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

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“Registered Nurses Referral to Quitlines: Helping Smokers Quit”
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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 Louisiana
- 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

GOALS

CHANGING WHAT A “GOOD NURSE” DOES

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

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Percent of Smoking-Attributable Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular diseases</td>
<td>29%</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>28%</td>
</tr>
<tr>
<td>Respiratory diseases</td>
<td>23%</td>
</tr>
<tr>
<td>Second-hand smoke</td>
<td>11%</td>
</tr>
<tr>
<td>Cancers other than lung</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>&lt;1%</td>
</tr>
</tbody>
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U.S. TOTAL: 443,595 deaths annually Louisiana: 6,499 every year

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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 aneurism
  - 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

2006 REPORT OF THE SURGEON GENERAL
IN Voluntary 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.

ANNUAL SMOKING-ATTRIBUTABLE ECONOMIC COSTS

- Health-care expenditures: $96.7 billion
- Lost productivity costs: $97.6 billion
- Total federal-state Medicaid program costs: $30.9 billion
- Total Medicare program costs: $18.9 billion
- Total economic burden of smoking, per year: $194 billion

Societal costs: $10.47 per pack of cigarettes smoked

FINANCIAL IMPACT of SMOKING

Buying cigarettes every day for 50 years at $6.00 per pack (does not include interest)

- Total Medicare program costs: $328,500
- Total federal-state Medicaid program costs: $219,000
- Total economic burden of smoking, per year: $109,500

Dollars lost, in thousands

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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.

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

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

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.

QUITTING: HEALTH BENEFITS

- Circulation improves, walking becomes easier
- Lung cilia regain normal function
- Ability to clear lungs of mucus increases
- Coughing, fatigue, shortness of breath decrease
- Excess risk of CHD decreases to half that of a continuing smoker
- Risk of stroke is reduced to that of people who have never smoked
- Lung cancer death rate drops to half that of a continuing smoker
- Risk of cancer of mouth, throat, esophagus, bladder, kidney, pancreas decrease
- Risk of CHD is similar to that of people who have never smoked

TOBACCO DEPENDENCE: A 2-PART PROBLEM

Tobacco Dependence

<table>
<thead>
<tr>
<th>Physiological</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>The addiction to nicotine</td>
<td>The habit of using tobacco</td>
</tr>
<tr>
<td>Medications for cessation</td>
<td>Treatment</td>
</tr>
<tr>
<td>Treatment</td>
<td>Behavior change program</td>
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Treatment should address the physiological and the behavioral aspects of dependence.

NICOTINE DISTRIBUTION

Nicotine reaches the brain within 10-20 seconds.

- Arterial
- Venous

BIOLOGY of NICOTINE

Nicotine addiction is **not** just a bad habit.

- Nicotine stimulates dopamine release
- Pleasurable feelings
- Repeat administration
- Tolerance develops

Discontinuation leads to withdrawal symptoms.

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

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.


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


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**

TOBACCO CESSATION REQUIRES BEHAVIOR CHANGE

- Fewer than 5% of people who quit without assistance from a healthcare provider 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.

PLASMA NICOTINE CONCENTRATIONS for NICOTINE-CONTAINING PRODUCTS

Nicotine levels for various nicotine-containing products

- Cigarette
- Moist snuff
- Nasal spray
- Inhaler
- Lozenge (2mg)
- Gum (2mg)
- Patch

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

Behavioral counseling helps patients learn to cope with these difficult situations without having a cigarette.

CHANGING BEHAVIOR (cont’d)

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

Comparison to patients who receive no assistance from a clinician, patients who receive assistance are 1.7–2.2 times as likely to quit successfully for 5 or more months.

CLINICIANS CAN MAKE a DIFFERENCE

NURSES CAN MAKE a DIFFERENCE

Nursing intervention for smoking cessation vs. usual care

Compared to smokers who receive usual care, smokers who receive assistance from a nurse have a 29% greater probability of successfully quitting for 6 or more months.

THE POCKET GUIDE

Helping Smokers Quit: A Guide for Clinicians

The 5 A’s

- Ask
- Advise
- Assess
- Assist
- Arrange

**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.”

**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.”

**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.

**NOT READY to QUIT Counseling Strategies**

**Consider asking:**
- “Do you ever plan to quit?”
  - **IF YES**
    - Advise patients to quit, and offer to assist (if or when they change their mind).
  - **IF NO**
    - Most patients will agree: there is no “good” time to quit, and there are benefits to quitting sooner as opposed to later.
- “What might be some of the benefits of quitting now, instead of later?”
- “What would have to change for you to decide to quit sooner?”

Responses will reveal some of the barriers to quitting.
**STEP 4: 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.

- **Encourage use of pharmacotherapy when not contraindicated**

- **Provide resources:**
  - Toll-free telephone quitline
    - National and LA: 1-800-QUIT NOW
    - Website for free materials in LA: [http://quitwithusla.org](http://quitwithusla.org)
    - Tobacco Free Nurses: [www.tobaccofreenurses.org](http://www.tobaccofreenurses.org)
  - Cessation materials appropriate by age, culture, language, education, and pregnancy status

**STEP 4: ASSIST (cont’d)**

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**STEP 5: 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, particularly the quitline.

**RE Referral to the LOUISIANA TOBACCO QUITLINE**

- **1-800-QUIT-NOW (800-784-8669)**

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, online services
- **Smokers receiving telephone counseling** are more likely to quit than those who only use self-help materials
- **Referrals through fax:** [http://quitwithusla.org/pages/detail/24/Fax-To-Quit-Louisiana](http://quitwithusla.org/pages/detail/24/Fax-To-Quit-Louisiana)
- **Referrals through the website:** [http://quitwithusla.org](http://quitwithusla.org)
RESOURCES:
1 800 QUIT NOW (1 800 784-8669)

Louisiana Smokers’ Quitline
- Materials, referrals, training to healthcare professionals (online & in-person), free medications (e.g. NRT) in some cases
- Web-based services: http://quitwithusla.org
- Open 24 hr/day (closed some holidays); several languages and hearing impaired

Smoking Cessation Trust Services (SCTMS)
- Cessation assistance (group counseling, telephone support, NRT for current LA residents who started smoking cigarettes prior to September 1, 1988. Apply at www.smokefreela.org

Louisiana’s Tobacco Control Program
- http://quitwithusla.org

WHY SHOULD LOUISIANA NURSES 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 50,000 nurses in Louisiana 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!