

**MASSACHUSETTS
TOBACCO TREATMENT SPECIALIST TRAINING**

**Core Certification Course Descriptions,
Goals and Learning Objectives**

The Massachusetts Tobacco Treatment Specialist Training and Certification Program is administered by the University of Massachusetts Medical School, Division of Preventive and Behavioral Medicine. For more information about this training program, call The Center for Tobacco Treatment Research and Training at 508-856-4099 or email cttrt@umassmed.edu or visit our website at <http://www.umassmed.edu/behavmed/tobacco/reqtrain.aspx>.

The Biology of Nicotine Dependence

Course Description

Until relatively recently, nicotine dependence was not recognized as a legitimate disorder, in part because its manifestations do not appear to be as severe and as potentially disruptive to everyday functioning as dependence on other drugs. However, closer study has revealed that nicotine dependence shares many features with other drug dependence, notably similar biological actions on brain reward and withdrawal circuitry, compulsive use, tolerance, etc. Moreover, because tobacco, the primary source of nicotine, is legal, availability is not a barrier. Nicotine dependence has an insidious onset, but once entrenched, takes addictive hold of the tobacco user, such that repeated efforts to quit are often met with failure, resulting in a lifetime of tobacco addiction.

This course will provide the knowledge base for understanding the biological basis of nicotine dependence. This will include learning about the basic brain processes that determine drug dependence in general and the development and maintenance of nicotine dependence in particular. We will look at how nicotine is absorbed, distributed and eliminated, discuss the physiological and psychological effects of nicotine, and review the diagnostic criteria for nicotine dependence and withdrawal.

Goal of the course

Provide tobacco treatment specialists with knowledge of the biological underpinnings of nicotine addiction to better understand and treat tobacco users.

Learning objectives

Setting the Stage:

1. Describe the prevalence and etiology of nicotine dependence and risk factors for nicotine dependence among youth and adults.
2. Apply the BioPsychoSocial model to nicotine dependence and cessation.

Biology of Nicotine Dependence:

3. Understand terminology related to basic biology and pharmacology of nicotine dependence.
4. Identify and describe brain regions and neuronal pathways associated with drug dependence.
5. Describe how activation of key neuronal pathways predisposes toward nicotine addiction in terms of reward and withdrawal.
6. Describe nicotine's pharmacologic properties, including its primary physiological and psychological effects, as well as its pharmacokinetic properties that predispose toward development of nicotine dependence.
7. Describe the nature of nicotine dependence in terms of diagnostic criteria (DSM IV).

Pharmacotherapy for the Treatment of Nicotine Dependence

Course Description

The Public Health Service guideline recommends that all tobacco users trying to quit be offered pharmacotherapy. There are currently seven first-line medications approved by the FDA for use in smoking cessation: five nicotine replacement products; bupropion, an anti-depressant; and varenicline, a partial nicotine agonist. While the effectiveness of each product has been demonstrated there are multiple factors to be considered when choosing the appropriate pharmacotherapy for each individual.

This course will provide descriptions of pharmacologic treatments for nicotine dependence, including nicotine replacement therapies, bupropion and varenicline focusing on how these compounds might work, how they may best be used and possible contraindications. The principles of evidence-based medicine will be reviewed and applied to the pharmacologic treatment of tobacco dependence.

Goal of the course

Provide tobacco treatment specialists with knowledge of the actions and use of pharmacologic agents, to better understand and treat tobacco users.

Learning objectives:

1. Describe the principles of evidence-based medicine.
2. Describe current pharmacological approaches to treatment of nicotine dependence, focusing on understanding their mechanisms of action and proper use.
3. Apply evidence-based medicine principles to the process of recommending pharmacological treatment for nicotine dependence.

Counseling Theory and Practice

Course Description

This course endeavors to teach principles of effective counseling for health-risk reduction by lifestyle change. In particular, participants will learn how to engage and assist individuals seeking to modify their use of tobacco and nicotine. These lessons are presented within the larger context of our current knowledge regarding a number of related topics including: Natural recovery and the stages of change, motivation, resistance, and behavioral self-control. The penultimate goal is to teach health care professionals how to have constructive conversations with individuals regarding the whys, whens, and hows of smoking cessation and the reduction in nicotine use.

