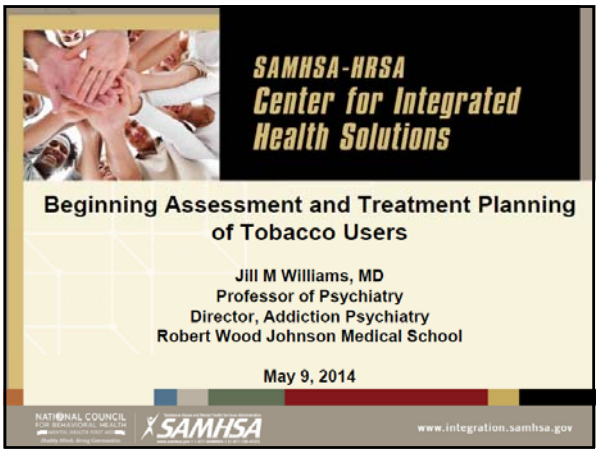


What to Assess

- **Severity of Tobacco Use Disorder** (Level of Dependence)
- **Motivation to Quit**
- Financial Implications
- Medical Consequences
- Psychiatric Consequences
- Other Tobacco Use
- Quitting History

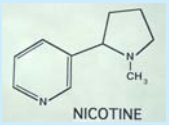
Tobacco Use Disorder

DSM 305.1

Most tobacco users are addicted (2 or more)

- withdrawal
- tolerance
- desire or efforts to cut down/ control use
- great time spent in obtaining/using
- reduced occupational, recreational activities
- use despite problems
- larger amounts consumed than intended
- Craving; strong urges to use

DSM-5



Nicotine Pharmacology

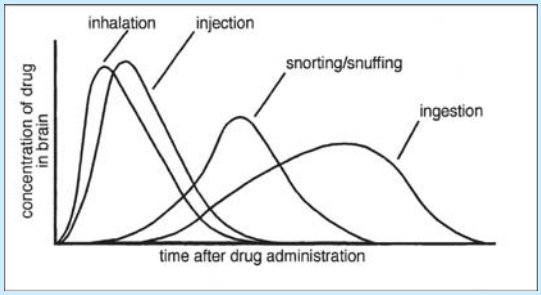
Pharmacology depends on delivery route
Reaches brain in 10 sec
Half-life 2 hours
Metabolized to cotinine in liver

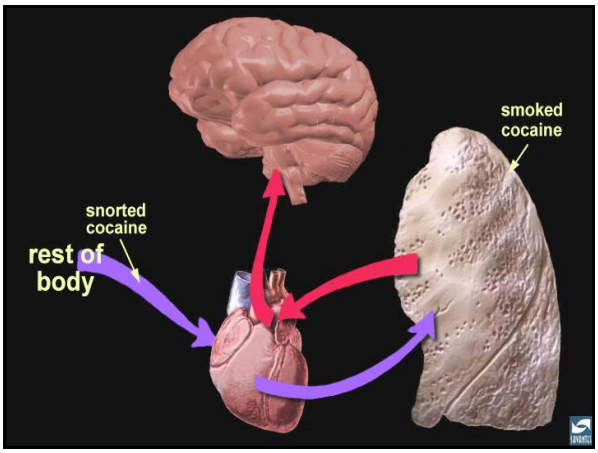
Routes of Drug Administration

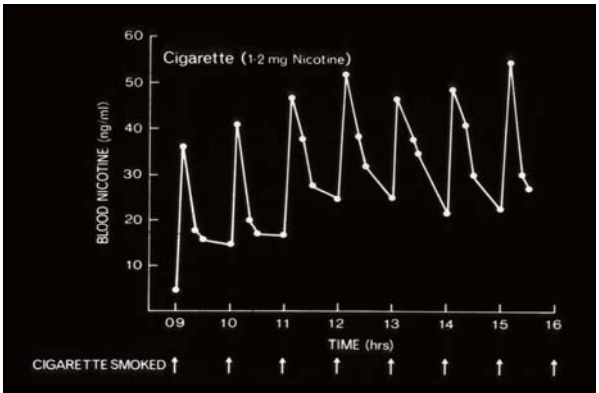
- Ingestion
- Inhalation
- Injection
- Snorting
- Through skin

Which is fastest?

