

# FASD Prevention Efforts with American Indian Communities

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Presentation to the Alyce Spotted Bear and  
Walter Soboleff Commission on Native Children

UMD

UNIVERSITY OF MINNESOTA DULUTH

Driven to Discover

# University of Minnesota Duluth's Land Acknowledgement

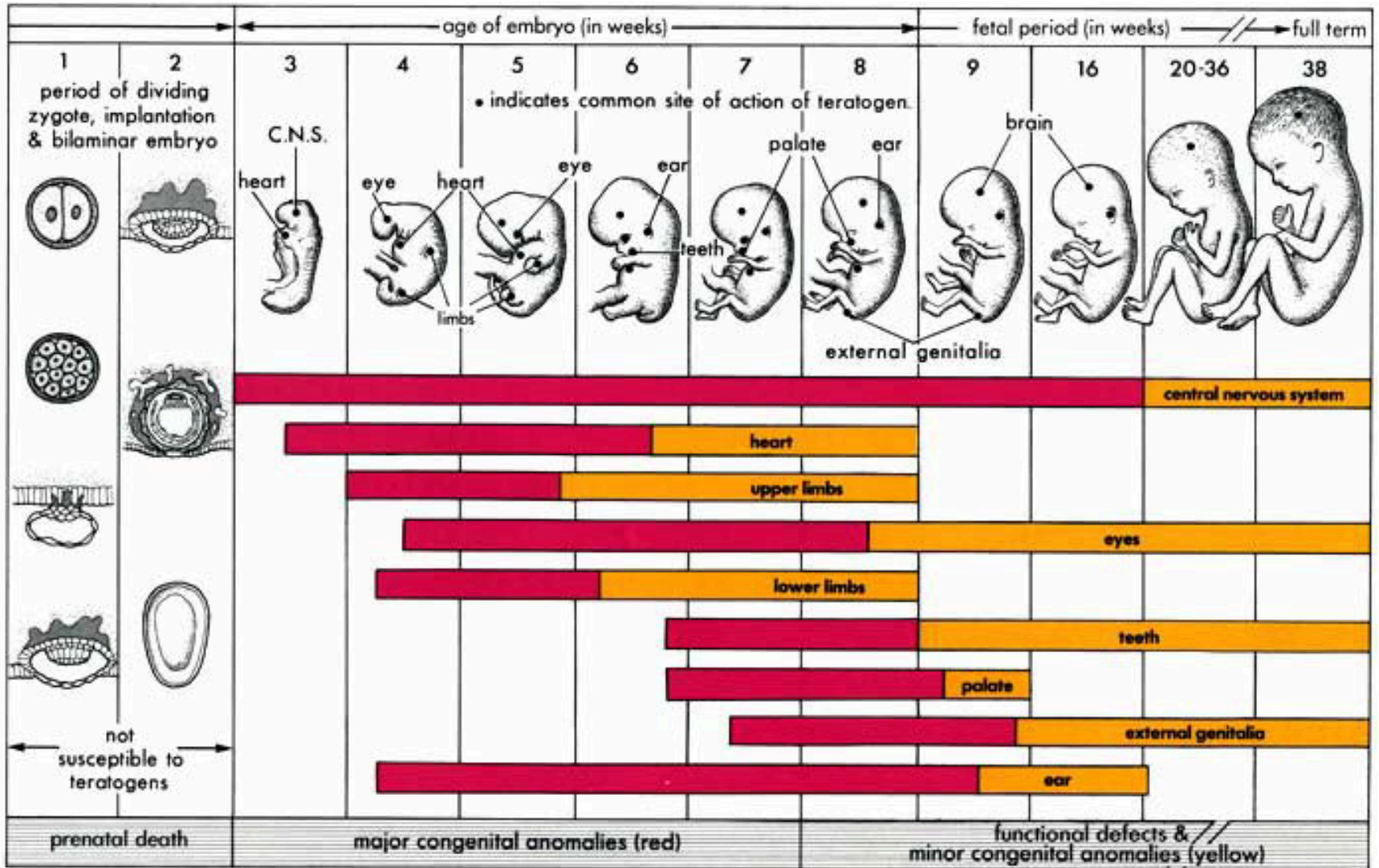


We collectively acknowledge that the University of Minnesota Duluth is located on the traditional, ancestral, and contemporary lands of Indigenous people. The University resides on land that was cared for and called home by the Ojibwe people, before them the Dakota and Northern Cheyenne people, and other Native peoples from time immemorial. Ceded by the Ojibwe in an 1854 treaty, this land holds great historical, spiritual, and personal significance for its original stewards, the Native nations and peoples of this region. We recognize and continually support and advocate for the sovereignty of the Native nations in this territory and beyond. By offering this land acknowledgment, we affirm tribal sovereignty and will work to hold the University of Minnesota Duluth accountable to American Indian peoples and nations.

# Fetal Alcohol Spectrum Disorders

- Continuum of outcomes in individuals prenatally exposed to alcohol.
- Leading preventable cause of disabilities in the U.S. (SAMHSA)





Source: Coles, C. (1994). Critical periods for prenatal alcohol exposure. *Alcohol Health Research World*, 18(1), 22-29

