Lung Cancer Screening: Now What?

WHAT IS LUNG CANCER?
Lung cancer usually begins when cells in lung tissue divide uncontrollably and form a tumor. There are two types of lung cancer: non-small cell lung cancer and small cell lung cancer. These two types are usually treated in different ways. Lung cancer is the second most common cancer diagnosed among men and women in the United States.

WHAT IS THE FUNCTION OF THE LUNGS?
The lungs are made of millions of tiny air sacs in the right and left lung and these are the left lung. Air passes into and out of the lungs through the bronchi and into the bronchioles. Air then passes through the bronchioles and into the alveoli, where oxygen is exchanged for carbon dioxide. The oxygen-rich blood flows back to the heart through the pulmonary veins.

WHAT DOES STAGE MEAN?
The American Joint Committee on Cancer (AJCC) classifies lung cancer stages by dividing them into four stages. The goal of staging is to accurately describe the extent of the tumor. The lung cancer stage can determine the type of treatment needed and the chances of cure or survival. There are several systems for classifying lung cancer stages. The TNM system uses tumor size, lymph node involvement, and metastasis to determine the stage of the cancer. These stages are:

1. Stage 0: The tumor is localized to the lung but has not spread to lymph nodes or distant parts of the body.
2. Stage I: The tumor is localized to the lung but has spread to lymph nodes within the chest.
3. Stage II: The tumor has spread to lymph nodes outside the chest but has not spread to other parts of the body.
4. Stage III: The tumor has spread to other organs in the body.
5. Stage IV: The tumor has spread to distant parts of the body.

HOW IS LUNG CANCER TREATED?
The treatment options for lung cancer are determined by the stage of the tumor, the type of lung cancer, whether the cancer has spread, and whether the patient smokes. For patients whose cancer has not spread, options include surgery, chemotherapy, radiation therapy, and targeted therapy. Surgery may be used to remove a tumor and the lymph nodes that may have been affected by the cancer. Chemotherapy uses drugs to kill cancer cells. Radiation therapy uses high-energy X-rays or other types of radiation to kill cancer cells. Targeted therapy uses drugs that target certain proteins or other molecules that contribute to cancer growth and spread.

HOW CAN I HELP WITH LUNG CANCER?
To help your loved one with lung cancer, it is important to stay informed about the disease, its treatment, and your loved one's progress. Here are some tips:

1. Stay informed about your loved one's treatment plan and progress.
2. Ask questions and take notes during doctor's visits.
3. Take care of yourself and your family.
4. Be patient and supportive.
5. Offer to help with daily tasks such as cooking, cleaning, and errands.
6. Consider joining a support group or online community to connect with others who are going through similar experiences.
Smoking is the leading preventable cause of death in the United States.

In a recent ASCO member survey, 85% of oncology providers believe tobacco cessation should be a standard part of cancer care; however they also cite lack of training as a main barrier to doing so.
THE 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
  • Erectile dysfunction in men, lower number and poorer quality of sperm
  • Poor pregnancy outcomes (e.g., low birth weight, preterm delivery)
  • Infant mortality

• Other effects: cataract, osteoporosis, periodontitis, poor surgical outcomes

2012 Behavioral Risk Factor Survey

Smoking
440,000 deaths in U.S. each year

• 23.3% MI adults
Secondhand Smoke Exposure:
46,000 heart disease deaths, 3400 lung cancer deaths

• 27.9% of MI adults reported exposure
Greatest single predictor of tobacco use is low socioeconomic status (SES)

- Low-income
- Less than 12 years of education
- Medically underserved (disabled 31.6%)
- Unemployed
- Working poor (uninsured 41.2%)

• Less likely to participate in cessation programs or receive cessation advice
• Advertising is more prominent
Smoking Prevalence among Adults by Lifetime Mental Illnesses Compared to General Population

- Schizophrenia: 59.1%
- Bipolar Disorder: 46.4%
- Serious Psychological Distress: 38.1%
- Attention Deficit Disorder: 37.2%
- Dementia: 35.4%
- Phobias or Fears: 34.3%
- General Population: 20.6% (24)

• Consume 44.3 percent of all cigarettes smoked in US-rates of physical illness and mortality

