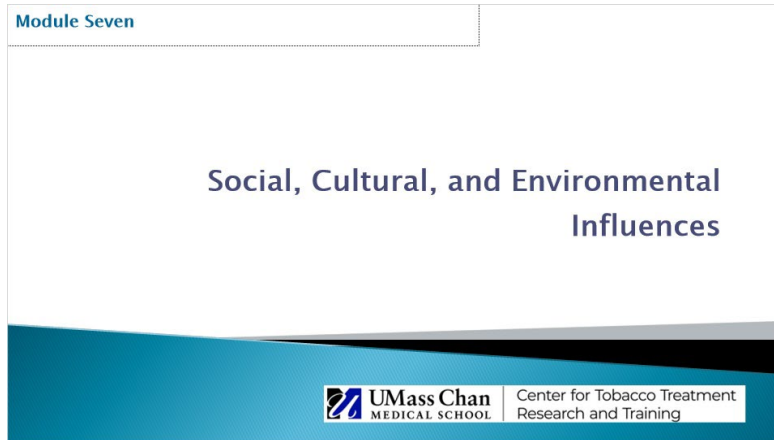
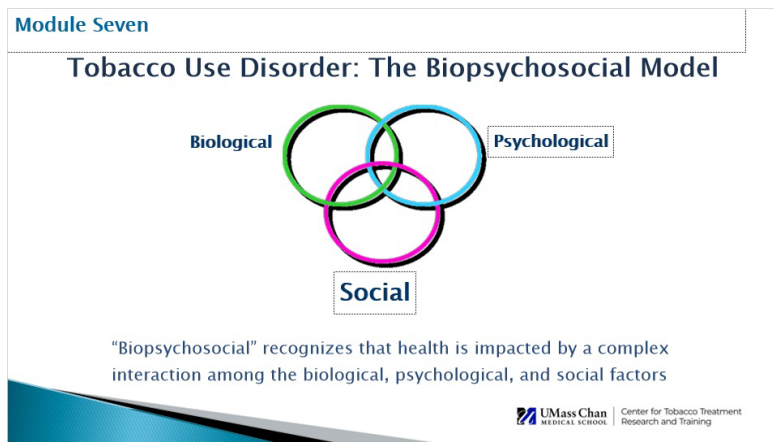


# Module 7: Social, Cultural, and Environmental Influences

## 1.1 Social, Cultural, and Environmental Influences



## 1.2 Tobacco Use Disorder: The Biopsychosocial Model



## 1.3 Objectives

### Module Seven

#### Objectives

- Describe disparities that exist in tobacco use
- Define culture and diversity
- List social factors that influence tobacco use
- List environmental factors that influence tobacco use

## 1.4 Vignette: Jerri S.

### Module Seven

#### Vignette: Jerri S.



*"I have been smoking since I was 13 years old when lots of my friends started. We all smoke Newport Lights. My partner doesn't smoke anymore but most of my friends and co-workers still do. Every time I try to quit I get irritable and moody, and I always want to smoke when I see a cigarette. I guess it helps that I cannot smoke at work. I want to be able to quit so that I can save money to go to college."*

## 1.5 Brainstorm: How would you describe social/cultural

### Module Seven



Brainstorm: How would you describe social/cultural factors that have influenced Jerri?

## 1.6 Here are some responses to consider

### Module Seven



#### Here are some responses to consider

Jerri expresses influences related to smoking and some that will help support a quit attempt:

- ❖ Friends were a strong influence when Jerri started smoking
- ❖ Jerri's social group still includes many people who smoke
- ❖ Having a non-smoking partner will be a support for quitting
- ❖ The tobacco-free work environment will support a quit attempt
- ❖ Finances and the need to save money are a motivator to quit

## 1.7 What are Social Determinants of Health?

### Module Seven

#### What are Social Determinants of Health?

- ▶ The community, environmental, or political influences that exist prior to individual choice or that influence individual choice are referred to as the "Social Determinants of Health."