Smoking is Fastest Route of Administration







Rate of delivery of drug to the blood/brain determines how addicting the substance will be

Tobacco Withdrawal

4 or more

Depressed mood
Insomnia
Irritability, frustration or anger
Anxiety
Difficulty concentrating
Restlessness
Increased appetite or weight gain

Fagerstrom Test for Nicotine Dependence (FTND)

1. How soon after you wake up do you smoke your first cigarette?

(0) after 60 minutes (1 hour)

(1) 31 to 60 minutes

(2) 6 to 30 minutes

(3) Within 5 minutes

2. Have you found it hard to refrain from using tobacco in certain places (forbidden situations; i.e., movies, church, library, smoke-free building)?

(0) No

(1) Yes

3. Which cigarette would you hate most to give up?

(1) The first one in the morning

(0) Any others

FTND

4. How many cigarettes do you smoke each day?

(0) 10 or less

(1) 11 to 20

(2) 21 to 30

(3) 31 or more

5. Have you smoked more frequently during the first hours after waking than during the rest of the day?

(0) No

(1) Yes

6. Have you smoked if you were so ill that you were in bed most of the day?

(0) No

(1) Yes

FTND Scoring and Interpretation

- Your level of dependence on nicotine is:
- 0-2 Very low dependence
- 3-4 Low dependence
- 5 Medium dependence
- 6-7 High dependence
- 8-10 Very high dependence

Heatherton et al., Br J Addiction 1991

Heaviness of Smoking Index

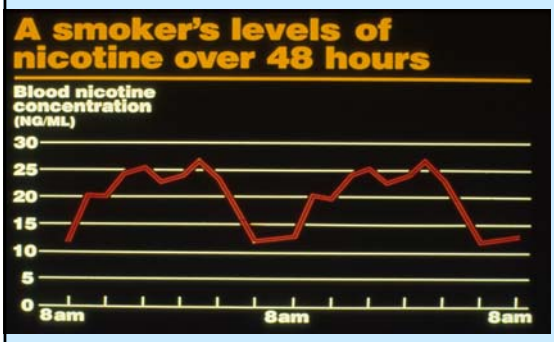
Measure of Dependence

Number of cigarettes per day (cpd)

AM Time to first cigarette (TTFC)

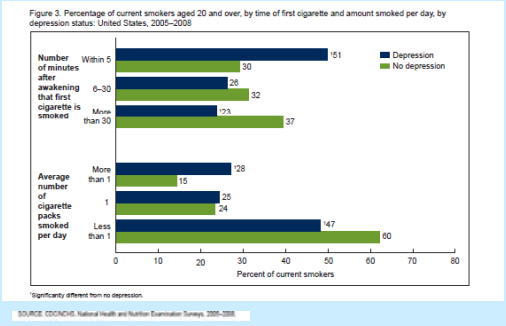
- ≤ 30 minutes = moderate
- ≤ 5 minutes = severe

Heatherton 1991

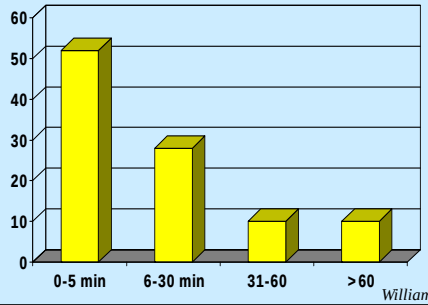


Nicotine peak about 10-40 ng/ml. Trough 5-10 ng/ml

Smokers with depression smoke more cpd and are more dependent



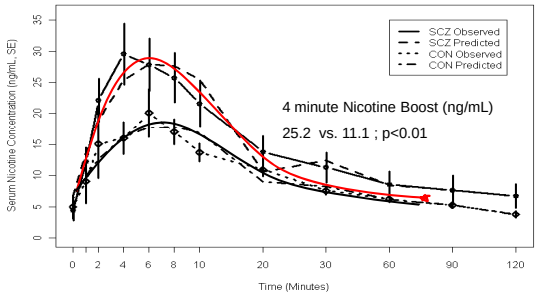
80% of Smokers with SMI report smoking within 30min of awakening