• Relationship may be bidirectional: depression increases risk of smoking, and chronic smoking increases susceptibility to depression
~ 50 percent diagnosed with severe mental illness are affected by substance abuse

Smoking + substance abuse prevalence is 3- to 4-fold higher than in the general population

50% of patients who were followed after inpatient substance abuse treatment died of tobacco-related causes

http://www.psychiatrictimes.com/articles/smoking-cessation-during-substance-abuse-treatment#sthash.wVwKDJt3.dpuf
Smoking Deadlier For HIV Patients Than Virus Itself

3,000 HIV patients in Denmark 1995 to 2010

- More than 60 percent of the deaths that occurred among the patients were associated with smoking rather than HIV.
- Findings emphasize the importance of counseling HIV patients on smoking cessation
- Smoking may impact their life expectancy considerably more than the HIV infection itself

Lung Cancer Risks: Myths and Facts

Accessed September 17, 2013

Myth: If You've Smoked for Years, the Damage Is Done

• Fact:
  ▫ Never too late
  ▫ Almost immediate benefits, including improved circulation and lung function
  ▫ Risk of lung cancer begins to decline over time
  ▫ Ten years after quitting, former smokers cut their risk of developing lung cancer by half
Myth: Low-Tar or 'Light' Cigarettes Are Safer Than Regular

- **Fact:**
  - Just as dangerous as regular cigarettes. And
  - Beware of menthol: May be more dangerous and harder to quit
  - Menthol “cooling” sensation can allow smokers to inhale more deeply
Myth: Smoking Marijuana Doesn't Increase Lung Cancer Risk

• Fact:
  ▫ May increase lung cancer risk
  ▫ Marijuana smoking exposes a person to more tar and other cancer-causing substances that you would find in cigarettes
Myth: Pipes and Cigars Don't Cause Lung Cancer

• **Fact:** Smoking pipes or cigars
  ▫ Increases lung cancer risk and cancers of the mouth, throat, and esophagus
  ▫ Cigar smoking puts you at much greater risk of both heart disease and lung disease
  ▫ Cigars just as toxic, maybe more so, than cigarettes
Myth: If Diagnosed With Lung Cancer, Quitting is Pointless

- **Fact:** Continued smoking
  - May decreases the effectiveness of cancer treatment and may make side effects worse
  - More trouble healing than ex-smokers
  - Increased risk of a second cancer forming
  - Increased risk of death from other causes (i.e., heart disease)
NEW POLL FINDS MILLIONS OF SMOKERS NATIONWIDE RESOLVING TO QUIT IN THE NEW YEAR

• Half of smokers are still not speaking with their HCPs about quitting
• 69 percent thinking about quitting within the next year, 79 percent either in process of quitting or planning to do so within the next six months
• Only 39 percent used a non-prescription product like gums during their last quit attempt.
• 13 percent used a prescription medication

Email online survey November 26th and December 5th, 2012 - 1,552 Americans 18 and over who have smoked at least 100 cigarettes in their lifetimes and still smoke at least occasionally
Other tobacco products

Camel Snus

Little Cigars

Bidis

Dissolvable Tobacco

Clove Cigarettes

Jodi L. Radke
Campaign for Tobacco-Free Kids
Director, Rocky Mountain/Great Plains & Michigan

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Hookah

- Flavored tobacco containing nicotine
- Evidence of addiction
- Increased risk of communicable diseases
- Secondhand smoke
- Length of session = more nicotine and toxin intake
- Harder and longer drags


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Lack of quality control in manufacturing
Some contain harmful chemicals
Can leak nicotine
Exposure to secondhand vapor
May deepen addiction
Successful Cessation Evidence-Based Science-Driven Treatment

