# **TB and Alcohol**

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## **Mentimeter Question**

What's the amount of alcohol in the following popular drinks





### What Is a Standard Drink?

12 fl oz of regular beer **8–9 fl oz of malt liquor** (shown in a 12 oz glass)

5 fl oz of table wine

#### **1.5 fl oz shot of distilled spirits** (gin, rum, tequila,

vodka, whiskey, etc.)



about 5% alcohol



about 7% alcohol



about 12% alcohol



about 40% alcohol

# Who is at risk of alcohol consumption?

### **Everybody is at risk of alcohol consumption!**

However, some factors make certain patients more susceptible to alcohol use.

Consider individual and social vulnerability factors when assessing alcohol risk.



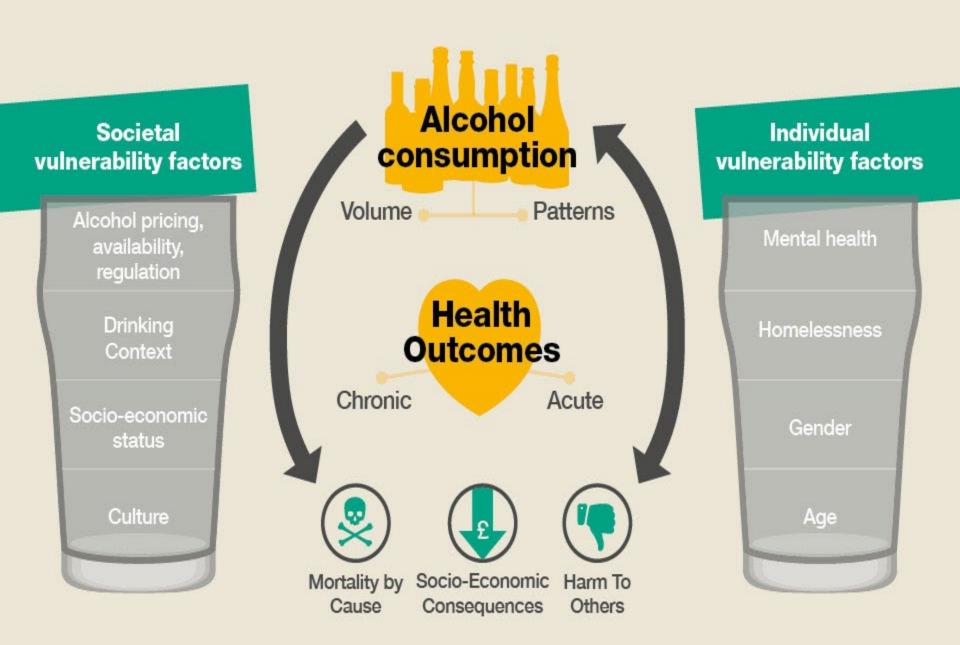


## **Mentimeter Question**

Give examples of individual and societal vulnerability factors that make a patient more likely to drink







## **Mentimeter Question**

What is the definition of Binge Drinking?





# **Definition of Excessive Alcohol Use**

#### • Binge Drinking:

 The Substance Abuse and Mental Health Services Administration (SAMHSA) defines binge drinking as 5 or more alcoholic drinks for males or 4 or more alcoholic drinks for females on the same occasion

