# Safe Babies Foster Parent Training Program

Module 5:

Neonatal Withdrawal

and Related Health Issues

# Learning outcomes

- Identify the signs and symptoms of neonatal withdrawal
- Describe the onset and duration of withdrawal in infants exposed to commonly used substances
- Review common issues of daily care and related health concerns
- Be aware of current trends in care and support
- Be aware of best practice recommendations for infant care in general

Before we begin, it is important to remember that...

- This is a general overview.
- Each infant has their own individual experience.
- Our knowledge is continually developing.



### Long term outcomes

- There is a continuum of outcomes, ranging from no effects to severe life long physical and mental disabilities.
- It is difficult to predict long term effects as every pregnancy and infant are unique.
- The home environment is an important factor in outcomes.
- Current research is limited.

# Neonatal withdrawal scoring tool

YSTE	The state of the s			a feet to	-		and the second	SCORE					
	Excessive high pitched (or other) cry (<5 mins) Continuous high pitched (or other) cry (>5 mins)	3	ijij		1		. I.B.	25		1 d	NEW Y		
Central ervous System isturbances	Sleep <1 hour after feeding Sleeps <2 hours after feeding Sleeps <3 hours after feeding	3 2 1											1
	Hyperactive Moro reflex Markedly hyperactive Moro reflex	2 .		37	73						Hit.	100	
	Mild tremors when disturbed Moderate-severe tremors when disturbed	1 2			BR				1			145	
	Mild tremers when undisturbed Moderate-severe tremors when undisturbed	3				Á			E				27
	Increased muscle tone	1	6			25000				1			-
	Excoriation (eg chin, knees, albow, toes, nose)	1	1102	10110			1000						-
	Myoclonic jerks (twitching / jerking of limb/s)	3		The state of	6 B	S. Santa		E Chillian	U STAIRSU				
	Generalised convalsions	5	MIT.	- 100	a Same	1000		7.		2000	Contract of	100000	( Servi
Metabolic / asomotor / Respiratory istarbances -	Sweating	1			-		19 8						
	Hyperthermia (37.2 – 38.2°C) Hyperthermia (≥ 38.4°C)	1 2	Bank						NA S		1		
1.0	Frequent yawning (>3-4 / interval)	1		1					-		1	-	
2, 5	Mottling	1				2 353	JUNE		1 Attack	( C )			1300
3 5	Nasal stuffiness	1	8 6			Town Town	STATE OF	S TWO	E TO	200		1	
Tr Do	Frequent meezing (>3-4 / interval)	1		1	100000	3 6 19	120			8		1	
9 9	Nasal flaring	2	-	1					19.00	10 =			
2.2	Respiratory rate >60/min Respiratory rate >60/min with retractions	2							- H				3 (17)19/8
Gastraintestira 1 isturiances	Excessive sacking	t		1	0.000	10000	1						15.57
	Poor feeding (infrequent / incoordinate suck)	2			4 9 3				E CAMPIE				
	Regargitation (>2 times during / post feed) Projectile vomiting	2 3											
	Laose stools (cardy / seedy appearance) Watery stools (water ring on aappy around stool)	2				1			T CHE				
	TOTAL SCORE			1		12				100			
	Date / Time			1	0 2 30	18 000			0.00	0			
	Initials of scorer:	- 3	L.	100	Total US	1	de de	1000				1	10000

# An upcoming assessment tool (FIR Square)

	Signs and symptoms √ = present	Intervals of observations											
	0 = not present												
Metabolic	Temperature												
Vasomotor	Heart rate												
Respiratory	Respiratory rate												
	Weight												
Central	Cry – high pitched												
nervous	Tremors/jitteriness when												
system	disturbed												
	Abnormal muscle tone (↑ or ↓)												
	Uncoordinated sucking/swallowing												
	Feeding – weak or absent suck (W/A)												
	Feeding – duration (minutes)												
	Loose, watery or explosive stools (L/W/E)												
Other	Morphine dosage												
Observers init	ials												

# Hospital management of baby

- Reduce environmental stimulation
- Move toward caring for baby with mother when possible and appropriate
- Pharmacological support
- Breastfeeding decision