N=100

Williams et al., CMHJ 2010

HIGHER AND EARLIER NICOTINE PEAK IN SCHIZOPHRENIA



Time spent smoking ~ 5 min

Williams NTR 2010

NRT and Agitation in Smokers With Schizophrenia:

- 40 smokers in psych ER
- 21mg patch vs placebo patch
- Usual care for psychosis
- Agitated Behavior was 33% less at 4 hours and 23% lower at 24 hours for NRT group
- Better response in lower dependence
- Same magnitude of response as antipsychotic studies

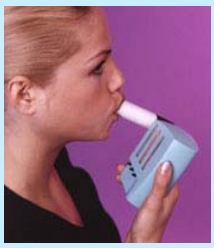
Allen 2011; Am J Psych

Assessment of Carbon Monoxide

CO = product of combustion
Expired CO in smokers > 4 ppm
Displaces oxygen on RBCs
Strain on heart, risk factor for CVD

REVERSIBLE effect
Normal levels 2-3 days (0-3ppm)

Carbon Monoxide Meters



- Cost $600-1500
- Cardboard mouthpiece
- Easy to use
- CO ppm (or %COHb)
- Lights and tone

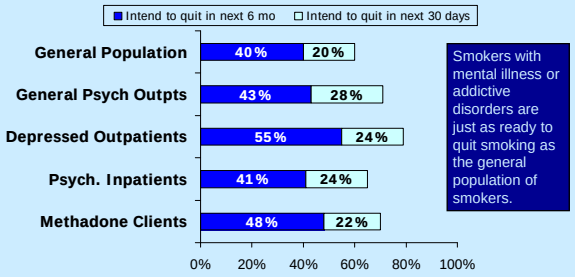
Purposes:
- Document smoke exposure
- Confirm abstinence
- Motivator

Stages of Change

Prochaska and DiClemente

• Precontemplation	not thinking of stopping in next 6 months
• Contemplation	thinking of stopping in next 6 months
• Preparation	planning stop in next 1 month
• Action	quit date
• Maintenance	abstinent >6 months

READINESS to QUIT in SPECIAL POPULATIONS



Smokers with mental illness or addictive disorders are just as ready to quit smoking as the general population of smokers.

*** No relationship between psychiatric symptom severity and readiness to quit**

Slide Courtesy J Prochaska; Acton 2001; Prochaska 2004; Prochaska 2006; Nahvi 2006

Match Treatment Strategies to Stages of Change

PRECONTEMPLATION OR CONTEMPLATION → **MOTIVATING**

PREPARATION → **ACTION QUITTING CESSATION**

Goals of Motivational Interventions

- Precontemplation
- Contemplation
- Preparation

SUCCESS !

Language is Important

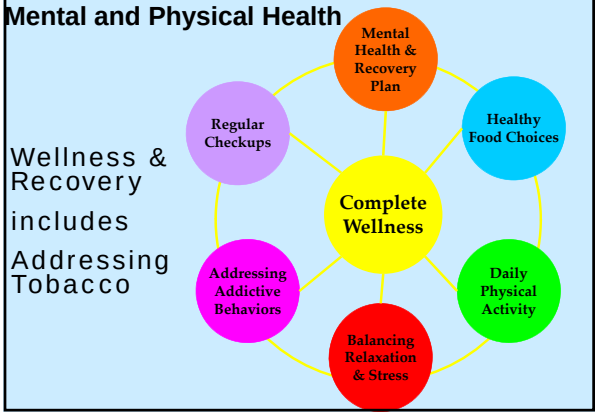
Tobacco Dependence Treatment vs.