#### • Heavy Alcohol Use:

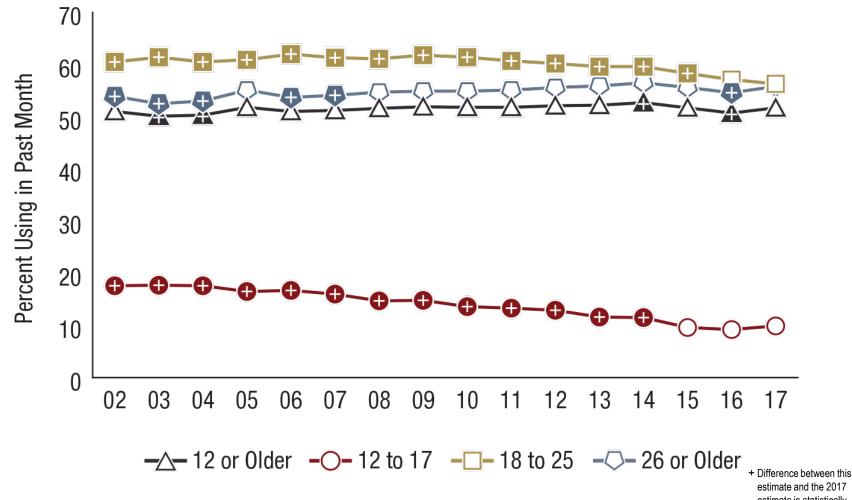
- Binge drinking on **5 or more days** in the past month.







#### Past Month Alcohol Use among People Aged 12 or Older, by Age Group: Percentages, 2002-2017

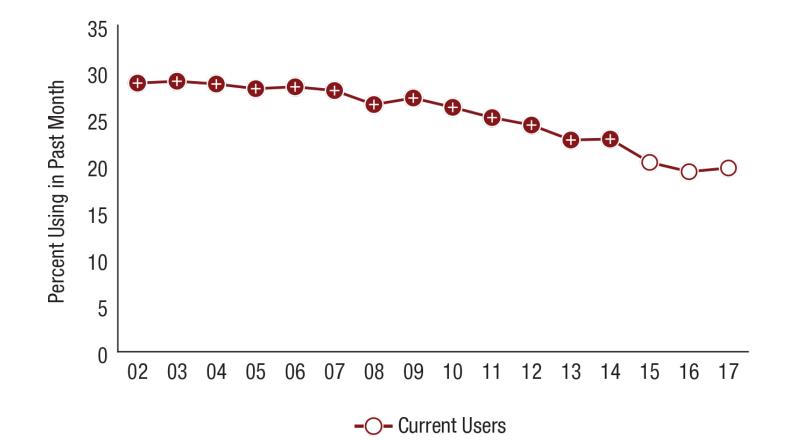


estimate and the 2017 estimate is statistically significant at the .05 level.

NIVERSITY of



#### Current Alcohol Use among People Aged 12 to 20: Percentages, 2002-2017

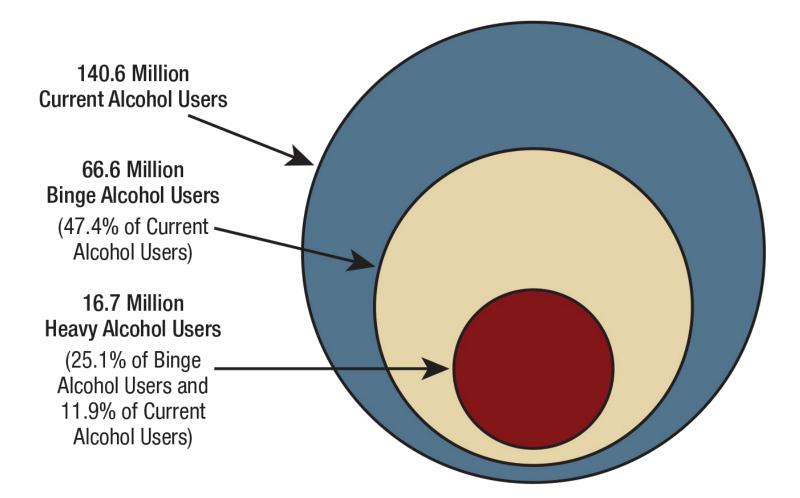


+ Difference between this estimate and the 2017 estimate is statistically significant at the .05 level.