There is perhaps nothing more frustrating to the conscientious and committed health care professional than the failure of individuals to heed sound healthcare advice regarding the modification of their nicotine use. Well known is the fact that most clients do not comply with even the simplest and most straightforward health care directive. Health care providers advise,

lecture, confront, exhort, and even try to shame smokers into compliance; all to little avail. It's as if with every provider expression of concern, the client digs further into the crater of resistance and noncompliance. What is left to do?

Motivational Interviewing (Miller & Rollnick, 1991, 2002) is a style of talking with patients about health-risk reduction and behavior change that integrates the principles of patient-centered medicine, client-centered psychotherapy, and social learning theory. Based upon the tenet that most individuals already have the requisite skills to successfully modify lifestyle and decrease health-risk, MI employs strategies that will enhance the patient's own motivation for and commitment to change. Motivational Interviewing integrates an empathic, non-confrontational style of interviewing with powerful behavioral strategies for helping clients convince themselves that they ought to change. Consequently, resistance is minimized, self-motivation maximized, and treatment compliance and behavior change secured.

Motivational Interviewing provides an effective alternative to coercion, confrontation, and exhortation as a means of promoting behavior change and treatment compliance in the nicotine-dependent individual. The principles and strategies of Motivational Interviewing provide the backbone for this course, organizing a broad knowledge base and skill set pertaining to counseling the individual with nicotine dependence.

Goal of the Course

To provide tobacco treatment specialists with the requisite knowledge and skills to effectively implement motivationally-oriented counseling strategies that promote readiness to change and subsequent abstinence in individuals who are nicotine-dependent.

Learning Objectives

1. Participants will apply patient-centered principles of health-risk reduction to the problem of effectively counseling individuals with nicotine dependence.
2. Participants will describe the basic principles of motivational interviewing and stage-informed counseling requisite to the effective treatment of nicotine dependence.
3. Participants will describe the limitations of the direct persuasion or confrontational interviewing style.
4. Participants will demonstrate how to effectively implement the initial phase of nicotine dependence counseling utilizing reflective listening skills.
5. Participants will describe the five categories of change talk.
6. Participants will demonstrate skills necessary for negotiating a behavioral change plan regarding nicotine use.

Treatment Strategies

Course Description

Recent estimates are that almost 440,000 individuals in the United States die each year from smoking-related causes, yet approximately 22% of Americans continue to smoke and tobacco use in young adults appears to be on the rise. Clearly, there is considerable need for effective tobacco treatment strategies to be developed and disseminated. This course will provide basic knowledge about the process of quitting smoking and will present smoking

cessation theory and treatment from within a social learning perspective. Treatment will be presented on a continuum of intensity of clinical contact, from self-help (no contact) to minimal contact/brief advice to brief counseling to intensive counseling. Tobacco treatment strategies will be presented within a framework that includes preparation, cessation and maintenance phases. Lifestyle changes that support quitting smoking and a generally healthy lifestyle will be discussed. The empirical basis for treatment strategies discussed will also be provided. This course will provide the requisite knowledge and skills to allow tobacco treatment specialists to assist cigarette smokers to quit smoking and remain abstinent, and will include an emphasis on tailoring treatments to smokers' readiness for change, level of nicotine dependence and psychiatric comorbidity. Issues relating to pharmacotherapy and the needs of patients with psychiatric comorbidity will be discussed in general terms, and will be covered more fully in other courses.

Goal of the course

To provide tobacco treatment specialists with knowledge of and the empirical basis for tobacco treatment strategies, ranging from minimal contact to intensive intervention; to provide tobacco treatment specialists with the necessary skills to assist smokers through the preparation, cessation and maintenance phases of quitting smoking.

