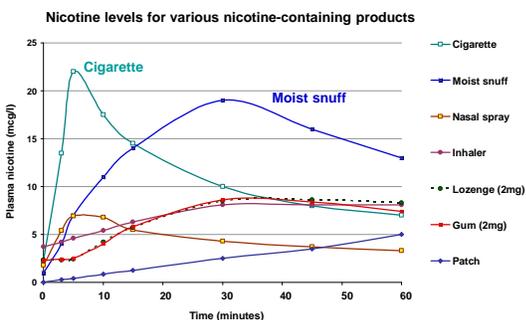
PLUS

Short-acting formulation (gum, inhaler, nasal spray)

- Allows for acute dose titration as needed for nicotine withdrawal symptoms

■ Bupropion SR + Nicotine Patch

PLASMA NICOTINE CONCENTRATIONS for NICOTINE-CONTAINING PRODUCTS



TOBACCO CESSATION REQUIRES BEHAVIOR CHANGE

- Fewer than 5% of people who quit without assistance of a healthcare professional or program are successful in quitting for more than a year.
- Few patients adequately PREPARE and PLAN for their quit attempt.
- Many patients do not understand the need to change behavior.
- Patients think they can just "make themselves quit."

Behavioral counseling is a key component of treatment for tobacco use and dependence.

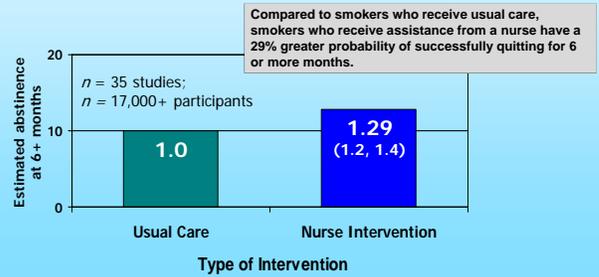
CHANGING BEHAVIOR (cont' d)

- Often, patients automatically smoke in the following situations:
 - When drinking coffee
 - While driving in the car
 - When bored
 - While stressed
 - While at a bar with friends
- Behavioral counseling helps patients learn to cope with these difficult situations without having a cigarette.

- After meals
- During breaks at work
- While on the telephone
- While with specific friends or family members who use tobacco

NURSES CAN MAKE a DIFFERENCE

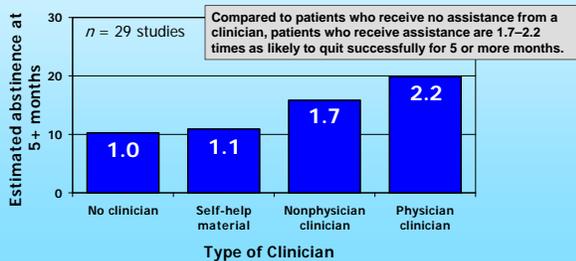
Nursing intervention for smoking cessation vs. usual care



Rice, Hartmann-Boyce, Stead. (2013) *Cochrane Database of Systematic Reviews* No.: CD001188.

CLINICIANS CAN MAKE a DIFFERENCE

With help from a clinician, the odds of quitting approximately doubles.



Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline*. Rockville, MD: USDHHS, PHS, May 2008.

THE POCKET GUIDE Helping Smokers Quit: *A Guide for Clinicians*

The 5 A's

- Ask
- Advise
- Assess
- Assist
- Arrange

Based on: Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline*. Rockville, MD: USDHHS, PHS, May 2008.

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STEP 1: ASK

- **ASK** about tobacco use
 - “Do you, or does anyone in your household, ever smoke or use any type of tobacco?”
 - “We like to ask our patients about tobacco use, because it has the potential to interact with many medications.”
 - “We like to ask our patients about tobacco use, because it contributes to many medical conditions.”