## 1.8 Social Determinants Contribute to Health Inequities

### Module Seven

#### Social Determinants Contribute to Health Inequities

Disparities in tobacco use and health consequences may be the result of:

- ▶ Unfair social policies and practices
- ▶ Lack of health promotion resources
- ▶ Increased exposure to risk factors
- ▶ Neighborhood and built environment (such as housing, environmental conditions, and safety)
- ▶ Reduced access to health care services, including tobacco dependence treatment

## 1.9 What is Equity?

### Module Seven

#### What is Equity?

Equity is the absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are definite socially, economically, demographically, geographically or by other means of stratification.

– World Health Organization

Health equity means that everyone has a fair and just opportunity to be healthier. This means removing obstacles such as poverty, discrimination, and their consequences including powerlessness and lack of access to good jobs, quality education and housing, and health care.

– Robert Wood Johnson Foundation

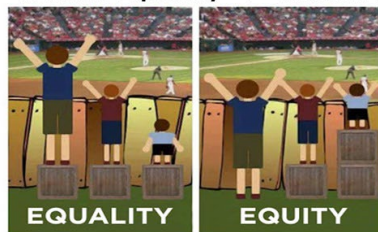
<http://rwjf.org/en/insights/our-research/2017/05/what-is-health-equity-.html>  
<https://www.who.int/health-topics/health-equity#tab=tab-1>

UMass Chan  
Medical School | Center for Tobacco Treatment  
Research and Training

## 1.10 Health Equality ≠ Health Equity

### Module Seven

#### Health Equality ≠ Health Equity



Health equity  
among population

=



Smoking rates  
underserved

UMass Chan  
Medical School | Center for Tobacco Treatment  
Research and Training

## 1.11 Social and Community Context Matter

### Module Seven

#### Social and Community Context Matter

People in communities influence each other in a variety of ways:

- › Persuasion
- › Communication
- › Imitation
- › Norm-setting
- › Modeling
- › Influencing beliefs
- › Attitudes



These influences can be direct, like the sermon of a trusted pastor, or more subtle, such as smoking by people in a group with other strong connections.

## 1.12 Relationships are part of Social Context

### Module Seven

#### Relationships are part of Social Context



- Peers, co-workers, friends & family who use tobacco increase likelihood of use; decrease chances for quitting
- Social non-acceptability of tobacco use decreases use
- Partners influence each other

Blener, 2010; Gilpin, 1999; Rodriguez, 2013; Duncan, 2014; King, 2014; Christakis and Fowler, 2008

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.13 Peers have strong influence during adolescence

### Module Seven

#### Peers have strong influence during adolescence

- The biggest impact is during younger adolescence
- 99% of people who smoke cigarettes start before age 26
- 88% of people who smoke cigarettes start before age 18
- Girls are more likely to be influenced by their peer group than boys
- Adolescents are more likely than adults to vape



Taylor, 2004; USDHHS, 2014; Simons-Morton and Farhat, 2010; Mercken et al, 2009; Newman et al, 1998; Cullen et al, 2019; Wang et al, 2018.

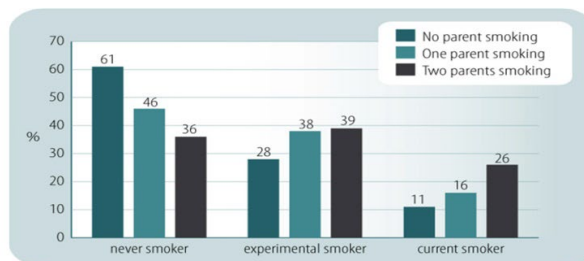
UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.14 Parents and older siblings also influence tobacco use

### Module Seven

#### Parents and older siblings also influence tobacco use

Children are less likely to smoke if parents do not smoke



Bricker, 2009; Bricker, 2005; White & Smith, 2010

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training



## 1.15 Role of Parental Smoking and Quitting

### Module Seven

#### Role of Parental Smoking and Quitting

Children who have a parent who smokes are more likely to smoke and to be heavier smokers

**BUT...**

When parents quit smoking, their children become less likely to start smoking and more likely to quit if they already smoke

Bricker, 2009; Bricker, 2005; Audrain-McGovern et al., 2006; Farkas 1999; White & Smith, 2010

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.16 Structural Racism Impacts Tobacco Use, Quitting, and Morbidity and Mortality