# The Preventable Tragedy: Fetal Alcohol Syndrome

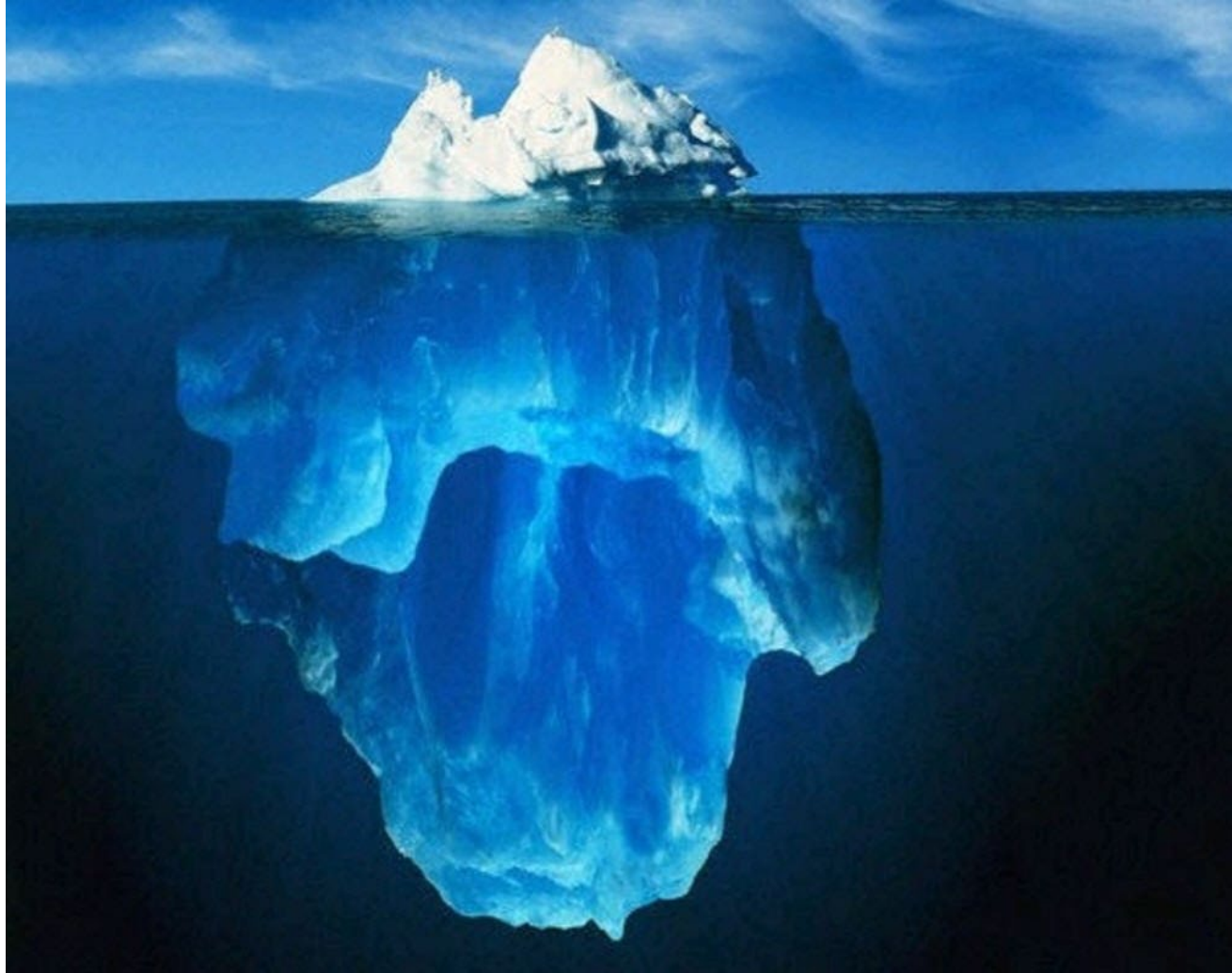
National Geographic

v. 181, No. 2. February 1992

*“I was drinking a bottle of vodka a day that December, so out of touch that I didn’t even know I was two months pregnant. When I found out, I quit there and then, but the damage was done.”*



# Iceberg Analogy



# Prevention of alcohol- exposed pregnancy in Native women

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CRITIQUES OF DATA



# FASD Prevalence

Not just an issue with American Indian communities but *“it’s worth our effort to stop FASD in our Nation.”*

(OST CHOICES Coordinator, 2015).



Q.

Which one has a  
Fetal Alcohol Spectrum Disorder?



HE physical disabilities:  
Tard development,  
short and thin stature,  
and brain damage.



HE hidden disabilities:  
Brain damage can result  
in learning problems,  
impulsive & impulsive  
behavior, memory  
problems, attention  
problems, eating,  
and conductive about  
stress and affect.

A.  
Both do.

Not all FASD\* symptoms are visible.

Just as most women don't know they are pregnant for the first month or so, many children are born with Fetal Alcohol Spectrum Disorders and nobody knows it until later in life. The only way for a woman to be sure that she doesn't have a baby with FASD is to avoid alcohol for her entire pregnancy. The Yousibai Hopline is a dedicated resource for people who are concerned about drinking and pregnancy. We are especially interested in helping women who are of childbearing age, because we know that the future health of our next generation depends on how well we care for ourselves today.