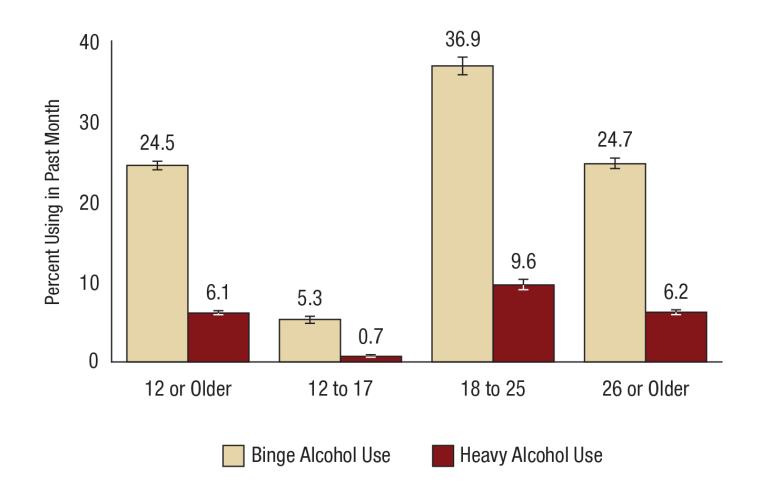
Current, Binge, and Heavy Alcohol Use among People Aged 12 or Older: 2017







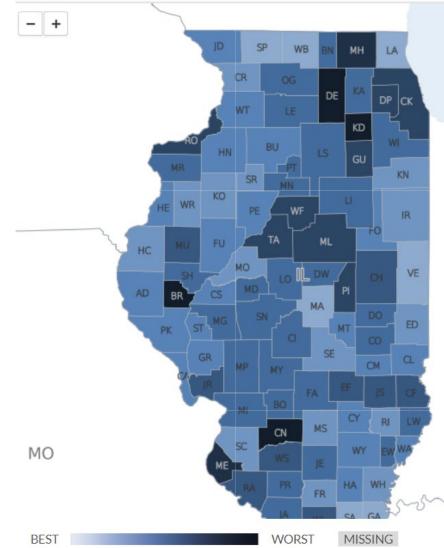
#### Past Month Binge and Heavy Alcohol Use among People Aged 12 or Older, by Age Group: Percentages, 2017