### Module Seven

#### Structural Racism Impacts Tobacco Use, Quitting, and Morbidity and Mortality

Leading to disparities in use and health consequences



Hayes-Green and Love, 2018

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.17 Intersectionality is also a Tool to Understand Disparities

### Module Seven

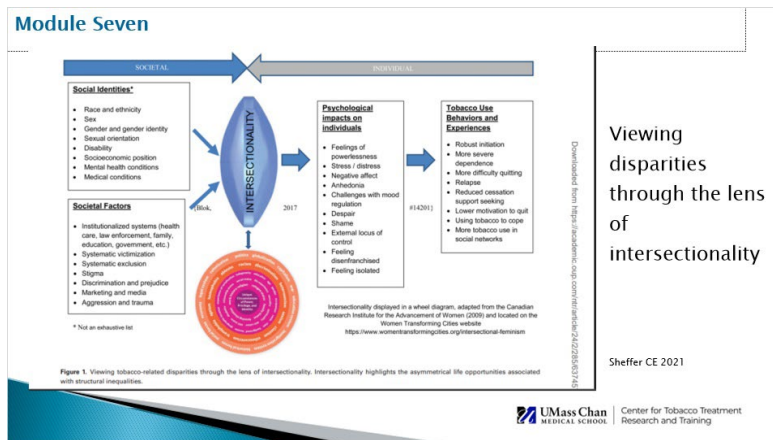
#### Intersectionality is also a Tool to Understand Disparities

- "Intersectionality can serve as a productive analytical framework for examining tobacco-related disparities across and within multiple marginalized populations."
- Focusing on solely one identity of a person can lead to assumptions and faulty conclusions.
  - For example, many people who have serious mental health conditions may be over-represented in lower socioeconomic groups. To focus on one identity ignores distinct experiences.

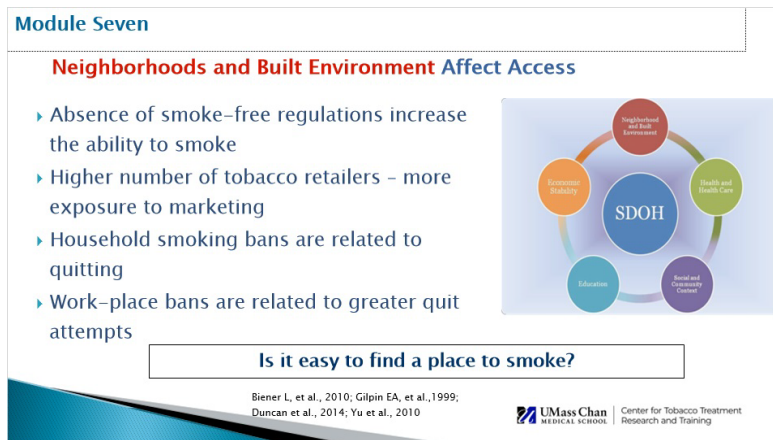
Sheffer CE, et al. 2021

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.18 Untitled Slide



## 1.19 Neighborhoods and Built Environment Affect Access



## 1.20 Untitled Slide

**Module Seven**

**Economic Stability and Educational Levels Highlight Significant Disparities**

As education and income levels rise, smoking rates fall – regardless of ethnic/cultural background

ANNUAL HOUSEHOLD INCOME		EDUCATION	
< 35,000	21.4%	0–12 yrs (no diploma)	23.1%
35,000–74,999	15.3%	GED	36.8%
75,000–99,999	11.8%	High School Diploma	18.7%
≥ 100,000	7.6%	Some college	17.4%
		Undergraduate degree	7.1%
		Graduate degree	4.1%

Wang et al, 2018

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.21 There are Race-Related Disparities in Health and Health Care

### Module Seven

#### There are Race-Related Disparities in Health and Health Care



- White people are more likely to use nicotine replacement therapy:
  - African American– 22%; Hispanic– 22%; Asians– 22%; Whites – 31%
- Minority groups are less likely to receive physician advice to quit smoking:
  - Non-Hispanic Black– 46.9%; Hispanic– 38.7%; non-Hispanic white– 52.6%
- Smoking rates are higher in areas with a lower density of primary care providers
- Hispanic/Latino groups are less likely to have health insurance than other ethnic groups

Fu et al, 2008; Danesh, 2014; Carabello et al, 2019, [Achieving Health Equity, 2015](#)

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.22 Cultural Factors:

### Module Seven

#### Cultural Factors: Examples and Trends



UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.23 What is Culture?

