

HUSHABYE NURSERY

The Tiniest Victims of the Opioid Crisis



Objectives

- What is Neonatal Abstinence Syndrome (NAS)?
- What causes NAS?
- Signs and Symptoms of NAS?
- Treatment of NAS?
- Follow up for babies with NAS?
- Medication assisted treatment- What is it?
- What is Hushabye Nursery's care model? Why Hushabye?



Every day, more than **2 babies** are born passively dependent in AZ.



Opioid Epidemic In Arizona



consumes
80 % of the
global opioid
supply

&

4 out of **5**



new heroin users start by
misusing prescription
painkillers

**More than 2 Arizonans die each
day from an opioid overdose**



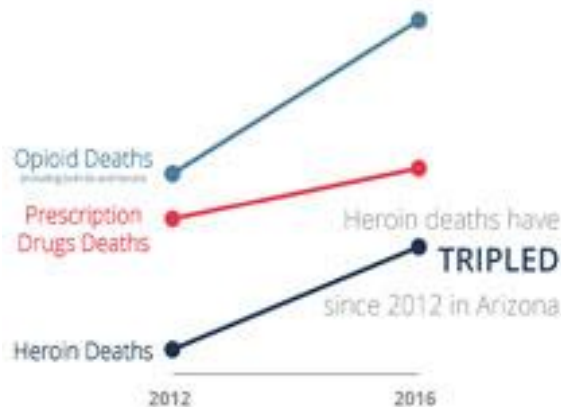
4 out of **10**

Arizona adults know someone addicted to
prescription painkillers

431 MILLION

opioid pills were
prescribed in 2016

enough for **every** Arizonan
to have a
2.5 week supply



Drug overdoses* take
more lives
than car crashes in Arizona

*Includes overdoses from opioids, cocaine, heroin, marijuana, and other illicit drugs.



In the last 5 years,
86%
of persons who died
from an opioid related
cause were using
multiple substances

For more information: azhealth.gov



ARIZONA DEPARTMENT
OF HEALTH SERVICES



Neonatal Abstinence Syndrome

Condition experienced by an infant after birth due to sudden discontinuation of exposure to certain drugs such as opioids that were used by their mother during pregnancy.



Prabhakar Kocherlakota

Pediatrics Aug 2014, 134 (2) e547e561; DOI: 10.1542/peds.2013-3524

NAS Withdrawal Symptoms

Similar to an adult

Can last up to 1 year of age

- Vomiting
- Diarrhea
- Mottling of skin
- Skin breakdown
- Tremors, jittery
- Sweating
- Inconsolable high-pitched cry
- Poor feeding or excessive sucking
- Inability to sleep
- Stuffy nose and sneezing
- Increased breathing rate
- Seizures



HOPPE

What if we started prenatally?

- Congratulations!!!
- Connect with Obstetrician/ Perinatology Consult
- Birthing classes (OUD/SUD specific)
- No THC
- DCS plan
- SENSE program
- Identify Safety Monitors
- Withdrawal Symptoms and Interventions
- Breastfeeding
- HIV/Hepatitis C status and Counseling



Management of NAS

Non-pharmacologic care

- Parents, Parents, Parents!!!
- Decreasing stimulation
 - Turning the lights down
 - Quiet environment
- Skin-to-skin
- Rooming-in or Nesting
- Nutrition- small frequent feedings, warm the bottle
- Breastfeeding, if not contraindicated
- Infant Massage
- Warm compresses to tummy

Rooming-In to Treat Neonatal Abstinence Syndrome: Improved Family-Centered Care at Lower Cost Alison Volpe Holmes, Emily C. Atwood, Bonny Whalen, Johanna Beliveau, J. Dean Jarvis, John C. Matulis, Shawn L. Ralston Pediatrics Jun 2016, 137 (6) e20152929; DOI: 10.1542/peds.2015-2929



Management of NAS

Non-pharmacologic care: teach parents!