\* Fetal alcohol spectrum disorders (FASD) is an umbrella term used to describe a range of effects that can occur in a person whose mother drank alcohol during pregnancy. FASD are drinking problems that can affect how a person looks, grows, learns, and acts.

Protect our future

IF YOU ARE A WOMAN  
EVEN IF YOU  
INFO



Prevention of  
FASD comes  
in many  
forms...

Source: Hanson JD, Winberg A, Elliott A. Development of a media campaign on fetal alcohol spectrum disorders for Northern Plains American Indian communities. Health Promot Pract. 2012 Nov;13(6):842-7. doi: 10.1177/1524839911404232.

# Systematic Review of FASD Prevention with Tribes in the U.S.

## Indicated Approaches

- Case management (Masis & May, 1991; May et al., 2008)
- CHOICES (Hanson et al., 2017)

## Selective Strategies

- Telephone-based intervention (Hanson et al., 2013)
- Web-based SBIRT (Montag et al., 2015)\*

## Universal

- Education (May & Hymbaugh, 1989; Plaiser, 1989)
- Media campaign (Hanson et al., 2012)

**\*Only RCT in the published literature**

# Native AIR Native Communities – Alcohol Intervention Review

Native Communities – Alcohol Intervention Review

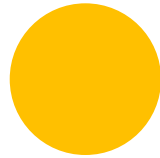
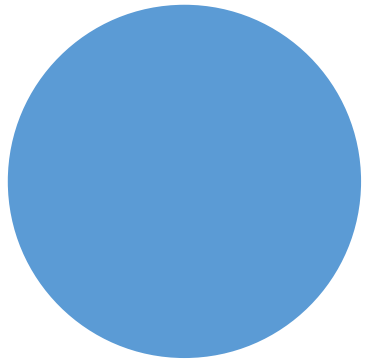


