

**Fetal Alcohol Syndrome**  
**Prevention Screening Indicator**  
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# Fetal Alcohol Screening Indicator Definition and Target

- *Definition: “Address screening for alcohol use in appropriate female patients”*
- Target: “During FY 2007, maintain the screening rate for alcohol use in female patients ages 15 to 44 at 28%” (same for FY08)

# Why an indicator for fetal alcohol syndrome screening?

- Prevalence
- Effects on behavior, socialization, and learning potential
- Physical effects

# Prevalence of fetal alcohol syndrome

- Approximately 1 in 1,000 of live births in the U.S. are at risk for fetal alcohol spectrum disorders
- The prevalence of FASD in the AI/AN population is 4 times the national average

# Pathogenesis

- Though exact cellular mechanism unknown, appears direct toxic effect of ETOH or metabolite is likely
- Differential neurodegenerative pattern based on timing of exposure
- Mild dose-dependant relationship
- Binge pattern drinking may be more deleterious than chronic low level drinking
- American Indians appear to be more sensitive (may be due to polymorphisms of alcohol dehydrogenase)
- Probably synergistic effect with other substances

# Physical effects

- Growth problems including microcephaly
- Facial abnormalities
- Heart problems
- Kidney problems
- Hearing problems
- Coordination problems

# Effects on behavior and learning

- Most common preventable cause of mental retardation
- Learning disabilities
- Abnormal sleeping and eating patterns

# Long term mental health problems

- Hyperactivity/ Impulsivity
- Poor reasoning and social judgment, over-sexualized behavior
- In some cases, long term custodial care

# Prevention

- To prevent the teratogenic effects of alcohol, alcohol abstinence/ reduction efforts must start before conception
- No safe level of alcohol consumption for developing fetus

# Screening recommendations

- United States Preventive Services Task Force (USPSTF) finds that screening for problem drinking is beneficial for all adults, including women of child bearing age
- They also conclude that brief counseling interventions with follow-up leads to small to moderate decreases in drinking

# Screening for what?

- Not diagnosing alcohol dependence, or alcohol abuse (could do if appropriately trained)
- Problem, or hazardous drinking, usually defined as:
  - Females:  $> 7$  drinks/week, or  $> 3$  drinks/setting more than once per quarter
  - Males:  $> 14$  drinks/week, or  $> 4$  drinks/setting more than once per quarter

# Screening instruments

- No mandate for any particular instrument, though strongly recommend validated instrument
- CAGE is very familiar, but best validated for older males, less valid in females
- CRAFFT (*C*ar *R*elax *A*lone *F*orget *F*riends *T*rouble) can be used for adolescents (though evidence less strong)

# Screening instruments (cont'd)

- AUDIT will be used in the Alcohol Screening/  
Brief Intervention Initiative
- ASSIST, developed by WHO, good for other  
substances
- We recommend the Single Alcohol Screening  
Question, as it is validated in multiple studies  
and very brief

# Interventions

- Even very brief interventions (5 minutes) have been shown to decrease the amount of drinking at 6 and 12 month follow-up
- Stages of change/ motivational interviewing model appropriate for primary care clinic
- Referral to behavioral health (strongly recommend for alcohol dependence)
- Pharmacologic interventions (acamprosate, naltrexone, not in pregnancy Cat C)