

“It is difficult to identify a condition in the United States that presents such a mix of lethality, prevalence, and neglect, and for which effective interventions are so readily available.”

AHCPR Smoking Cessation
Guideline Panel

Smoking Prevalence

- US population
 - 28.2% of males
 - 23.1% of females
 - 70% of smokers want to quit
- Mean age of initiation
 - 25% start by age 12
 - 50% start by age 13-14
 - 90% start by age 20
- Mean age of initiation for females: 12-13 years of age

Social Determinants

- Prevalence inversely related to educational level
- Nineteen percent of individuals with only a high school education smoke half a pack or more, compared with 8% of individuals entering college

Health Effects

Primary Effects

- Cancer
- Cardiovascular disease
- Pulmonary disease

Secondary Effects

- Environmental tobacco smoke
 - respiratory illness in infants and children
- Other health effects

Female-Specific Health Effects

- Increased risk of stroke
- Increased risk of cervical neoplasia
- Higher rates of osteoporosis
- Earlier menopause

Comorbid Substance Use/Abuse

- May be part of a pattern of polydrug use/abuse
- Identified as a "gateway drug"
- Female smokers use more prescription drugs
- Females who experiment with cigarettes are more likely to proceed to other illicit drugs

Pregnancy

- 60-80% of women smoke throughout pregnancy
- 70-80% of women who quit during pregnancy relapse with one year of delivery
- Characteristics associated with smoking during pregnancy
 - unmarried
 - under age 30
 - less than 12 years education
 - low socioeconomic status

Smoking During Pregnancy Increases the Risk of.....

- Tubal pregnancy
- Spontaneous abortion
- Prenatal mortality
- Perinatal mortality
- Neurobehavioral deficits in offspring
- Placental abruption
- Stillbirth
- Preterm delivery
- Intra-uterine growth retardation
- Sudden infant death syndrome
- Depressed or low 1- and 5-min Apgar score
- Lower respiratory tract illness during infant's first 5 years of life

Why Is It So Difficult to Quit?

- Most individuals attempt to quit an average of 3 times before reaching maintenance or termination
- Sociological aspects
 - peer groups
 - role models
 - decreasing societal acceptance
- Physiological aspects

Nicotine Dependence

- Past withdrawal symptoms
- Inability to abstain for a number of hours without becoming agitated or fidgety
- Smoking within the first half-hour of waking up
- Waking in the middle of the night to smoke
- Quantity: more than a pack and one-half a day

Nicotine Withdrawal Symptoms

Craving

Anxiety

Irritability

Hunger

Restlessness

Decreased concentration

Sleep disturbance

Weight Management and Smoking

- Smokers weigh several pounds less than non-smokers of the same age and gender
- Upon smoking cessation BMI increases to level of non-smokers
- Average weight gain between 10.6 pounds and 13.0 pounds
- Women more likely to gain even more weight (>26 pounds)

Weight Management and Smoking

- Younger age and sedentary lifestyle are risk factors for greater weight gain in women
- Lower educational attainment (males & females) is a risk factor for greater weight gain
- Use of nicotine gum and bupropion can postpone weight gain in dose response relationship (greatest effect for > 6 pieces/day)

Psychological Aspects Associated With Smoking

- Associated with environmental, behavioral and cognitive "cues" or "triggers"
- Positive consequences
- Avoidance of withdrawal
- Habitual behavior
- Underlying psychiatric disorder
- Depression

Role of Primary Care Provider

- Providers need to take advantage of opportunities to intervene
- Simple provider advice to stop smoking can result in an increased quit rate
- Screen all smokers and ex-smokers for depression
- Discuss goals
- Follow-up session

Prochaska & Diclemente's 'Readiness for Change'

- Precontemplation stage
 - address agenda
 - assess smoking and quitting history
 - advise with personalized message and feedback about health risks/benefits
 - arrange/offer follow-up to readdress
- Contemplation stage
- Action stage
- Maintenance stage
- Relapse

The 5 A's of Smoking Cessation

Address

Assess

Advise

Assist

Arrange Follow-up

Motivational Intervention - 4Rs (AHCPR Guidelines)

- Rewards
- Relevance
- Risks
 - acute
 - long-term
- Repetition

Specific Counseling Strategies

- Personalized messages
- Smoking diary
 - 1 to 2 weeks prior to quit date
 - index card - record: when, where, why, how
- Behavioral skills
 - identify triggers/cues
 - avoid triggers
 - change cues
 - substitute behavior
 - avoid alcohol
- Set a "quit date"

Specific Strategies

- Relapse Prevention
- Increase patient self-efficacy
 - set concrete and attainable goals
 - discuss past successes in overcoming obstacles
 - enhance patient self-confidence
- Attention to concerns regarding weight gain
- Discuss role of physical activity

Gender -Specific (female) Risk Factors for Relapse

- Lack of partner/social support
- Smoking member of household
- Less than high school education
- Greater perception of nicotine dependence
- Reported alcohol consumption of greater than 7 drinks/week

Counseling the Pregnant Smoker

- Be aware of the pregnant smoker's view point
- Urge patient to quit early in pregnancy
- Provide pregnancy-related motivational messages
- Discuss pros and cons of nicotine replacement in pregnancy
- Begin relapse prevention during pregnancy

Pharmacologic Approaches

- Nicotine Replacement
 - Nicorette gum
 - Nicoderm CQ (OTC)
 - Nicotrol (OTC)
 - Habitrol (Prescription only)
- Bupropion (Wellbutrin, Zyban)
- Other antidepressants
- Antihypertensives useful as an adjunct to behavioral treatment interventions