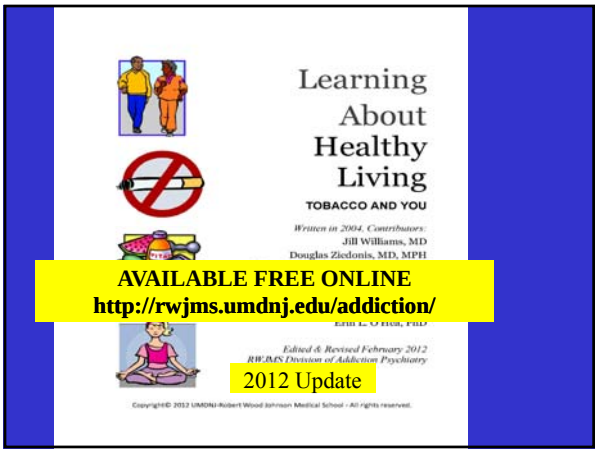
"Smoking Cessation"

"Quitting"

"Stop Smoking"

Complete Wellness: Mental and Physical Health





Complete Wellness Approach

- **LAHL developed to help low motivated smokers**
- **Mental health settings**
- **Group format**
- **Education on range of topics**
  - **Healthy eating**
  - **Increasing activity**
  - **Awareness of tobacco addiction**

Learning About Healthy Living

- This treatment is designed as two groups.
- Group I - Learning About Healthy Living
- Group II - Quitting Smoking

- It is designed so that consumers can progress from Group I to Group II, when appropriate or desired

Group I: Learning About Healthy Living

- **20 Weeks**
- **Educational and Motivational**
- **Accepts all smokers with SMI**
- **Piloted in outpatients**
- **Smoking within the context of Healthy Living (Exercise, stress, & diet)**
- **Could change the order of the sessions and some may take longer than 1 session**

Table of Contents

Learning About Healthy Living

TOBACCO AND YOU

Jill Williams, MD
Douglas Ziedonis, MD, MPH
Nancy Speelman, CSW, CADC, CMS
Betty Vreeland, MSN, APRN, NPC, BC
Michelle R. Zeichner, LSW
Raquel Rahim, APRN
Erin L. O'Hea, PhD

Revised 6/2005

Section 5

Table of Contents: Group I
Learning About Healthy Living Education Group

Section 5: Chapter 3

What's in cigarette smoke?

Many things are found in a cigarette.
When cigarettes are made flavors, additives and other chemicals are added to tobacco to enhance the smoking experience. Most of the harmful chemicals in cigarettes are released as gases when cigarettes are burned.

- ✓ Over 4,000 chemicals are produced by cigarette smoke!
- ✓ Nicotine, is only one of the 4000 chemicals found in the smoke of a tobacco product. (cigarettes, cigars, pipes) Nicotine is a drug found naturally in tobacco. Nicotine is highly addictive. When you smoke, nicotine goes deep into the lungs where it is quickly picked up in the blood and taken throughout the body. Nicotine affects many parts of the body including your heart, blood vessels, your metabolism and your brain. The nicotine used as medications is safe because it is monitored by your doctor.
- ✓ Cigarette Tar is a sticky brown substance that is the main cause of lung and throat cancer in smokers.
- ✓ There are **60 KNOWN cancer causing chemicals** and 400 other known harmful chemicals that make smoke **DEADLY**! Some examples are:
  - •Lead is a harmful metal, capable of causing serious damage to the brain, kidneys, nervous system and red blood cells.
  - •Nickel causes increased susceptibility to lung infections.
  - •Formaldehyde causes respiratory and gastro-intestinal problems.

Nicotine is the cause for

Learning More about Smoking

When you smoke put more than 4000 different chemicals into your body. Many of these are considered poisons.

This is a list of some of the chemicals found in cigarette smoke and other uses for these same chemicals. Some of these are also known to cause cancer.

Acetone: Paint Stripper and Nail Polish Remover
Ammonia: Floor Cleaner
Arsenic: Ant Poison
Benzene: Industrial Solvent / Fuel, Dyes, Synthetic Rubbers
Butane: Lighter Fluid, Key Component of Gasoline
Cadmium: Used in Car Batteries
Carbon Monoxide: Poisonous gas in car exhaust
DDT: Insecticides
Formaldehyde: Embalmers use it to preserve dead bodies
Hydrogen Cyanide: Poison used in gas chambers
Methanol: Rocket Fuel
Phenol: Disinfectants
Napthalene: Mothballs
Toluene: Industrial solvent


Section 5: Chapter 15

Why should I quit smoking?

Making the Decision to Quit

Making the Decision NOT to Quit

It is important to stop and ask yourself if YOU should consider quitting smoking. What would be the benefits of quitting or not quitting?