## Fetal Alcohol Spectrum Disorder (FASD) Prevention Interventions

| Intervention   | Description  | Cultural Engagement  | Costs  | Outcomes                             |
|--|--|--|--|--------------------------------------|
| <p>1. <a href="#">Educational Intervention</a></p> <p>1. <a href="#">Ma et al. 1998</a></p>  | <p>FAS prevention program that used educational materials (videos, study guides, flyers and brochures) to target Native American middle schoolers.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Local/Community, School</li> <li>• <b>Level:</b> Medium Sized Group (10-50)</li> <li>• <b>Participants:</b> Adolescents, Native, Male and Female</li> <li>• <b>Staffing Needs:</b> Credentials – Not specified; Background - Educator</li> <li>• <b>Research Design:</b> Pre-/Post-intervention data</li> <li>• <b>Developmental Stage of Research:</b> Early Stage</li> </ul> | <p><b>Cultural Inclusion:</b> Medium</p> <p><b>TCBPR:</b> Low</p>    | <p><b>Startup:</b> Medium (\$\$)</p> <p><b>Maintenance:</b> Low (\$)</p> | <p>Medium/ Mixed Level of Change</p> |
| <p>2. <a href="#">Screening, Brief Intervention, and Referral to Treatment (SBIRT)</a></p> <p>2a. <a href="#">Montag et al. 2015 (ACER)</a><br/>                 2b. <a href="#">Montag et al. 2015 (AJPH)</a><br/>                 2c. <a href="#">Gorman et al. 2013</a></p> | <p>Culturally tailored, web-based Screening and Brief Intervention and Referral to Treatment (SBIRT) intervention administered to AI/AN women of child bearing age.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Region, Clinic</li> <li>• <b>Level:</b> Individual</li> <li>• <b>Participants:</b> Young Adult, Adult, Native, Female</li> <li>• <b>Staffing Needs:</b> Not specified</li> <li>• <b>Research Design:</b> Randomized controlled experimental design</li> <li>• <b>Developmental Stage of Research:</b> Early Stage</li> </ul>                                  | <p><b>Cultural Inclusion:</b> Medium</p> <p><b>TCBPR:</b> Medium</p> | <p><b>Startup:</b> Medium (\$\$)</p> <p><b>Maintenance:</b> Low (\$)</p> | <p>Medium/ Mixed Level of Change</p> |

| Intervention   | Description   | Cultural Engagement   | Costs  | Outcomes   |
|--|---|---|--|--|
| <p>3. <a href="#">Nationwide Primary Prevention</a></p> <p>3a. <a href="#">May &amp; Hymbaugh 1989</a><br/>3b. <a href="#">May &amp; Hymbaugh 1982</a></p> <p>Note: This intervention was reviewed using an earlier version of the coding scheme</p> | <p>A nation-wide FASD primary prevention project employing public education, training of clinicians, establishing clinics and referrals, and developing prevention materials for Native American and Alaska Native school children, prenatal women and community groups.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Local/Community, State, Region, National, Clinic, School, Rural, Reservation</li> <li>• <b>Level:</b> Multi-Level</li> <li>• <b>Participants:</b> Child, Adolescent, Young Adult, Adult, Native, Male and Female</li> <li>• <b>Staffing Needs:</b> Credentials - Advanced/Licensed Degreed Professional, Certified Professional; Background – Educator, Community Leader</li> <li>• <b>Research Design:</b> Program Evaluation</li> </ul> | <p><b>Cultural Inclusion:</b><br/>Medium</p> <p><b>TCBPR:</b><br/>Low</p> | <p><b>Start up:</b><br/>High (\$\$\$)</p> <p><b>Maintenance:</b><br/>Medium (\$\$)</p> | <p>Low Level of Change</p>                       |
| <p>4. <a href="#">Enhanced Case Management</a></p> <p>4. <a href="#">May et al. 2008</a></p>   | <p>Case management (CM) intervention provided to women at high risk of drinking during pregnancy as a part of a comprehensive FAS epidemiology and prevention program in four American Indian communities in the Northern Plains states.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Reservation</li> <li>• <b>Level:</b> Individual</li> <li>• <b>Participants:</b> Young Adult, Adult, Native, Female</li> <li>• <b>Staffing Needs:</b> Not Specified</li> <li>• <b>Research Design:</b> Pre-/Post-intervention data</li> <li>• <b>Developmental Stage of Research:</b> Early Stage</li> </ul>   | <p><b>Cultural Inclusion:</b><br/>None</p> <p><b>TCBPR:</b><br/>Low</p>   | <p><b>Startup:</b><br/>High (\$\$\$)</p> <p><b>Maintenance:</b><br/>Medium (\$\$)</p>  | <p>Medium/<br/>Mixed<br/>Level of<br/>Change</p> |
| <p>7. <a href="#">Comprehensive Program for High-risk Women</a></p> <p>7. <a href="#">Masis and May 1991</a></p>   | <p>This comprehensive FAS prevention program included presenting education materials; screening for alcohol use in prenatal clinics; case management, counseling, personal support, social and medical services for women at risk.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Clinic, Reservation</li> <li>• <b>Level:</b> Individual</li> <li>• <b>Participants:</b> Adolescent, Young Adult, Adult, Native, Female</li> <li>• <b>Staffing Needs:</b> Not Specified</li> <li>• <b>Research Design:</b> Pre-/Post-intervention data</li> <li>• <b>Developmental Stage of Research:</b> Early Stage</li> </ul>   | <p><b>Cultural Inclusion:</b><br/>Low</p> <p><b>TCBPR:</b><br/>Low</p>    | <p><b>Startup:</b><br/>High (\$\$\$)</p> <p><b>Maintenance:</b><br/>High (\$\$\$)</p>  | <p>Medium/<br/>Mixed<br/>Level of<br/>Change</p> |

