

“She Drank Before She Knew”

Reducing Alcohol-Exposed Pregnancies

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Presentation Objectives

- Describe the unchanging rate of unintended pregnancy in recent years,
- Report the alcohol use trends for reproductive age women,
- Discuss possible reasons for unintended pregnancy and contraceptive underuse, and
- Promote best practices (and share ideas) for screening and intervention with reproductive age women.

Alcohol & Unintended Pregnancy- Why Do We Care?

- Alcohol is a known teratogen
- Alcohol use often associated with sexual activity
- Resulting sexual activity may be “spontaneous”
- Fetal damage can occur very early in gestation
 - The “face” of Fetal Alcohol Syndrome (FAS) is the result of alcohol exposure in third week of gestation
 - For a woman with a 28 day cycle- this means *during the first week after she’s missed her period...*

Teratogens

- A teratogen is a substance that causes developmental malformations
 - Effect related to timing of exposure and a “threshold” dose
 - Examples- medical conditions (i.e. diabetes), congenital infections (i.e. Rubella, CMV, Syphilis, Toxoplasmosis) and chemicals, drugs or medications (i.e. alcohol, thalidomide, anticonvulsants)
 - Human “threshold dose” for alcohol unknown- hence no alcohol during pregnancy is current recommendation
- *Alcohol has a direct toxic effect on cells and can produce cell death, thereby causing certain areas of the brain to actually contain fewer cells than normal.*
(Streissguth, 1997)

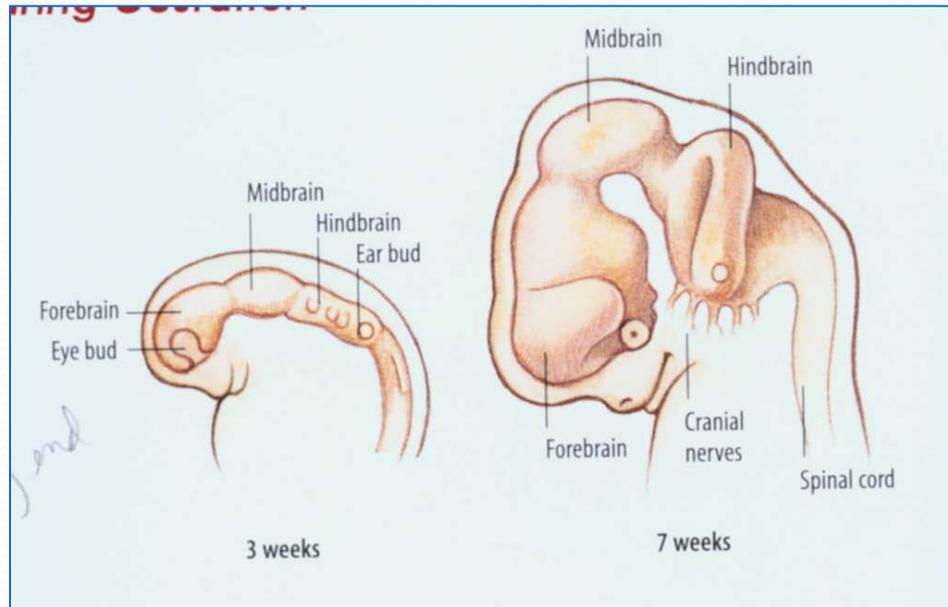
Factors that Influence How Alcohol Effects a Fetus

- Timing of her drinking during pregnancy
- Amount (dose) of the alcohol
- Mother's genetic make-up
- Baby's genetic make-up