We have already reviewed many of the harmful consequences and drawbacks of smoking in earlier chapters. Some are listed below:

- ✓ Health problems and diseases
- ✓ Unpleasant problems including premature wrinkling of the skin, bad breath, bad smelling clothes, and yellow fingernails.
- ✓ Spending too much money on tobacco
- ✓ Keeps me addicted

Learning about Healthy Living 93 Consumer's Handouts / 2005


Section 5: Chapter 15

Making the Decision to Quit Smoking

Complete the boxes below.

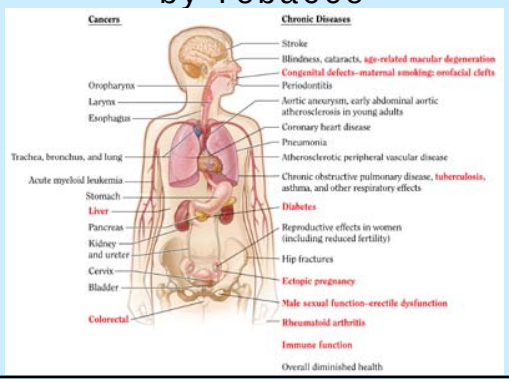
List what you like about smoking:	List what you don't like about smoking:
List the things that make you afraid to quit smoking:	List the things that would be good about quitting smoking:

Learning about Healthy Living 92 Consumer's Handouts / 2005

Biological Assessment

- Evaluate Tobacco Use Disorder
  - (Z72.0 Mild)
  - (F17.200 Moderate)
  - (F17.200 Severe)
- Tobacco Smoke Exposure/ Expired CO
- Nicotine Withdrawal Quitting History
- Medical Consequences of Tobacco Use

Illnesses Caused or Worsened by Tobacco



Psychological Assessment

- Motivation to Quit
- Relationship of tobacco to symptoms
- Confidence/ self-efficacy about quitting
- Alternate coping strategies

Social Assessment

- Smokers in Home
- Smoking Indoors
- Smokers in Social Network
- Smoke-Free Recreation
- Support for Quitting
- Financial Consequences

Treatment Planning in the Behavioral Health Setting

- Add Tobacco Use Disorder (305.1) to Problem List and Treatment Plan
- Complete Assessment
- Identify measurable long-term and short-term goals

{HINT: Other substance abuse goals}

Principles of Co-occurring Disorders Treatment

- Integrated mental health and addiction services
- Comprehensive services
- Treatment matched to motivational level
- Long-term treatment perspective
- Continuous Assessment of substance use
- Motivational interventions
- Psychopharmacology
- Case management
- Housing

Treating Tobacco Cost Effective

- For every $1 spent, statewide heath care costs ↓ by $3.60 (California 2000).
- MA Medicaid, use of a comprehensive tobacco cessation pharmacotherapy benefit was associated with a ↓in claims for acute MI and CAD (Land 2010).
- Tobacco dependence treatment less costly than screening mammography and other measures
- If all smokers enrolled in Medicaid programs stopped smoking, the Medicaid program would save $9.7 billion after 5 years. (Legacy 2009)

Government Publications Say this Should be Paid For

- Public Health Service clinical practice guidelines on Treating Tobacco: comprehensive coverage of effective tobacco-dependence medications and counseling by health insurers
- Healthy People 2010: objective for Medicaid programs to cover all FDA approved medications and counseling for tobacco cessation yet even as recently as 2007, *only six states* do

Fiore 2008; MMWR 2009

Reality of Today

Only 6 states have comprehensive benefit

23 states cover individual/ group tobacco counseling for all Medicaid beneficiaries.

36% of Medicaid-enrolled smokers, and 60% of physicians, knew that their State program offered any coverage for tobacco treatments

Search at ALA website

http://lungusa2.org/cessation2/

ALA 2012; McMenamin et al., 2004

Medicare Part B Coverage

- Varies for medications (poor for OTCs)
- Counseling since 2005
- 4 sessions (max 2x/year)
- Inpatient/outpatient
- Tobacco users: have a "disease or an adverse health effect linked to tobacco
- Intermediate 99406/G0375 (3-10min); $12.89
- Intensive 99407/G0376 (>10mins); $20.88
- Adjunctive to another visit