- Your baby will be sensitive to light, sound and touch.
- Keep the surroundings calm and quiet.
- Limit visitors.
- Mute your cell phone.
- Only wake babies for feedings if necessary.
- Let your baby sleep. It is very important for them to rest well.
- Avoid rubbing and stroking, gently pat to provide extra comfort.
- Smoking can be an irritant.



Current NICU Environment



Opioid Use Disorder (OUD)

A Brain Disease, not a moral failure!

How we talk impacts the way we think.

Improved understanding that **opioid use disorder** is a complex interplay of biology and environment will decrease stigmatize and increase access to healthcare.



Maternal OUD Treatment Cold Turkey

Why not???

- Increases the risk of miscarriage
- High incidence of relapse
- Not recommended by ACOG currently



Medication-Assisted Treatment (MAT)

Harm Reduction and Evidence-Based Treatment for OUD

- Combines behavioral therapy and medications to treat substance use disorders
- Proven efficacy with Opioid Use Disorder



Medication-Assisted Treatment (MAT)

Methadone, Buprenorphine (Subutex), Suboxone
(Buprenorphine/Naloxone), Naltrexone (Vivitrol)

- Decrease HIV/AIDS
- Decrease mortality
- Decrease healthcare costs
- Decrease in drug-related crime
- Decrease IV drug use
- Improved family stability
- Improved pregnancy outcomes