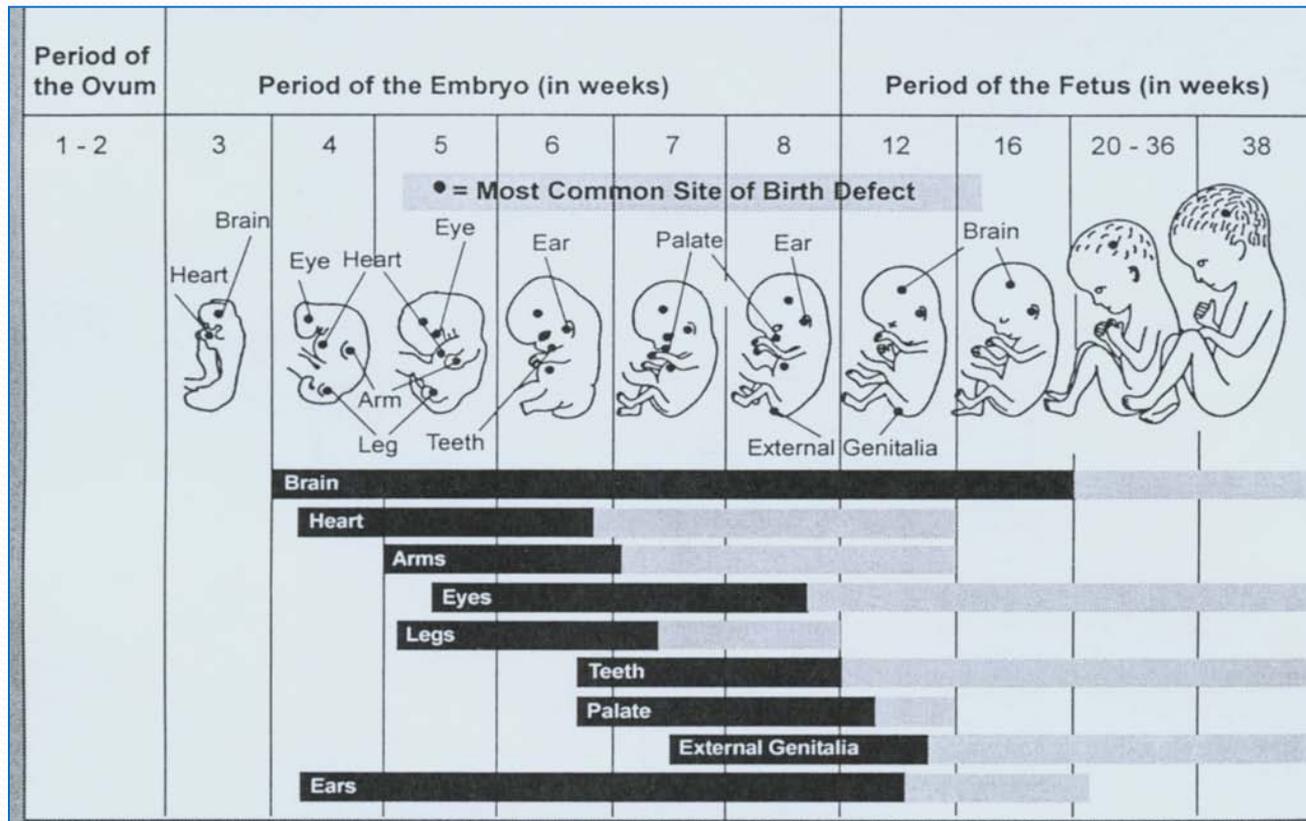
What is FAS?

- Medical diagnosis for a permanent condition caused by prenatal alcohol exposure
 - Growth deficiency
 - Head, height, weight
 - Special pattern of facial features
 - Small palpebral fissures, thin upper lip, flat philtrum
 - Signs of central nervous system damage

Fetal Brain Development Begins Very Early



Organs vulnerable at various times



What is FASD?