### Module Seven

#### What is Culture?



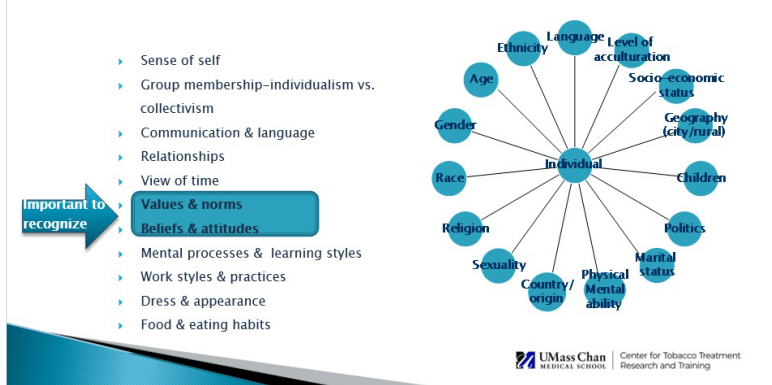
- An integrated pattern of human behavior that includes thoughts, communications, languages, practices, beliefs, values, customs, courtesies, rituals, manners of interacting, roles, relationships, and expected behaviors of a racial, ethnic, religious, or social group and the ability to transmit the above to succeeding generations.
- How would you describe your Culture?

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training



## 1.24 There are Many Dimensions of Culture

### Module Seven



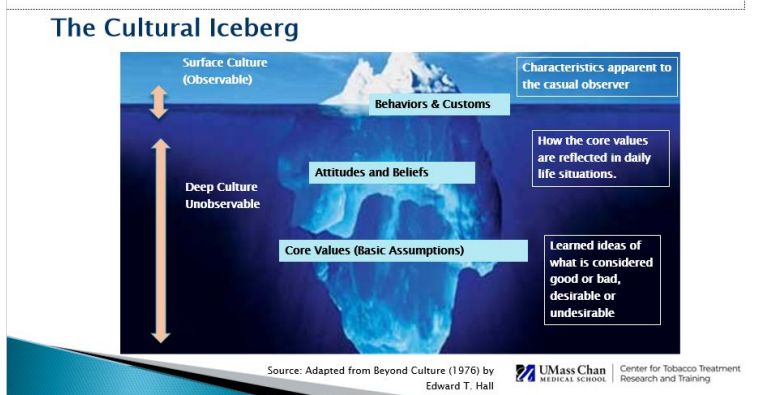
## 1.25 Untitled Slide

### Module Seven



## 1.26 The Cultural Iceberg

### Module Seven

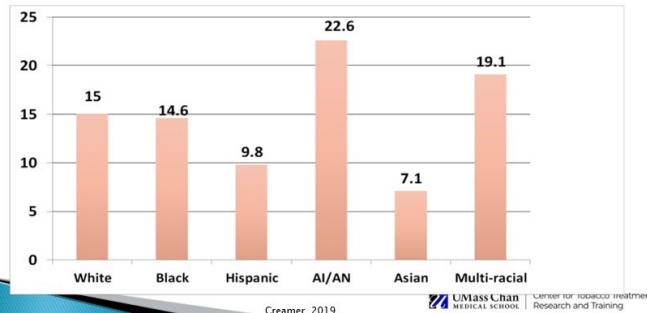


## 1.27 Disparities in Rates of Smoking Exist Across Ethnic Groups

### Module Seven

#### Disparities in Rates of Smoking Exist Across Ethnic Groups

Cigarette Smoking (%) among Adults by Ethnicity, 2018



## 1.28 And – There are Disparities in Health Effects

### Module Seven

#### And – There are Disparities in Health Effects

- ▶ Black men have a higher rate of mortality from lung cancer when compared to white men
- ▶ American Indian/Alaska Natives suffer from higher rates of tobacco related diseases compared to white individuals
- ▶ Black individuals have twice the rate of fatal versus non-fatal first CHD incidents
- ▶ Risk of diabetes is higher among Black and Hispanic men and women compared to non-Hispanic white men and women