Adverse Childhood Experiences Study (1998)- 7 Domains

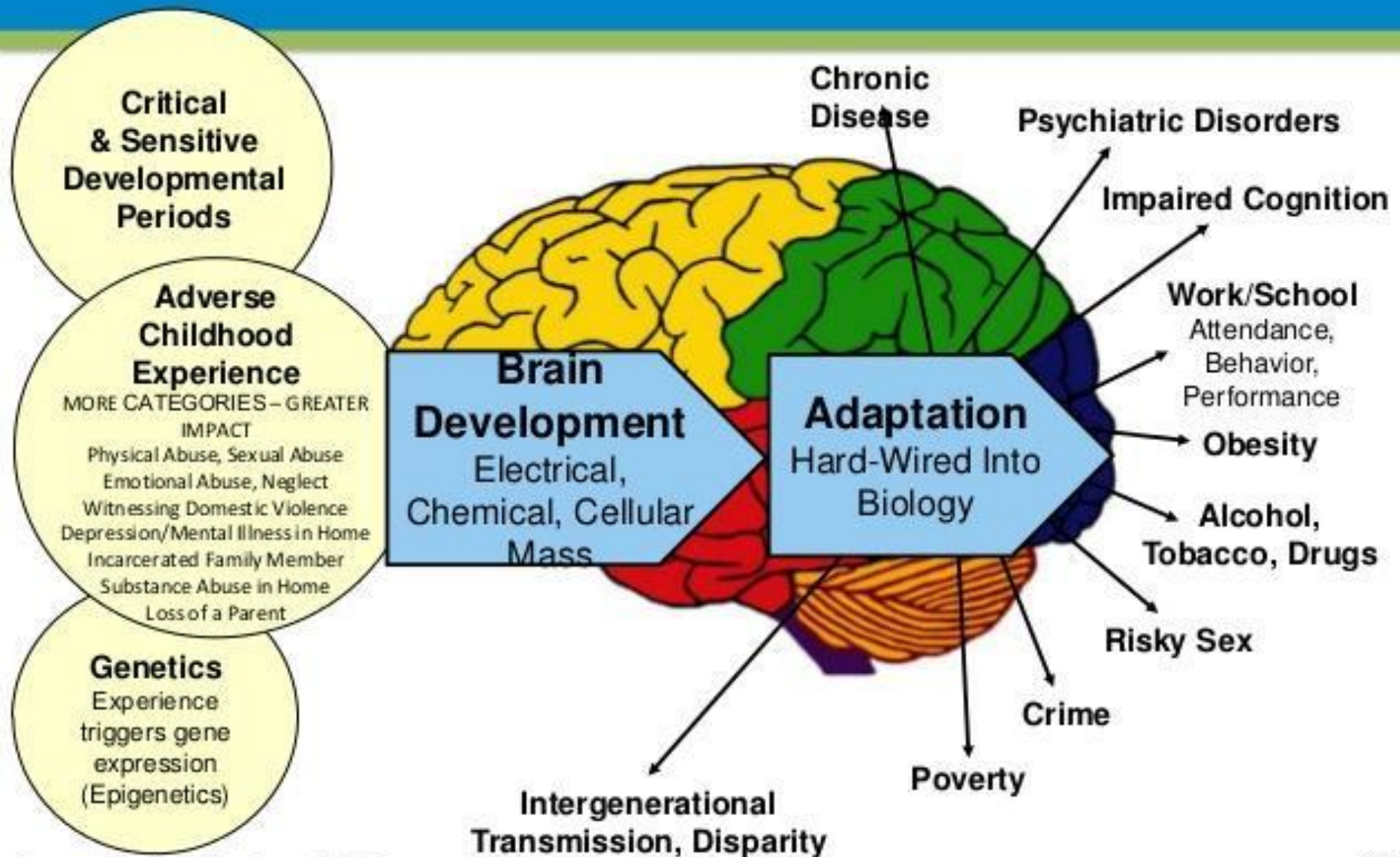
3 Types of Abuse

- Physical
- Sexual
- Emotional
- Mental Illness in household
- Substance abuse in household
- Evidence of Criminal Activity in household
- Mother abused in the household



Pediatrics [March 2003, VOLUME 111 / ISSUE 3](#) Abuse, Neglect, and Household Dysfunction and the Risk of Illicit Drug Use: The Adverse Childhood Experiences Study Shanta R. Dube, Vincent J. Felitti, Maxia Dong, Daniel P. Chapman, Wayne H. Giles, Robert F. Anda

Lifespan Impacts of ACEs



Source: Family Policy Council, 2012



ACE's

Event + Experience + Effect

- LIVING WITH SOMEONE WHO IS MENTALLY ILL or SUICIDAL
- LIVING WITH SOMEONE WHO HAS AN ALCOHOL OR DRUG PROBLEM
- EXPERIENCING SOCIOECONOMIC HARDSHIP
- BEING TREATED OR JUDGED UNFAIRLY DUE TO RACE, ETHNICITY, OR IDENTITY
- HAVING A PARENT IN JAIL
- EXPERIENCING THE DEATH OF PARENT
- EXPERIENCING DIVORCE OR PARENTAL SEPARATION
- WITNESSING DOMESTIC VIOLENCE
- BEING A VICTIM OR WITNESS OF NEIGHBORHOOD VIOLENCE