- A spectrum of physical, mental, behavioral, and/or learning disabilities that can result from prenatal alcohol exposure.
 - It is not a clinical diagnosis
 - Alaska prevalence is 152 per 10,000 births ('96-'02)
 - 9% of these meet case definition for full FAS
- **FAS and FASD are completely preventable.**

Characteristics of Birth Mothers of Children with FASD

- Diverse racial, educational & economic backgrounds
- Often victims of abuse
- Often challenged by mental health issues
- Older and has higher parity (but not always)
- Had fewer PN visits & more complications
- Prenatal alcohol consumption higher



Julie

(on Part 1)

4 min. video clip from

Recovering Hope Mothers Speak Out

SAMHA's FASD Center for Excellence

Two Ways to Think About Reducing Alcohol-Exposed Pregnancies

Consider assessment & education for ALL reproductive age girls and women at every opportunity for:

‘At risk’ drinking patterns
and

Ineffective or no contraception

Alcohol is “Accepted”

- Alcohol is a traditional part of many cultures all over the world
- Alcohol is used to celebrate, relax, and socialize
- Many people have strong feelings about alcohol
- In US, we give our youth mixed messages about alcohol

Sexuality and Alcohol

- We live in a culture (US) in which basic human sexuality is discouraged yet sex is used to sell virtually everything
- Alcohol ads use sexual messaging to sell products
- Alcohol is a 'rite of passage'- but is also the forbidden fruit

Alcohol Consumption in Alaska

- Enough alcohol was sold in Alaska in 1999 to add up to 516 drinks for every man, woman and child in the state that year and 30% of our population does not drink
- In many communities in AK beer is cheaper than milk, fruit juice and brand name soft drinks
- 54.8% of Alaskan adults surveyed reported having had at least one drink in the last 30 days
- 6.4% of Alaskan adults report drinking at least one drink/day
- 19.2% of Alaskan adults report binge drinking patterns

What IS a standard drink?

- 12 oz size of beer or a wine cooler 5% alcohol
- 8-9 oz of malt liquor 7% alcohol
- 5 oz table wine 12% alcohol
- 1.5oz of 80proof spirits 40% alcohol

- Depending on type of spirit and recipe, one 'mixed drink' can contain from 1-3 standard drinks
- "Size matters".....glass size, bottle size, etc.

US Binge and At Risk Drinking

- 54.9% of women (age 18-44) who might become pregnant reported using alcohol and 12.4% reported binge drinking patterns
 - NOTE- does not capture younger teens data
- In 2005, 12% of pregnant women reported alcohol use in past 30 days and 2% reported binge level drinking
- Definition of a binge for women
 - 5* standard drinks/occasion
 - At risk level=7 or more drinks/week or more than 3 drinks/occasion

Alaska Binge and At Risk Drinking for Pregnant Women

- Prenatal alcohol use during last 3 months of pregnancy declined from 6.4% (1996) to 4.3% (1998) but no change since then
- During 2001-2005:
 - Overall prevalence of binge drinking in pregnancy was <1%
 - Prevalence of ANY prenatal alcohol use was slightly higher among non-Native women (5%) than Native (3.7%)
 - Alaska Native binge rates (2.3%) during last 3 months of pregnancy higher than non-Native (0.5%)

Youth Behavioral Risk Survey '09

- **% AK youth who** (= 1995 data)
 - rode in a car driven by someone who has been drinking (in last 30 days) = **21.9** (31.9)
 - had at least 1 drink of alcohol ever = **66.6** (80.1)
 - had their first drink before age 13 = **16.9** (36.7)
 - had at least one drink in past 30 days = **33.2** (47.5)
 - had 5 or more drinks (binge) in last 30 days = **21.7** (31.3)
 - think that 1 to 2 drinks/day = no or slight risk **34.7***

*new question so no 1995 data to compare

Youth Behavioral Risk Survey '09

- % AK youth who
 - have had sex ever = **43.5** (47.2); in past 3 mos. = **30.4** (30.5)
 - drank alcohol or drugged at time of last sex = **17.1** (26.6)
 - used a condom during last sex = **62.2** (53.7%)
 - used birth control pills during last sex = **26** (14.4%)
 - felt so sad/hopeless almost every day for 2 weeks or more in a row that they stopped some usual activities in last year = **25.2***

The Good News?