Application of the NCI model: Clinical Practice Guideline for Treating Tobacco Use and Dependence

http://www.ahrq.gov/path/tobacco.htm

These slides are the property of the presenter. Do not duplicate without express written consent.
<table>
<thead>
<tr>
<th>5 A’s</th>
<th>2 A’s + R</th>
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</thead>
<tbody>
<tr>
<td><strong>ASK</strong></td>
<td><strong>ASK</strong></td>
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<tr>
<td>About tobacco use</td>
<td>About tobacco use</td>
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<tr>
<td><strong>ADVISE</strong></td>
<td><strong>ADVISE</strong></td>
</tr>
<tr>
<td>About the health consequences and benefits of quitting</td>
<td>About the health consequences and benefits of quitting</td>
</tr>
<tr>
<td><strong>ASSESS</strong></td>
<td><strong>REFER</strong></td>
</tr>
<tr>
<td>Determine readiness to quit</td>
<td>Provide information on resources for quitting</td>
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<tr>
<td><strong>ASSIST</strong></td>
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<tr>
<td>Patient with a quit plan</td>
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<tr>
<td><strong>ARRANGE</strong></td>
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<tr>
<td>Provide follow-up support</td>
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</tbody>
</table>
When we **ASK**

“Do you use tobacco?” include:

- **All forms of tobacco**: new products, hookah
- **Any tobacco use at all**: “social smoker”
- **Other smoking products**: “electronic cigarette”
No safe level of exposure to tobacco smoke
Damage from tobacco smoke is immediate
Smoking longer means more damage
Cigarettes designed for addiction
No safe cigarette.
The only proven strategy for reducing the risk for tobacco-related disease and death is to never smoke, and if you do smoke, to quit.

*Brief advice by a clinician (approximately 3 minutes or less) increases long-term abstinence rates significantly


*Chapters 6 and 9 concern respiratory effects, and chapter 7 covers cancer
Suggestions
to be closer to getting ready to quit

- Is there something you could do right now to get you closer?
  - Smoke one less cigarette per day
  - Delay first cigarette of the day
  - Don’t buy cartons
  - Only smoke outdoors
- Where do you see yourself in five years if you don’t stop?
- Tell me about your experiences with quitting
- What is it about quitting that concerns you?
- What is it about not quitting that concerns you?
- What keeps you from quitting?
- What do you see as the health risks for you?
- If you quit smoking what would be the benefits for you?
Options for Quitting

- Cold Turkey
  - or -
- Telephone Quitline
- Online Counseling
- Group Counseling
- Individual Counseling
- Any of the above + FDA approved medication can double success rates

It takes most smokers 8-10 attempts at quitting before being successful: “skillpower”
Help the patient with a quit plan

ASSIST

- Discuss barriers to success and ways to overcome them
- Personalize benefits
- **Identify patient triggers** to tobacco use and ways to overcome them
- Identify coping strategies
- Set quit date within the next 30 days
- Provide support materials
### FDA Approved Medications

<table>
<thead>
<tr>
<th>FDA Approved Medication</th>
<th>Contains Nicotine</th>
<th>Contains No Nicotine</th>
<th>Prescription Needed</th>
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</thead>
<tbody>
<tr>
<td>Bupropion SR</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Chantix</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Nicotine inhaler</td>
<td>X</td>
<td></td>
<td>X</td>
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<tr>
<td>Nicotine nasal spray</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Nicotine patch</td>
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<tr>
<td>Nicotine gum</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Nicotine lozenge</td>
<td>X</td>
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</table>
Purpose Of Cessation Medications

- Blunt withdrawal symptoms during the acute stages of withdrawal
- *Do not cure nicotine dependence or make smokers quit.*
- Commitment and desire to quit should be present
- FDA approved cessation medication + counseling doubles the quit rates over counseling alone.¹

¹ Fiore et al. USDHHS 2000.
Follow-Up

ARRANGE

- within one week before quit date
- one week after quit date
- one month after quit date

Benefit From A Relapse

• Provides useful information
  ▫ Determine cause of the event: a formerly unknown stressful situation
  ▫ Correct the occurrence in the future: an action plan for that event
• Represents a normal part of the recovery process
Best Practices

• At all visits, patients should be asked about smoking, and smokers should be encouraged to quit.

• Patients willing to try to quit: discuss treatments for smoking cessation:
  ▫ Quit date
  ▫ Past quitting experiences
  ▫ Anticipate challenges (reduce or eliminate alcohol use, address other smokers in household)

• Recommend consistent use of medications approved by the FDA for smoking cessation.
Systems Change: Treating Tobacco Use and Dependence Based on the Public Health Service (PHS) Clinical Practice Guideline—2008 Update

- Implementing a tobacco-user identification system in every clinic
- Providing adequate training, resources, and feedback to ensure that providers consistently deliver effective treatments
- Dedicating staff to provide tobacco dependence treatment and assessing the delivery of this treatment in staff performance evaluations
Quitting Matters...