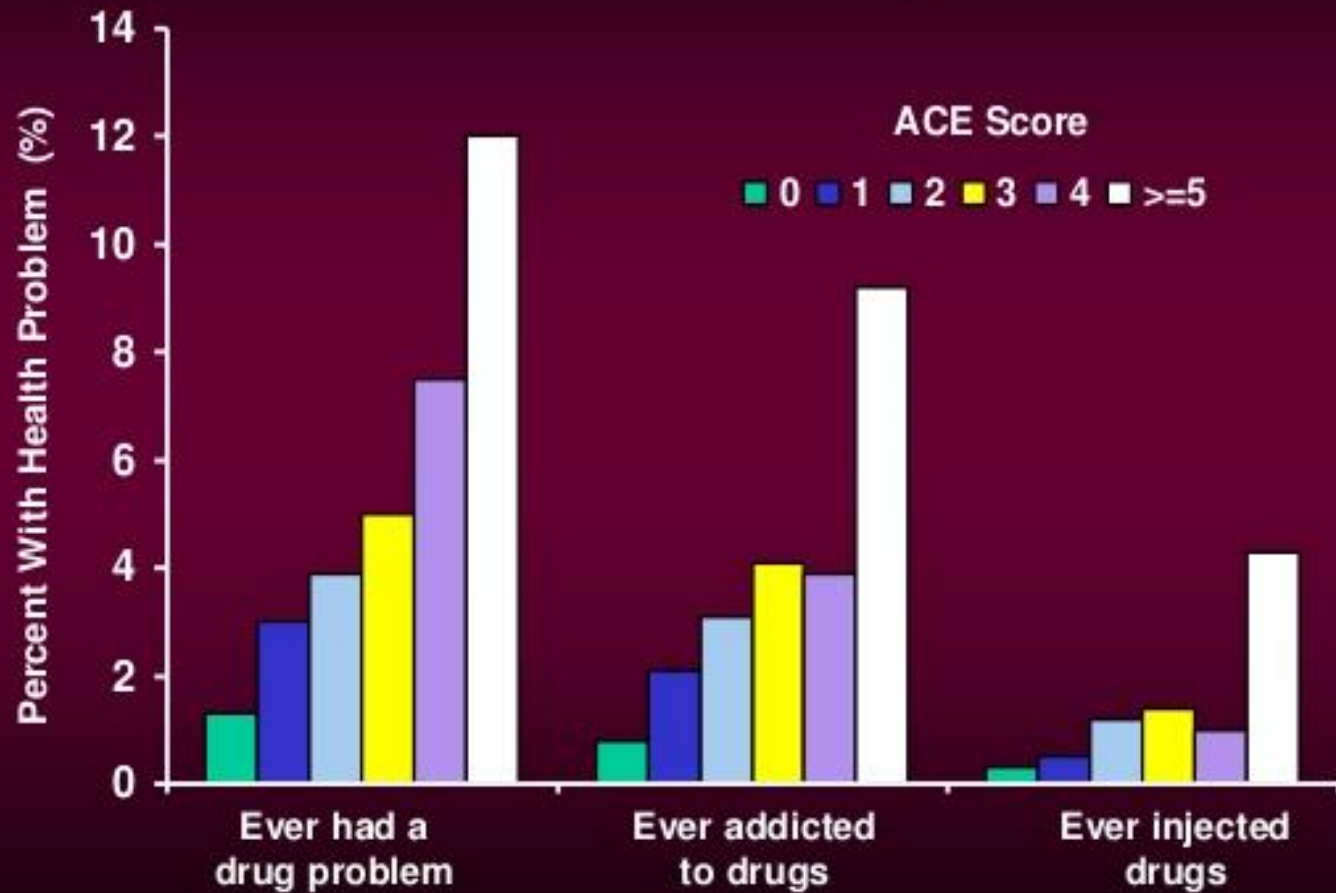


The Future???

NAS babies have 2 or 3+ ACE's at birth.



ACE Score and Drug Abuse



HUSHABYE NURSERY

Recovery Center for Neonatal
Abstinence Syndrome





Hushabye Nursery is Different.

NICU Model

- Treat babies in bright, noisy, intense environment
- Design NICU for premature babies, not NAS babies
- Provide minimal education/limited resources
- Restrict visitation and prohibit overnight stays
- Ensure one caregiver to every three babies (1:3)
- Staff teams with limited NAS training

Hushabye Model

- Treat babies in quiet, dark, calm environment
- Design nursery with one crib per room
- Educate families on how to care for NAS baby
- Encourage moms to stay in-room 24/7
- Ensure one caregiver per baby (1:1)
- Hire specially-trained staff with passion for NAS babies
- Promote bonding and breastfeeding
- Use five Ss, rock up and down, 6th S-squat techniques
- Wean and treat babies with medications as necessary
- Validate Finnegan Neonatal Abstinence Scoring System
- Provide physical, speech, occupational therapy



Hushabye Nursery will make a Difference.

We will care for babies, support families, and save taxpayer dollars, resulting in:

1 Collective Impact

By connecting community partners, we will build collaboration and connect the silos.

2 Stronger Families

By providing wraparound services (including DCS Safe Model), we will help families stay together.

3 Reduced Costs

By providing specialized care and wraparound services, we will save money throughout their entire lives.

4 Better Outcomes

By caring for NAS babies – the tiniest victims of the opioid epidemic – we will build brighter futures.



Future Impact of Hushabye Nursery







Thank you