Learning Objectives

1. Describe the range of treatment intensities: minimal, moderate and intensive, and the implications for matching intensity level of clinical contact with patient characteristics.
2. Review the Public Health Service recommendations for optimal structure and intensity of effective tobacco treatment intervention.
3. Discuss harm reduction as a treatment strategy.
4. Describe the specific and appropriate strategies for the *preparation phase* of treatment, including how to tailor the strategies to the unique needs of the individual smoker.
5. Describe the specific and appropriate strategies for the *cessation phase* of treatment, including how to tailor the strategies to the unique needs of the individual smoker.
6. Describe the specific and appropriate strategies for the *maintenance phase* of treatment, including how to tailor the strategies to the unique needs of the individual smoker.

Working with Smokers with Medical Conditions

Course Description

It has long been clear that chronic tobacco abuse is a major risk factor for the development and progression of a variety of medical conditions, most importantly coronary artery disease (CAD), chronic obstructive lung disease (COPD), and peptic ulcer disease (PUD). In addition, smoking significantly compounds the negative health consequences of diabetes mellitus (DM), HIV infection and Hepatitis C. Finally, maternal smoking substantially increases the risk of pregnancy complications (premature delivery, antepartum hemorrhage) as well as adverse effects on the fetus, including low birthweight, and perinatal death.

Smoking cessation is particularly important in patients who already have medical conditions caused or aggravated by smoking, yet pharmacologic treatment in these subsets is especially complicated because of these same conditions. Research of smoking cessation

treatment is limited for these special conditions, though there is some data available to allow for educated decision making regarding treatment.

This course will discuss the anticipated effects of the five different forms of nicotine replacement therapy relative to the known acute effects of smoking cigarettes on patients with CAD, COPD, PUD, DM, and pregnancy. Additionally, the pros and cons of bupropion and varenicline therapy in these same subgroups of medical patients will be addressed. When available, research on the safety of these various therapies in medically ill patients will be reviewed.

Brief attention will be paid to a subset of medical conditions for which nicotine may be beneficial. In these situations, smoking cessation without nicotine replacement may be particularly problematic.

Goal of the course

The course will provide sufficient background information on the effects of nicotine in CAD, COPD, PUD, DM, and pregnant patients such that tobacco treatment specialists will feel comfortable in counseling these subgroups of patients regarding the use of pharmacologic therapies to assist with smoking cessation. The course will also address special considerations when counseling tobacco using patients with HIV and Hepatitis C.

Learning Objectives

1. Understand the anticipated effects of nicotine replacement therapy, bupropion and varenicline therapy relative to continued smoking in each of the following subgroups of patients:
 - a. coronary artery disease (CAD)
 - b. chronic obstructive pulmonary disease (COPD)
 - c. peptic ulcer disease (PUD)
 - d. diabetes mellitus (DM)
 - e. pregnancy and lactation
 - f. HIV and Hepatitis C
2. Understand the anticipated relative pros and cons of the different forms of pharmacologic treatment in each of the medical conditions listed under the first objective.
3. Review the medical contraindications to NRT, bupropion and varenicline.
4. Be aware of medical conditions which may be exacerbated by quitting smoking.

Working with Smokers with Substance Abuse and Mental Health Disorders

Course Description

Individuals who suffer from more than one psychiatric or substance abuse disorder are more likely to smoke, have greater difficulty quitting smoking, and consequently, have a higher risk for smoking caused illness. While this group of tobacco users can achieve success in quitting, they are likely to need more intensive and comprehensive support throughout the quitting process to address their complex issues.

This course will provide the knowledge base for understanding the nature of associations between current and lifetime comorbid psychiatric and substance abuse disorders and smoking

prevalence, efforts to quit smoking, and response to various forms of treatment. An emphasis will be placed on how to talk to clients about their illness, about the role tobacco use plays in helping them cope with their mental health/substance abuse (MH/SA) disorder and the implications for treatment of nicotine dependence. Techniques for brief screening and recognition of symptoms of MH/SA disorders will be examined. Following this will be a discussion of how to communicate and work with the client's mental health provider(s) and how to determine when referral is appropriate. Case studies will be provided to illustrate and reinforce the didactic material presented in class.