Gadgil & Kalemkerian, 2003; CDC MMWR, 2010;  
[Achieving Health Equity, 2015](#); Safford et al., 2012;  
Chow, et al., 2012

UMass Chan Medical School | Center for Tobacco Treatment Research and Training

## 1.29

### Module Seven

#### Tobacco Use Among Lesbian, Gay, Bisexual, Transgender Groups



- ▶ Rates of smoking may be up to 2.5 times higher than heterosexual adults
- ▶ Range of smoking rates is reflective of other factors such as social stress, targeting by tobacco industry, other drug/alcohol use
- ▶ 2017 National Health Interview Survey reported 20.3% smoking among Lesbian/Gay/Bisexual vs 13.7% among heterosexuals
- ▶ Transgender adults report high rates of cigarette/cigar/e-cigarette use (39.7%)

USDHHS, 1988; Wang et al 2018; Buchting et al 2017; SAMHSA 2014;  
Truth Initiative; [Achieving Health Equity, 2015](#)

UMass Chan Medical School | Center for Tobacco Treatment Research and Training

## 1.30 Untitled Slide

Module Seven

### Examples from other Groups

**Chronically ill/mobility impaired:**

- ~ 11–48%
- Influenced by disease type, stage, and perception of the link of the disease to smoking

**Military:**

- Average 24.5%
- Range 17.2 – 31.9%
- Varies by military branch, rank, etc.

**College students:**

- 21% (full-time) v. 34.4% (part-time)
- Differences between two vs. four year school setting

US Dept of Health and Human Services, 1988. Dept. of Defense, 2013; SAMHSA 2014; Wang 2018

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.31 The Role of Acculturation

Module Seven

### The Role of Acculturation

- ▶ Influenced by:
  - Years living in the US
  - Immigrant status
  - Language preferences
  - 1st, 2nd, 3rd US generation
- ▶ There may be differences in subpopulations within groups
  - Hispanic includes Dominican, Puerto Rican and others
  - Asian includes Chinese, Vietnamese, Japanese, etc.
- ▶ Gender differences with increased acculturation
  - Smoking rates for females increase/rates for males stay the same
  - Quitting rates for males increase/rates for females stay the same

Perez-Stable et al, 2001; Wilkinson et al, 2005; Choi et al, 2008; Castro et al, 2009

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.32 Quitting Differences

Module Seven

### Quitting Differences

- ▶ Quit attempts
  - People who smoke who are from racial and minority groups make more quit attempts than white people who smoke but are less likely to remain quit at follow-up
- ▶ Successful quit rates (% of lifetime smokers who have quit smoking)
  - African American– 37.5%; Hispanics– 42.9%; White– 50%<sup>2</sup>
- ▶ Prior use of nicotine replacement therapy
  - African American– 22%; Latinos– 22%; Asians– 22%; White– 31%<sup>3</sup>
- ▶ Receipt of physician advice to quit smoking
  - Non-Hispanic black– 46.9%; Hispanic– 38.7%; non-Hispanic white– 52.6%<sup>4</sup>

USDHHS, 1998; Giovino, 2002; Fu et al, 2008; Danesh, 2014

UMass Chan MEDICAL SCHOOL | Center for Tobacco Treatment Research and Training

## 1.33 Summary: Social Factors

### Module Seven

#### Summary: Social Factors

- ▶ Social Determinants of Health contribute to the initiation and maintenance of smoking. These factors include:
  - Economic stability
  - Education
  - Neighborhood
  - Health and Health Care
  - Social and Community Context

#### TAKE HOME MESSAGE:

Know your community and the role tobacco plays in their lives

USDHHS, 1998; Giovino, 2002; Fu et al, 2008; Danesh, 2014

UMass Chan  
Medical School

Center for Tobacco Treatment  
Research and Training

## 1.34 Untitled Slide

### Module Seven

#### Module 7 Required Quiz

To take the quiz, click on the 'course homepage' link below, it will take you to the course main homepage where you can click on the module quiz 'button' to start the quiz.

[Course homepage](#)