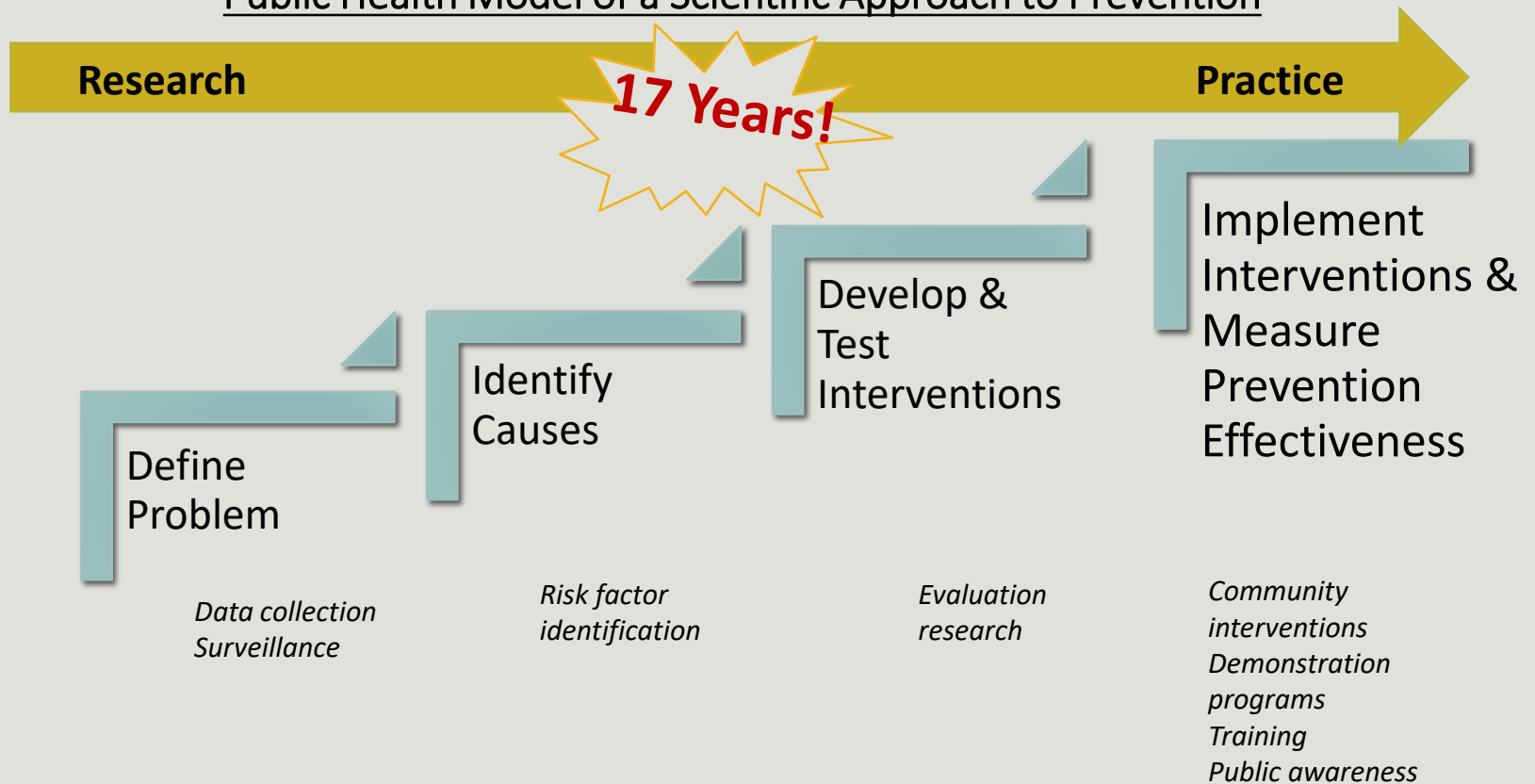
| Intervention  | Description  | Cultural Engagement  | Costs   | Outcomes                                     |
|---|--|--|---|--|
| <p>5. <a href="#">Media Campaign and Remotely Delivered Screening and Brief Intervention (CHOICES)</a></p> <p>5a. <a href="#">Hanson et al. 2012</a><br/>5b. <a href="#">Hanson et al. 2013</a></p> <p>Note: This intervention was reviewed using an earlier version of the coding scheme</p> | <p>After a media campaign to prepare and recruit Native women the intervention consisted of motivational interviews administered by phone and self-guided change workbooks. Personalized feedback provided on risk for alcohol exposed pregnancy due to poor birth control use and drinking.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Region, Rural, Reservation</li> <li>• <b>Level:</b> Individual</li> <li>• <b>Participants:</b> Young Adult, Adult, Native, Female</li> <li>• <b>Staffing Needs:</b> Credentials - Not Specified; Background - Community Members</li> <li>• <b>Research Design:</b> Program Evaluation</li> </ul>   | <p><b>Cultural Inclusion:</b><br/>Medium</p> <p><b>TCBPR:</b><br/>Medium</p> | <p><b>Startup:</b><br/>High (\$\$\$)</p> <p><b>Maintenance:</b><br/>Low (\$)</p>      | <p>Medium/<br/>Mixed Level<br/>of Change</p> |