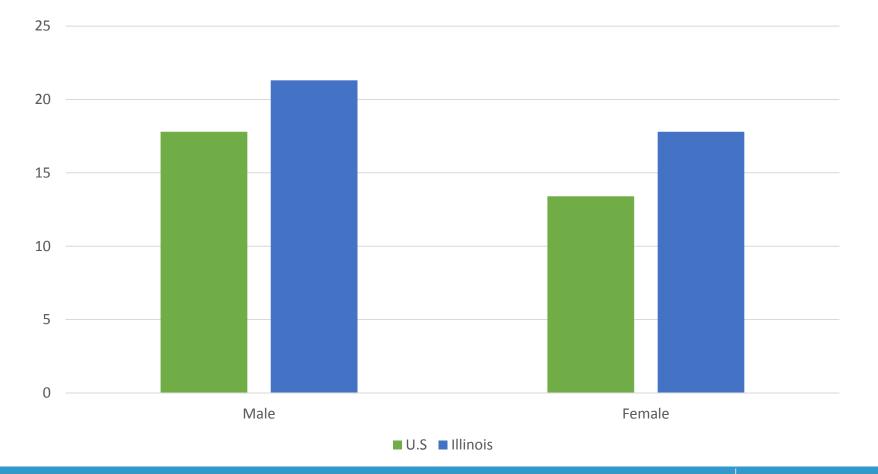
## **Excessive Alcohol Use-IL**





Southeastern National

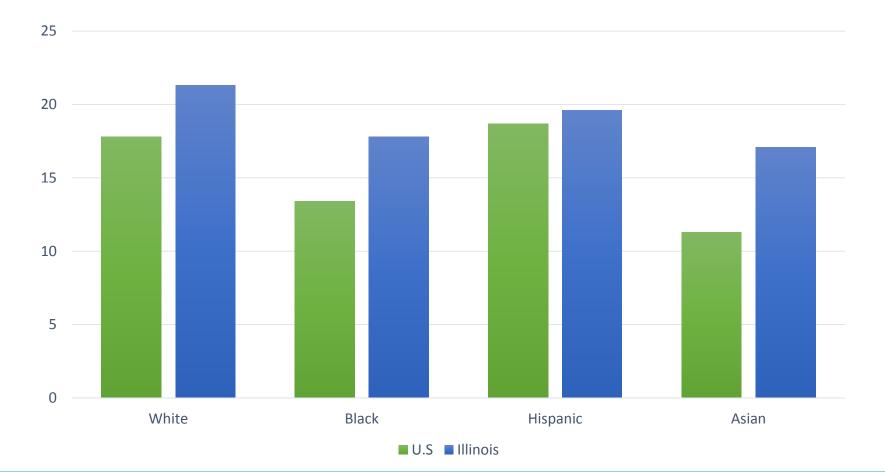
## Binge Drinking Illinois: Sex





UF FLORIDA

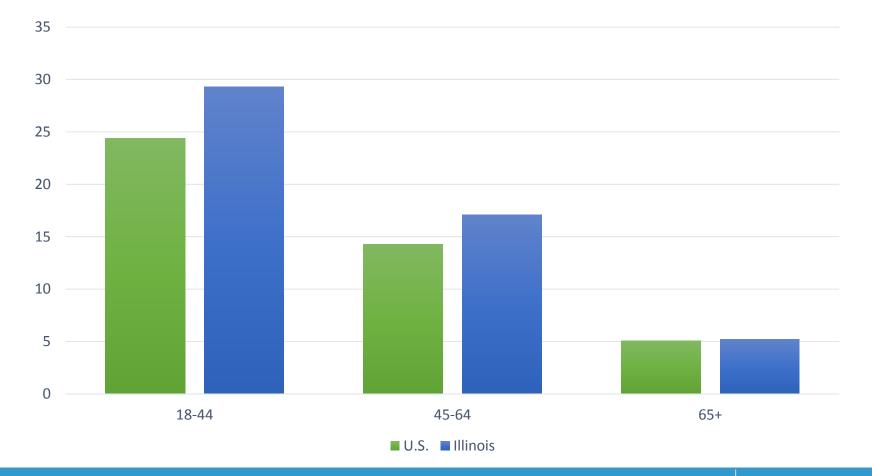
# Binge Drinking Illinois: Race/Ethnicity



Southeastern National Tuberculosis Center



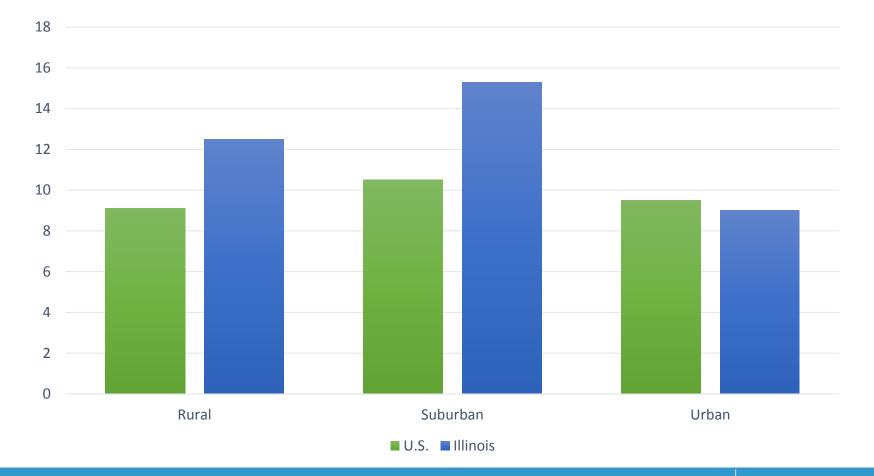
# Binge Drinking Illinois: Age







# Binge Drinking Illinois: Urban/City







## Mentimeter

• Think back on the patients you have seen in the past month. Have any of them reported using or abusing alcohol?