- **Trend lines for all behaviors noted are heading in an “improved” direction**
 - **down for alcohol use and**
 - **up for protection used during sex;**
 - **sad item only measured since 03 and unchanged**

A woman (girl) is more likely to drink excessively if she has a:

- Partner who drinks heavily
- History of depression
- History of childhood physical or sexual abuse
- Parents & siblings (or other relatives) who have alcohol problems and/or
- Can "hold her liquor" more than others



Drinking During Pregnancy

(on Part 2)
6 min. video clip from

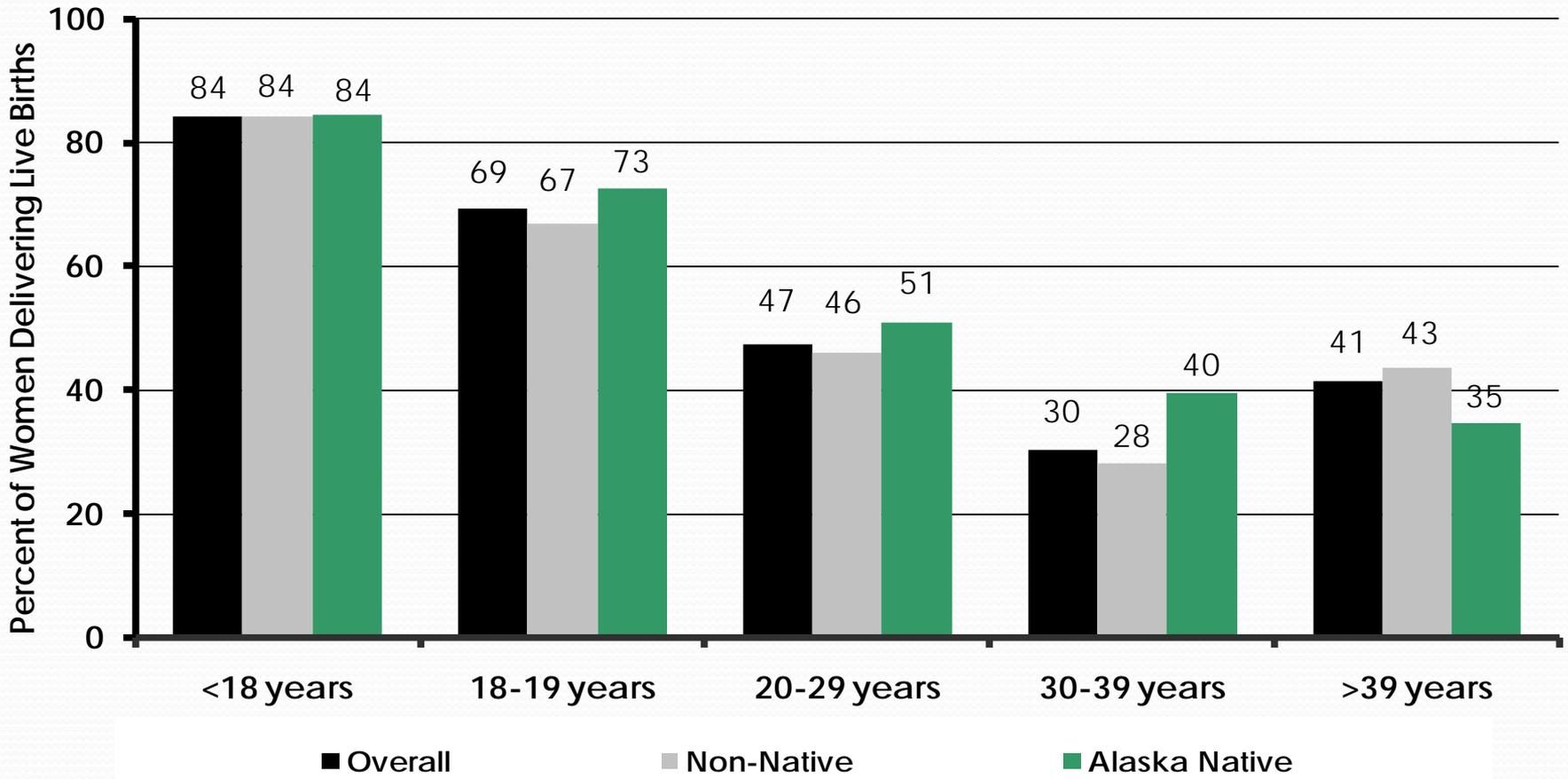
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Unintended pregnancy