Recommendations for ideal Medicaid benefit

- Coverage of all 7 FDA approved meds
  - No PA
  - No requirement to be in counseling
  - No stepped care
  - No time limits
  - Allow combinations

- Coverage of multiple options for counseling
- Access to several courses of meds/ year
- Access to multi-session counseling/ year
- Low or no co-pay

ALA; PFP; Action to Quit 2010

Obama Administration Tells Health Insurers They Must Cover Evidence-Based Treatments to Help Smokers Quit (May 2014 ACA Updates)

Affordable Care Act (ACA) included language mandates coverage for all US Clinical Preventive Services Task Force (USPSTF) "A" and "B" level recommendations. (Tobacco cessation "A" level)

- 2 quit attempts must be covered each year
- at least four 10 minute counseling sessions per quit attempt (telephone, group or individual counseling)
- all FDA-approved cessation medications for 90 days per quit attempt, including OTC medications, when prescribed by a health care provider must be covered
- a prohibition against requiring pre-authorization for counseling or medication.

HHS document cites the 2008 United States Public Health Service Clinical Practice Guideline, *Treating Tobacco Use and Dependence* as its evidence source.

Short Term Goals

- Increase motivation about quitting
- Increase understanding that treatment works to increase chances of success in making a quit attempt
- Attend a LAHL group
- Become aware of three consequences of tobacco use
- To comply with tobacco-free policies while at treatment facility

Long Term Goals

- Quit smoking (eventual abstinence)
- Move Client to Preparation
- Make a 24 Hour Quit Attempt

Meet Mr Q

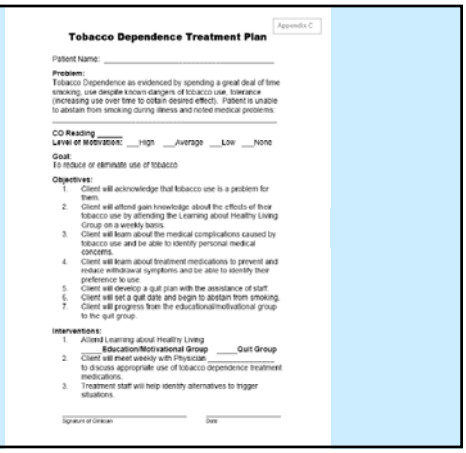
- 52 yo divorced, lives alone
- 24 cigarettes per day; TTFC 15 min
- Used patch for 2 weeks, then relapsed back to smoking
- Heart attack 5 years ago; Hypertension, High cholesterol, Hepatitis C positive
- Drinks 5 beers on weekends
- Struggling financially
- Doesn't want to quit at this time- too "stressed" but recognizes the problem

Assessment:

Level of Dependence
Motivational Level

Goal:

Intervention:



Tobacco Dependence Treatment Plan

Appendix C

Patient Name: _____

Problem:
Tobacco Dependence as evidenced by spending a great deal of time smoking, use despite known dangers of tobacco use, tolerance (increasing use over time to obtain desired effect). Patient is unable to abstain from smoking during illness and noted medical problems.

CO Reading _____
Level of Motivation: ___High ___Average ___Low ___None

Goal:
To reduce or eliminate use of tobacco

Objectives:
1. Client will acknowledge that tobacco use is a problem for them.
2. Client will attend gain knowledge about the effects of their tobacco use by attending the Learning about Healthy Living Group on a weekly basis.
3. Client will learn about the medical complications caused by tobacco use and be able to identify personal medical concerns.
4. Client will learn about treatment medications to prevent and reduce withdrawal symptoms and be able to identify their preference to use.
5. Client will develop a quit plan with the assistance of staff.
6. Client will set a quit date and begin to abstain from smoking.
7. Client will progress from the educational/motivational group to the quit group.

Interventions:
1. Attend Learning about Healthy Living _____Education/Motivational Group _____Quit Group
2. Client will meet weekly with Physician _____ to discuss appropriate use of tobacco dependence treatment medications.
3. Treatment staff will help identify alternatives to trigger situations.

_____ _____
Signature of Clinician Date

Conclusions

- Assessment and documentation is important first step in systems change
- Document nicotine dependence and motivation to change
- Carbon monoxide meter powerful tool
- Match strategies to patient motivational level