# **Tobacco and Alcohol**

- People who are dependent on alcohol are 3x more likely to be smokers.
- People who are dependent on tobacco are 4x more likely to be dependent on alcohol.



National Institute on Alcohol Abuse and Alcoholism. (2007). Alcohol and Tobacco.





## **Alcohol Use Among Smokers**

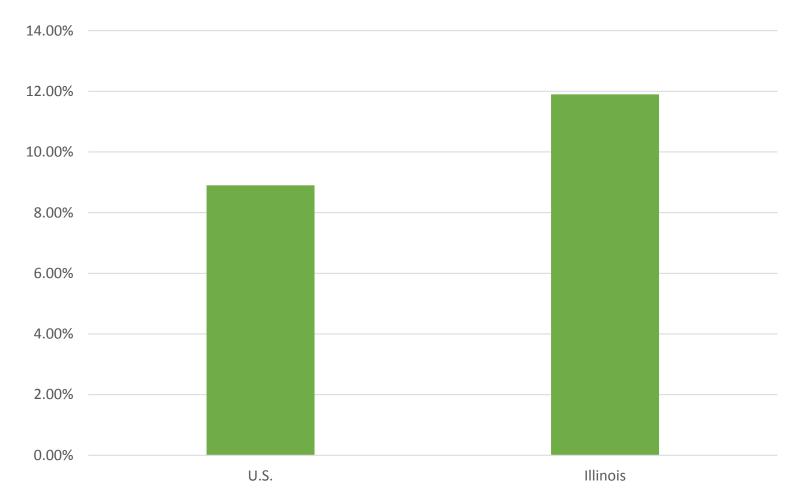
	Smokers	Non Smokers
Current Alcohol Use in the past month	65.2%	48.7%
Binge Drinking	42.9%	17.5%
Heavy Drinking	15.7%	3.8%







## Tuberculosis Case and Percentages, by Excess Alcohol Use, Ages 15 years and older







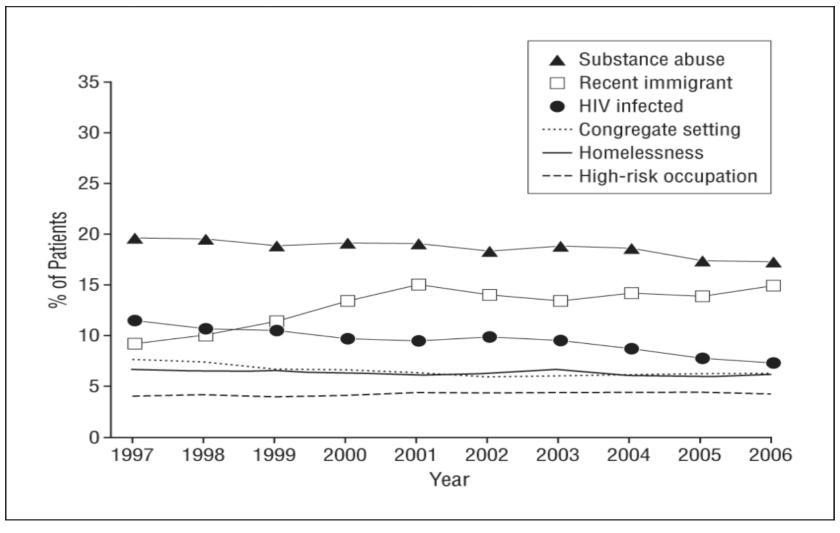
# **TB High Risk Groups and Alcohol Use**

- Unstably Housed/Homeless
- People living with HIV
- People in High Risk Occupations
- Congregate Settings
- Recent Immigrants
- Substance Abuse