| <p>6. <a href="#">Personally Delivered Oglala Sioux Tribe (OST) CHOICES Program</a></p> <p>6a. <a href="#">Hanson et al. 2017</a><br/>6b. <a href="#">Hanson et al. 2016</a><br/>6c. <a href="#">Hauge et al. 2015</a></p>  | <p>Oglala Sioux Tribe (OST) CHOICES Program is a culturally adapted version of an evidence based intervention (EBI) to reduce alcohol exposed pregnancy (AEP) by reducing drinking and/or improving birth control use. The intervention was administered to non-pregnant American Indian women at risk for AEP in midwestern Northern Plains areas.</p> <ul style="list-style-type: none"> <li>• <b>Setting:</b> Local/Community, Urban, Reservation</li> <li>• <b>Level:</b> Individual</li> <li>• <b>Participants:</b> Young Adult, Adult, Native, Female</li> <li>• <b>Staffing Needs:</b> Credentials not specified; Background – Community Members</li> <li>• <b>Research Design:</b> Pre-/Post-intervention data</li> <li>• <b>Developmental Stage of Research:</b> Early Stage</li> </ul> | <p><b>Cultural Inclusion:</b><br/>Medium</p> <p><b>TCBPR:</b><br/>High</p>   | <p><b>Startup:</b><br/>High (\$\$\$)</p> <p><b>Maintenance:</b><br/>Medium (\$\$)</p> | <p>Medium/<br/>Mixed Level<br/>of Change</p> |