Other topics that will be addressed include: (a) The connection between smoking and relapse to other substance abuse or mental health disorders; (b) Providing support for persons recovering from multiple addictions; (c) Methods of and paths to recovery - tools, strategies, settings that people have used; (d) Using individuals' quitting experience with other substances to help them quit smoking; (e) Helping clients become aware of increasing severity of mental health symptoms during the quitting process, and (f) Knowledge of treatment resources available both to the treating professional as well as to the patient.

Finally, the importance of communicating with other health care professionals through complete and accurate clinical notes in order to provide the most effective treatment for clients with substance abuse or mental health disorders will be discussed. The role of clinical supervision and self-care issues for the treating professional, including setting boundaries and termination of treatment, will also be addressed.

Goals of the course:

- The primary goal of this course is to teach tobacco treatment specialists how to have a constructive dialogue with a client around his/her substance use or psychiatric disorder and how it relates to his/her tobacco use and quit attempts.
- A second goal is to provide TTSs with knowledge and understanding about the association between tobacco use and psychiatric and substance use disorders so that the TTS will be able to recognize symptoms of mental illness or substance abuse, make appropriate referrals to other providers, and be able to tailor nicotine dependence treatment to the needs of the individual client.
- A third goal is to help TTSs understand how to set boundaries, keep treatment focused on tobacco use issues, and take care of themselves when dealing with substance using or mentally ill clients.

Learning Objectives

1. Discuss the importance of referral to and communication with other health care providers when treating individuals with substance use and other psychiatric issues.
2. Discuss how to set boundaries when dealing with clients with substance use or mental health disorders and when to terminate treatment.
3. Discuss the critical role of clinical supervision when dealing with clients with substance use or other psychiatric disorders. Identify participant's clinical supervisor.
4. Assess for current or past substance abuse and discuss the implications for tobacco dependence treatment.
5. Describe three major classes of psychiatric disorders (depression, schizophrenia and anxiety) and key considerations when quitting smoking.

6. Identify a referral network of substance abuse and mental health services and professionals in the participant's local region and know how to access this network.
7. Discuss when and how to refer clients to other health care providers.

Intake, Assessment and Treatment Planning

Course Description

Smoking rates in the United States have declined from 50% to 22% over the past 40 years. The majority of ex-smokers quit smoking on their own. The decline in smoking rates has reached a plateau for 2 reasons: 1) The constant feed of teenage smokers; and, 2) smokers who could quit easily have done so. This leaves a group of hardcore smokers resistant to traditional quit methods. Clearly, a more in depth understanding of smokers is required to help them achieve their goal of smoking cessation. It is important to appreciate that for some people quitting smoking and staying quit is the hardest thing they will ever do.

To understand and treat your smoking clients, you must do a comprehensive evaluation of their smoking history and smoking behavior. This is a multi-level process that begins with your first encounter with the client and continues throughout your treatment program. This session will address how to initiate this process in order to establish a foundation for an effective working relationship. It will review the questioning skills needed to assess key factors of your client's smoking and quitting history, level of addiction, psychological, environmental, and social factors which may support or inhibit quitting smoking. This session will also provide the learner with materials and the skills needed to work with the client to customize a treatment plan based on the comprehensive assessment. In addition, it will address the importance of ongoing assessment and evaluation of the client's response to the interventions, the aftercare plan, and referrals to other resources to offer reinforcement to help the client maintain a smoke-free lifestyle.

Goal of the Course

To apply knowledge of counseling theory and practice, nicotine dependence, and other psychosocial factors to assess smoking clients to determine effective strategies for quitting smoking and to tailor the intervention to help clients achieve long-term abstinence.

Learning Objectives

1. Describe the key components of a comprehensive intake process including;
 - Demographics
 - Nicotine dependence/smoking history
 - Quitting history
 - Social/environmental factors
 - Medical/psychiatric history
 - Beliefs/stage of change/self-efficacy.
2. Identify strengths, potential barriers to treatment.
3. Review the information gathered during an initial assessment in order to develop an appropriate treatment plan.
4. Define elements of program protocol, evaluation and follow up.
5. Demonstrate how to use a carbon monoxide monitor.