- Women today have longest fertile years in history
- US (and AK) unintended pregnancy rates continue to be 49% despite varied contraceptive options
- Burden heavier on some groups:
 - Aged 18–24,
 - Low-income ,
 - Cohabiting, and
 - Minority women

Unintended Pregnancy by Age Group and Alaska Native Status Alaska, 2001-2005

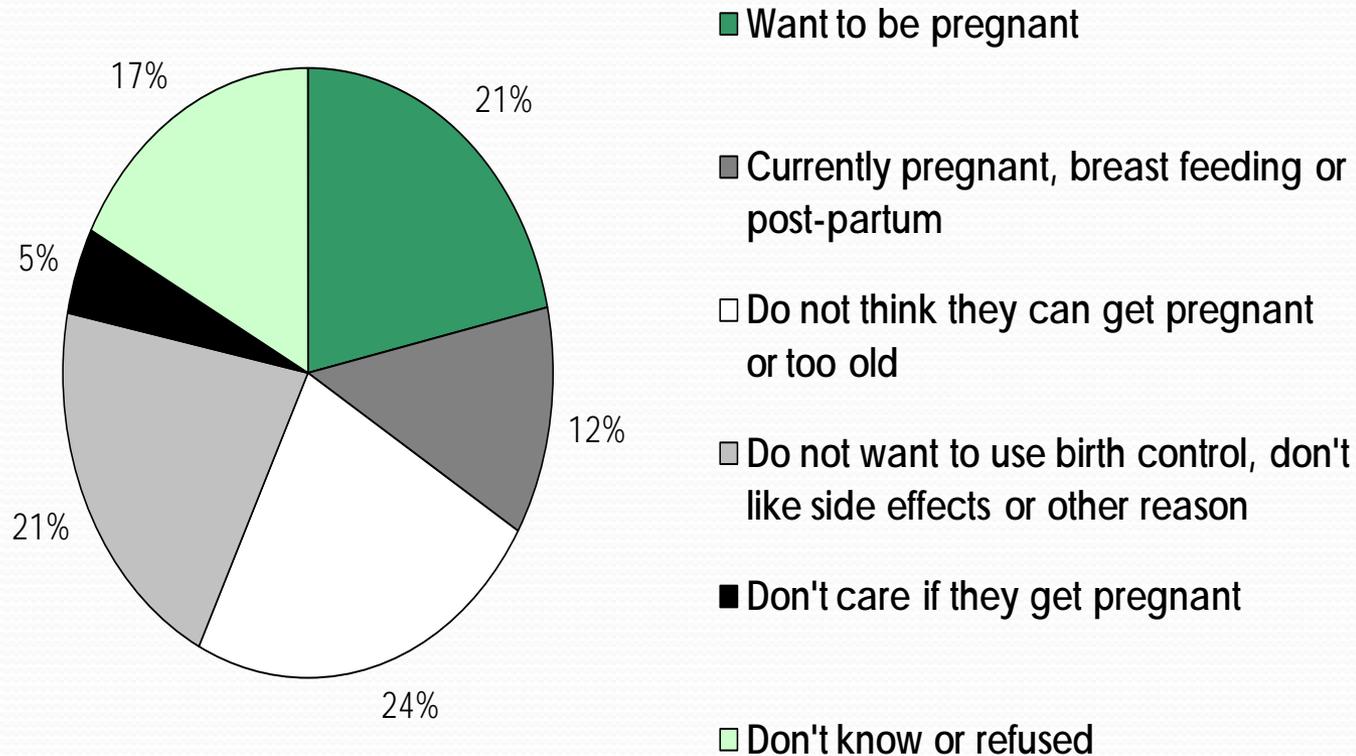


Source: Schoellhorn KJ. Perham-Hester KA. Goldsmith YW. Alaska Maternal and Child Data Book 2008: Health Status Edition. MCH Epidemiology Unit. WCFH. DPH. DHSS. December 2008.

Reasons women do not use or continue use of contraception

- No access/\$
- Infrequent sexual encounters = “no need”
- Cultural, religious, spiritual
- Partner influence
- Perceived or real side effects
- “Poor match” between woman and method
- Want to be pregnant
- Don't think they can get pregnant
- Don't care if they do get pregnant

Reasons for Not Using Contraception (Excluding Medical Sterilization), Alaska, 2004



Source: Schoellhorn KJ. Perham-Hester KA. Goldsmith YW. Alaska Maternal and Child Data Book 2008: Health Status Edition. MCH Epidemiology Unit. WCFH. DPH. DHSS. December 2008.

Current Method Options

User-dependent

Fertility Awareness (15-25/100 failures)

- Rhythm, BBT, Billings
- Cycle Beads

Withdrawal (30/100 failures)

Spermicide alone “ “

Barriers (15-25/100 failures)

- Condoms, male and female
- Diaphragm
- Cervical cap, Leah's Shield

Breastfeeding exclusively, often (2-8/100 failures)

Hormonal (2-8/100 failures)

- Combined hormones- pill, patch, ring
- Progestin only pills

User-independent