#### **Trends in High-Risk Populations Among Patients with Tuberculosis**

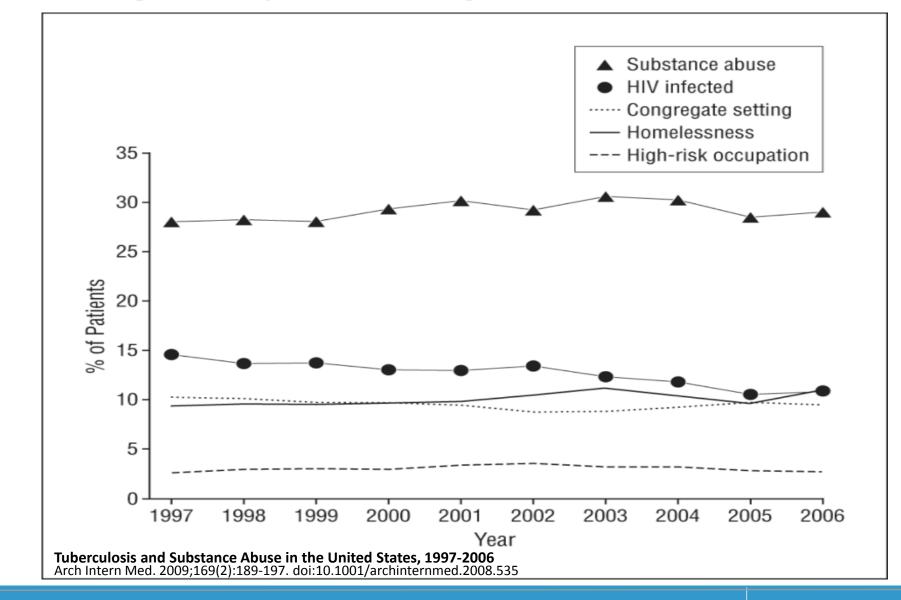


#### Tuberculosis and Substance Abuse in the United States, 1997-2006.

Arch Intern Med. 2009;169(2):189-197. doi:10.1001/archinternmed.2008.535







#### **Trends in High-Risk Populations among US-born Patients with Tuberculosis**





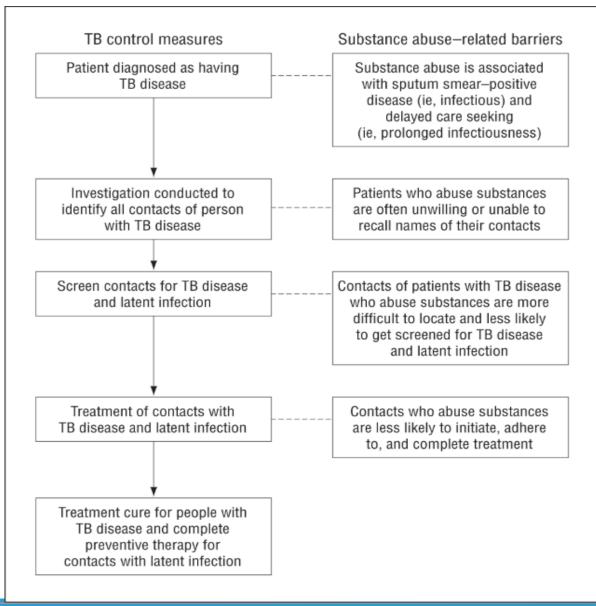
# Alcohol and TB

- Susceptibility
- Extent of Disease
- Delays in Diagnosis
- Extended transmission
- Treatment issues





#### Substance Abuse–Related Barriers to TB control in the United States







# **Alcohol Consumption and TB Treatment**

Consuming alcohol while on TB treatment can:

- Increase drug side effects
- Increase toxicity
- Negatively affect liver function
- Cause liver damage

An estimated 10% of TB deaths are attributed to alcohol use globally.





The man in black shoots open a second window, climbs on a Dumpater, and Jumpa converge The officer sprints down the alley with flashlight and gun drawn, and follows him through the warehouse window. dark warehouse. INT. WAREHOUSE - NIGHT Police! Drop your weapon and put your hands in the air! MAN IN BLACK (Laughing) Do you really think you're going to stop me? Don't move, or I'll shoot! If you want me, come and get me. The man in black disappears behind a tall row of steel cylinders and cranks open a valve on one of them. and looks for another way around. Pressurized gas HISSES out.