**IT MATTERS** because smoking during treatment can:

- Decrease chance of survival
- Decrease effectiveness of chemotherapy or radiation
- Increase chances of recurrence or second malignancy
- Decrease wound healing

It is never too late to quit smoking.

Set a quit date now, prior to the start of cancer treatment.
Quitting smoking is the most important thing your patients can do to protect their present and future health.

*With your help, they can be successful.*

*Your efforts will save lives!*
Multidisciplinary Approach

- Family Physicians/Specialists/Oncologists
- Nurses
- Pharmacists
- Physician Assistants
- Emergency Physicians
- Anesthesiologists
- Diabetes Educators
- Mental Health Professionals
- Dental professionals
- Chiropractors

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Quit Smoking Apps

• QuitNow!  
  iPhone, Android, BlackBerry  
  Free

• My Last Cigarette  
  iPhone, iPad  
  99c

• Livestrong MyQuit Coach  
  iPhone  
  Free

• Quit Now: My QuitBuddy  
  iPhone, Android  
  Free

• Quit Smoking Now with Max Kirsten  
  iPhone, iPad, Android  
  $7.49 for iPhone, $7.49 for iPad, $4.99 for Android
Text Messaging

- SmokefreeTXT
  24/7 encouragement, advice, and tips to help smokers stop smoking for good
  http://www.smokefree.gov

- 1-800-QUIT-NOW (784-8669)
  http://www.njhcommunity.org/michigan/

- Text2Quit
  Available through health plans, employers and public health departments

- Sign up for quit tobacco text tips
  http://www.ucanquit2.org/quittips/default.aspx
Facebook App

- First evidence-based Facebook app available to help smokers quit
- Part of a three-year study funded by the National Institutes of Health (NIH)
Online Quitting

- http://becomeanex.org/home.aspx
- www.ucanquit2.org for the military and VA
- www.smokefree.gov
- www.women.smokefree.gov
- www.ffsonline.org
- www.quitnet.com
- www.tobaccofreeca.com
- www.smokeclinic.com
- www.nicotine-anonymous.org
- Smokefree Teen QuitSTART
- ASPIRE (online tool for youth-mdanderson.org)
- BeTobaccoFree.gov
- www.cdc.gov/tobacco/quit_smoking/index.htm
Telephone Counseling

- 1-800-QUIT-NOW (784-8669)
- http://www.njhcommunity.org/michigan/

Group Clinic

- Freedom From Smoking®
  This program is offered as a group clinic to help adult smokers work through the problems and process of quitting. Contact 1-800-LUNGUSA to speak with your local Lung Association about participation.
Mental Health Professionals: Who They Are and How to Find One

- The Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services has an online database of services and facilities in each state:

www.mentalhealth.org

Click on “Services Locator”
American Society of Clinical Oncology

Tobacco Cessation and Control Resources

ASCO has outlined a far-reaching agenda aimed at promoting worldwide reduction and ultimate elimination of tobacco-related disease through discouraging the use of tobacco products and exposure to secondhand smoke (SHS). More than two-thirds of the 46 million current smokers in the United States would like to quit. There is strong evidence that advice from a health care professional can more than double smoking cessation success rates, but smokers are often reluctant to ask their physician for assistance. ASCO is committed to educating its members and providing resources to help patients quit using tobacco, supporting policy change aimed at decreasing tobacco product use, and increasing research into cessation and control interventions.

In a 2013 Tobacco Cessation Policy Statement Update, ASCO encourages providers to lead by example by refraining from tobacco use and to treat tobacco dependence as aggressively and compassionately as they treat cancer. The Policy Statement also includes recommendations aimed at strengthening provider education, supporting coverage of all FDA-approved tobacco cessation services, increasing global tobacco control, and supporting legislative and regulatory efforts to curb tobacco use and SHS, among others.