Non-Hormonal

Paraguard IUD (< 1/100 failures)

Sterilization (all < 1/100 failures)

- Female tubal ligation
- Essure
- Male vasectomy

Hormonal

- Depo (2-8/100 failures)
- Implanon (< 1/100 failures)
- Mirena IUS “ “ “

Top Reasons Contraceptives Fail

- Medical intervention
 - Oral contraceptives inactivated by some antibiotics
- The condom breaks
- Improper use of method
- Belief that they cannot get pregnant
 - Many do not like method side effects or how condoms feel so they take chances
 - Yes, some women can get pregnant while on their periods

Improving contraception use

- Who is the girl/woman you are encountering?
 - Her social/family history
 - Life plans
 - Partner status
 - Health history
 - Willingness to do whatever selected method requires of her? (Is she better user dependent or independent candidate?)
 - Willingness to “work a bit” to find something that works for her...it is often a process
 - Other?

Alcohol Screening in Primary Care & Other Settings

- Several tools available:
 - CAGE- screens for ETOH abuse, not misuse
 - TWEAK - good for screening pregnant women
 - T-ACE- “ “ “

Identifying at risk women:

- In one study, 82.8% of 278 T-ACE positive pregnant women consumed alcohol while pregnant.
- **However, their providers only identified 10.8% of them at being at risk for drinking.**

TWEAK

- TOLERANCE for alcohol
- WORRY or concern by family or friends about drinking behavior
- EYE OPENER the need to have a drink in the morning
Blackouts or AMNESIA while drinking and
- The self perception of the need to CUT DOWN on alcohol use.