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STEP 3: ASSESS

- **ASSESS** readiness to quit
 - Ask every tobacco user if s/he is willing to quit at this time.
 - If willing to quit, provide resources and assistance
 - See STEP 4, *ASSIST*
 - If NOT willing to quit at this time, provide resources and enhance motivation.

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STEP 2: ADVISE

- **ADVISE** tobacco users to quit
 - “Quitting is important, and I can refer you to people who can help you.”
 - “There are several medications that can help you to quit. I’d be happy to ask the [doctor, nurse, pharmacist, etc.] to talk with you about these options.”
 - “People who receive assistance with quitting are more likely to be able to quit successfully. If you are interested, we can talk about different options.”

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NOT READY to QUIT Counseling Strategies

Consider asking:

“Do you ever plan to quit?” → If NO Advise patients to quit, and offer to assist (if or when they change their mind).

↓ **If YES**

“What might be some of the benefits of quitting now, instead of later?” ↓ Most patients will agree: there is no “good” time to quit, and there are benefits to quitting sooner as opposed to later.

“What would have to change for you to decide to quit sooner?” ↓ Responses will reveal some of the barriers to quitting.

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STEP 4: ASSIST

ASSIST tobacco users with a quit plan

- Set a quit date, ideally within 2 weeks.
- Get support from family, friends, and coworkers.
- Review past quit attempts—what helped, what led to relapse.
- Anticipate challenges, particularly during the critical first few weeks, including nicotine withdrawal.
- Identify reasons for quitting and benefits of quitting.
- Give advice on successful quitting:
 - Complete abstinence is essential—*not even a single puff*.
 - Drinking alcohol is strongly associated with relapse.
 - Having other smokers in the household hinders successful quitting.



STEP 5: ARRANGE

- **ARRANGE** follow up visits
 - Provide information for follow up visits with his/her health care provider
 - If a relapse occurs, encourage repeat quit attempt—tell patient that relapse is part of the quitting process.
 - Review circumstances that caused relapse.
 - Use relapse as part of the learning experience.
 - Reassess pharmacotherapy use and plans for termination.
 - Refer to other resources



STEP 4: ASSIST (cont'd)

ASSIST tobacco users with a quit plan

- Encourage use of pharmacotherapy when not contraindicated
- Provide resources:
 - Toll-free telephone quitline
 - Kentucky: 1-800-QUIT NOW
 - Kentucky website for free materials: www.QuitNowKentucky.org
 - Tobacco Free Nurses: www.tobaccofreenurses.org
 - Cessation materials appropriate by age, culture, language, education, and pregnancy status



REFERRAL to the KENTUCKY TOBACCO QUITLINE 1-800 QUIT NOW

Referring patients to a toll-free quitline is simple and easily integrated into routine patient care.

- **Quitlines** are effective and provided at no cost to the caller.
- **Quitline** Callers receive one-on-one coaching and follow-up from trained counselors in single or multiple sessions
- **Smokers receiving telephone counseling** are more likely to quit than those who only use self-help materials



Resources:
1 800 QUIT NOW (1 800 784-8669)

- **Kentucky's Tobacco Quitline**
 - Open 8am – 1am (closed some holidays), in several languages and for hearing impaired; Free medications (e.g. NRT) in some cases
 - Online services in English and Spanish; text and e-messaging
 - Mailed materials, training for healthcare providers
 - Referral through the web:
www.QuitNowKentucky.org/eReferral
 - Referral by FAX:
https://www.quitnowkentucky.org/providers_partners/default.aspx

**Kentucky Nurses
Helping Smokers Quit**

<http://www.tobaccofreenurses.org/RNQL-HSQ>



Thank You

**WHY SHOULD NURSES IN KENTUCKY
ADDRESS TOBACCO?**

- Helping your patients to quit is the **most important** thing you can do to protect their health now and in the future.
- If each of the over 54,000 nurses in Kentucky helped **five** smokers per year to quit, we could reach over **one quarter million** smokers in the state!
- You *can* make a big difference in your patients' lives!