Also See:
- Tobacco Cessation Resources From Cancer.Net
- Order Booklet Bundles From Bookstore
- Dr. Nasser Almansa Discusses Integrating Tobacco Cessation Into His Practice

http://www.asco.org/practice-research/tobacco-cessation-and-control-resources


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Michigan Tobacco Quitline Broadens Availability

From June 1, 2012 – Sept. 30, 2013, Michigan Cancer Consortium members are able to fax refer cancer patients to the Michigan Tobacco Quitline, regardless of client insurance status. The following resources are available for health care providers:

- Informational flyer (available as an Adobe Acrobat PDF file)*
- Fax referral form (available as an Adobe Acrobat PDF file)*
- Educational poster: "Improving Cancer Treatment Through Smoking Cessation" (available as an Adobe Acrobat PDF file)*
- Talking Points & Resources for Smoking Cessation (available as an Adobe Acrobat PDF file)*

Welcome to the Michigan Providers Tobacco Cessation Tool Kit. It is our goal to support

http://www.michigancancer.org/WhatWeDo/tob-providerstoolkit.cfm?nav=21

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### Tobacco Cessation Collaborative Resources

<table>
<thead>
<tr>
<th>Action</th>
<th>MOQC Resources</th>
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</thead>
<tbody>
<tr>
<td>1) Validate change process with current state</td>
<td>Change Packet</td>
</tr>
<tr>
<td>2) Team Engagement: Educate staff on rationales for quitting and practice-specific change process</td>
<td>MOQC Tobacco Cessation Project #6 Slide Deck</td>
</tr>
<tr>
<td></td>
<td>FAQ Document</td>
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<td>Quitting Matters (Provider Script)</td>
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<td>Intake Staff Script</td>
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<td>It Matters Buttons for All Staff</td>
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<tr>
<td></td>
<td>Michigan Tobacco Quitline Protocol</td>
</tr>
<tr>
<td>3) Preparing for implementation process</td>
<td>Patient Referral Log</td>
</tr>
<tr>
<td></td>
<td>Tobacco Alert Sticky Notes</td>
</tr>
<tr>
<td></td>
<td>Pre-Printed Fax Referral Forms (Required)</td>
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<tr>
<td>4) Educate patient about importance of quitting and QUITline referral process</td>
<td>Patient Brochure</td>
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<tr>
<td></td>
<td>Exam Room Posters</td>
</tr>
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<td>Test Cards</td>
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<tr>
<td>5) Tracking Performance</td>
<td><strong>Motivational Interviewing Resources</strong></td>
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<tr>
<td></td>
<td>Large Storyboard</td>
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<tr>
<td></td>
<td>Performance Tracking Tool</td>
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<td></td>
<td>Chart Audit Tool</td>
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<tr>
<td></td>
<td>Feedback Reports received from QUITline</td>
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</tbody>
</table>

Contact MOQC to request additional resources

http://moqc.org/TobaccoCessationResources

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Tobacco Treatment and Cessation Trainings

- Tobacco Dependence Treatment:
  - [http://tobaccoquitter.com/tobacco-cessation-counseling/training-cme](http://tobaccoquitter.com/tobacco-cessation-counseling/training-cme)
  - [http://www.ocpd.wisc.edu/tobaccocme.htm](http://www.ocpd.wisc.edu/tobaccocme.htm)

- Motivational Interviewing:
  - [http://www.motivationalinterview.org](http://www.motivationalinterview.org)

- Multicultural:
  - [http://www.tobaccopreventionnetworks.org](http://www.tobaccopreventionnetworks.org)

- General Resources

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Help Your Patients Quit Tobacco Use: An Implementation Guide for Community Health Centers

- Implementation guide for U.S. community health centers
- Intended to help centers integrate tobacco screening and treatment into their clinical services.
- Address day-to-day issues involved in instituting and maintaining these services.

*Health centers are in a position to improve patient care and make a significant impact on tobacco use among populations disparately affected.*

Organizations

- ATTUD: Association for the Treatment of Tobacco use and Dependency
- SRNT: Society for Research on Nicotine and Tobacco
- AAP: Section on Tobacco Control Affiliate Member
- AAFP: American Academy of Family Physicians ASK and ACT
- ASCO: American Society for Clinical Oncology
- MOQC: Michigan Oncology Quality Consortium