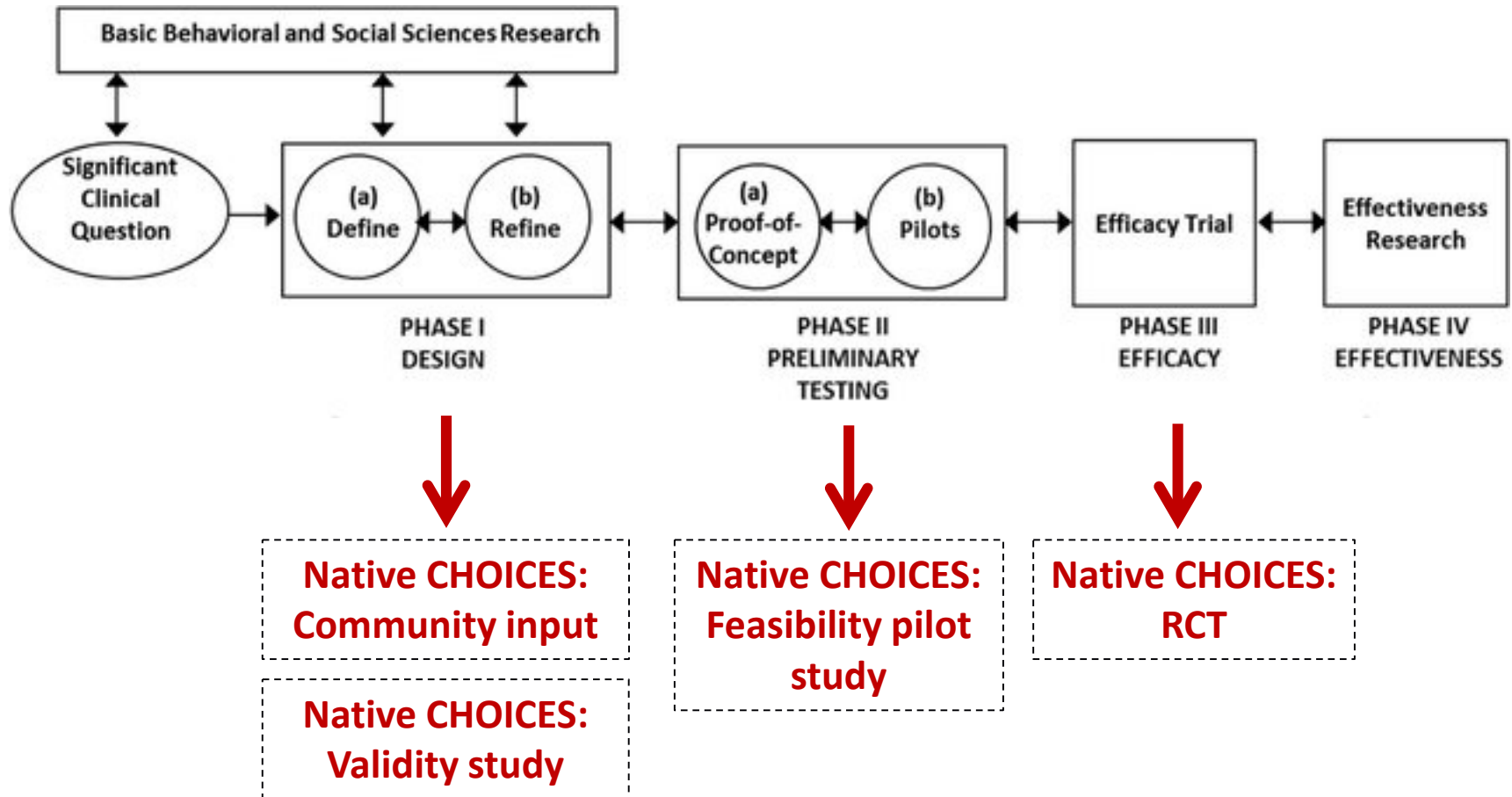
Application of the ORBIT  
Model to Reframe FASD  
Prevention |

# Translational Research Context

## Public Health Model of a Scientific Approach to Prevention

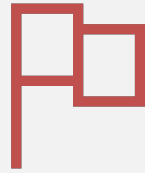


# Application of the ORBIT Model on Preconceptual FAS Prevention with Native Communities





# Future Research



Epidemiology and  
Surveillance



Stigma



Phase IV  
Effectiveness/  
Dissemination &  
Implementation  
Research

# Questions?





Thank you!