# **Screening Interventions**

- The USPSTF determined that **1-item to 3-item** screening instruments have the best accuracy for assessing unhealthy alcohol use in adults 18 years or older.
  - Abbreviated Alcohol Use Disorders Identification Test– Consumption (AUDIT-C)
  - NIAAA-recommended Single Alcohol Screening Question (SASQ)





# AUDIT-C

- The AUDIT-C is an alcohol screening assessment that can help identify alcohol use disorders, hazardous drinkers, and alcohol misuse among TB patients.
- Only consists of three questions.





#### AUDIT-C

The Alcohol Use Disorders Identification Test is a publication of the World Health Organization, @ 1990

Q1: How often did you have a drink containing alcohol in the past year?

Answer	Points
Never	0
Monthly or less	1
Two to four times a month	2
Two to three times a week	3
Four or more times a week	4
Q2: How many drinks did you have on a typical day when you were drinking in the past year?	

Answer	Points	
None, I do not drink	0	
1 or 2	0	
3 or 4	1	
5 or 6	2	
7 to 9	3	
10 or more	4	
13: How often did you have six or more drinks on one occasion in the nast year?		

Q3: How often did you have six or more drinks on one occasion in the past year?

	Points
Never	0
Less than monthly	1
Monthly	2
Weekly	3
Daily or almost daily	4

The AUDIT-C is scored on a scale of 0-12 (scores of 0 reflect no alcohol use). In men, a score of 4 or more is considered positive; in women, a score of 3 or more is considered positive. Generally, the higher the AUDIT-C score, the more likely it is that the patient's drinking is affecting his/her health and safety.







# **Brief Interventions Against Alcohol Use**

### What is a brief intervention?

A brief intervention is a one 5-to 15-minute **patientcentered** behavioral change counseling session followed by a follow-up session.

- Components of a brief alcohol intervention
  - Patient-centered
  - Feedback and advice
  - Collaborative goal setting
  - Additional assistance
  - Follow-up session(s)





# **Steps in a Brief Interventions**

- 1) Approaching the topic: Dancing versus wrestling
- 2) Setting the stage: Creating a dance floor
- **3) Let the dance begin:** Make the first step positive
- 4) First steps in the dance
- **5) Moving with the music:** Measuring importance and confidence





# Approaching the topic: Dancing versus wrestling

Dancing involves a **partnership** with both parties involved taking the lead at different times

- Allow the patient to take the lead by doing most of the talking
- You can take the lead by **eliciting information** from the patient on motivation, challenges, etc.
- Avoid taking the lead by delivering information through lecture





# Setting the stage: Creating a dance floor

- Create an environment where the patient feels comfortable and unjudged
- Create an open dialogue between the patient and you
- A follow-up session on the previous discussions signals concern and importance of the issue





# Let the dance begin: Make the first step positive

- Always open each conversation in a positive way
- Start each session with what the patient HAS achieved and NOT with what they haven't achieved
- The achievement can be as small as a simple observation from the medical record





# Moving with the music: Measuring importance and confidence

- Set realistic goals and provide support to promote those goals
- Consider using scales to measure a patient's desire and confidence to change
  - On a scale from 1 to 10, with 10 being the highest, do you think it is important to not consume alcohol while being treated for TB?
  - On a scale from 1 to 10, with 10 being the highest, do you think you will be able to not consume alcohol while being treated for TB?





# Keys to Change

A sense of the importance of change

A sense of confidence about one's ability to change (Self-efficacy)

A support system (friends, family, providers)





# Additional Strategies to Stop Alcohol Use among TB Patients

- •Keeping Track
- Counting and Measuring
- Avoiding "triggers"
- Game plan for urges
- Knowing your no