- Score of 2 or more suggestive of harmful drinking patterns in obstetric population (If >5 drinks before she falls asleep or passes out=2; Yes to worry=2; Yes to last three questions=1 point each)

T-ACE

(To score: yes to A,C, E=1; more than 2 drinks for T=2)

How many drinks does it take for you to feel high? 1. Less than or equal to 2 drinks 2. More than 2 drinks	<u>T</u> olerance
Have people annoyed you by criticizing your drinking? 1. Yes 2. No	<u>A</u> nnoyance
Have you felt you ought to cut down on your drinking? 1. Yes 2. No	<u>C</u> ut Down
Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover? 1. Yes 2. No	<u>E</u> ye Opener
Total Score=_____	Score of 2 or more= potential risk for pregnancy outreach purposes

CRAFFT designed for teens 14-18

- Have you ever ridden in a CAR driven by someone (including yourself) who was high or had been using alcohol or drugs?
- Do you ever use alcohol or drugs to RELAX, feel better about yourself, or to fit in?
- Do you ever use alcohol or drugs while you are by yourself or ALONE?
- Do you ever FORGET things you did while using alcohol or drugs?
- Do your family or FRIENDS ever tell you that you should cut down on your drinking or drug use?
- Have you ever gotten into TROUBLE while you were using alcohol or drugs?
- Each item positive response= 1 point. A score of 2 or higher = alcohol use disorder in teen

A positive screen, then what?

- First, be non-judgmental...you do not know her story.
- Remember that asking the question IS an intervention
 - She may not realize that her alcohol consumption level is risky or considered that she may put a fetus at risk
 - Your questions may help her “contemplate”
- Assess her for ‘readiness to change’

Stages of Change

- Pre-contemplation
- Contemplation
- Preparation/determination
- Action
- Maintenance

- Relapse

Brief Intervention is Effective

- In one multi center project, nearly 70% of women who were drinking at risky levels and not using effective contraception reduced their risk of an AEP (as measured 6 months later) because they stopped or reduced their drinking to below risky levels or they started using effective contraception.
- For women who were already pregnant, randomized studies report significant reductions in alcohol use and improved newborn outcomes after intervention.

What IS Brief Intervention?

- Motivational interventions that are associated with sustained reduction in alcohol in reproductive age women. The FRAMES model is one example:
- Feedback- discuss her level of drinking vs. low risk
- Responsibility-it is hers to change
- Advice-be direct but not insistent
- Menu-discuss risky drinking situations/alternatives
- Empathy-be understanding and involved
- Self-efficacy-encourage her ability to change

Follow-up for women with risky level drinking:

- Did she meet her goals? Congratulations!
- Did not meet her goals- restate advice, review plan, work to modify....
- Continues risky drinking? If trying to get pregnant or not using contraception, discuss treatment options
- Refer as needed
- Don't give up on her!

Consider the following:

- Pregnancy is an optimal 'reachable moment' BUT we want to reach women BEFORE they get pregnant
- Medical and social services have their areas of expertise but do not generally coordinate or share their information gathering-how to change this?
- Risk level drinking information not shared widely enough?
- Friends, family, businesses, health & social service professionals, (media and others?) all have a role

Thoughts for the future:

- Media literacy education for youth
- Find ways to help parents/families with conversations about sexuality, personal values, life plans, and contraception
- Get the word out about “risky drinking”
- “Think Before You Drink” campaign to encourage self-awareness/honesty with oneself:
 - How likely is it that I’ll have sex?
 - Am I using protection if I’m drinking?

Website Resources

- <http://www.hss.state.ak.us/fas/Resources/atriskwomen/default.htm>
- http://www.hss.state.ak.us/dph/infocenter/topics/alcohol_drugs.htm
- <http://www.hss.state.ak.us/dph/chronic/school/YRBSresults.htm> (2009 is most recent data)
- <http://www.cdc.gov/ncbddd/fasd/research-preventing.html>
- <http://www.plannedparenthood.org/parents/index.htm>
 - **Meeting Your Children's Basic Needs**
 - **Human Sexuality — What Children Need to Know and When**
 - [How to Talk with Your Children About Sex](#)
 - [Puberty 101 for Parents](#)
 - [Resources for Parents](#)