# Before baby goes home

- Feeding well
- Gaining weight
- Off morphine
- Showing neurobehavioral recovery
- All assessments completed and referrals made



# Community follow up

- Physician/midwife/nurse practitioner
- Public health nurse
- MCFD
- Infant Development Program
- Infectious disease follow up
- Vision and hearing screening
- Nutrition services



# Major issues in daily care

- Irritability
- Sleeping difficulties
- Feeding challenges
- Tone
- Behavior



# Symptoms that may be related to substance exposure:

- Unpredictable sleeping patterns
- Feeding difficulties prematurity (tires easily), sucking difficulties, frequent spitting up, difficulties tolerating formula
- Irritability all infants have different temperaments. May need to swaddle infant with hands out, walk and carry infant, bath, massage, soother, soft music
- Social interactions personalize to infant as they can tolerate

# Dopamine depletion effects (for cocaine, crystal meth):

- Lethargic, excessive sleep periods
- Poor suck and swallow coordination
- Poor habituation



#### Breastfeeding

- "Hot topic"
- There are many reasons to support breastfeeding, including attachment, health
- Decision best made prior to leaving hospital in consultation with physician, family, MCFD
- Issue is more than the substance includes presence of infectious disease, ability to pump and store safely
- Will need to factor into visitation and access plans



# Summary of potential health issues

- Prematurity
- Increased risk of SIDS
- Failure to thrive
- Infectious diseases (Hep B, Hep C, HIV, MRSA)
- Developmental delays
- Lowered immunity
- Vision and hearing delays
- Shaken BabySyndrome/abuse/neglect



# Prematurity

- Normal pregnancy full term is considered 37-40 weeks
- Infants born before 37 weeks are premature
- Common issues with prematurity include trouble maintaining temperature, breathing difficulties, feeding difficulties, susceptible to infections

# Low birth weight babies

Infants weighing less than 2.5 kg (or 5.5 lbs) at full term

May need extra support for feeding

 Infant will need to have weight monitored regularly

 Could have potential for developmental problems

#### S.I.D.S.

- Increased risk for this population
- General incidence has decreased significantly since "back to sleep" recommendations have been in place

# Reducing risk of SIDS

- Need to choose carefully where infant sleeps crib newer than 1988 with a firm mattress, no bumper pads or toys in crib
- No smoking around infant
- Infant should not be overdressed and should use lightweight blankets
- Infants should sleep on back for first year. OK to sleep on stomach when they are rolling over on own



## Hepatitis B

- All women are tested for Hepatitis B during pregnancy
- Spread through blood and body fluids
- Immunizations are given to infant at birth when mom is positive for Hepatitis B or health history is unknown
- Caregivers are eligible for vaccines
- Mom can breastfeed informed choice

### Hepatitis C

- Infection rates very high (up to 90%) in intravenous drug users
- Spread through blood and body fluids
- No treatment or vaccine available
- Infants whose mothers are Hepatitis C will have further blood tests mom's antibodies in baby's system for one year or more
- 5-10% of infants may become infected from mom
- Mom can breastfeed informed choice

#### HIV

- In Vancouver 30% of intravenous drug users are positive for HIV
- Transmission from blood and body fluids
- No vaccine available
- If mom is positive during pregnancy or has high risk history, treatment with antiviral is very effective less than 1% of babies will become infected
- Regular follow up is advised
- Breastfeeding not recommended

#### Antibiotic resistant infections

- MRSA methicillin resistant staphylococcus aureas –
  this bacteria lives commonly on our skin for about 25%
  of the population it is a normal bacteria but has
  become resistant to antibiotics
- Used to be more in hospitals but is now more in community
- NICU babies are an at risk population
- Breastfeeding possible that infection transmits back and forth between mother and baby

## MRSA prevention

- Hand hygiene
- Cover lesions
- Don't share personal products
- Don't share facecloths, towels or bedding



## Universal precautions

 Handwashing is the best defence against spreading germs

 Cover your mouth when you cough or sneeze

 Treat all blood and body fluids as potentially infectious. Use gloves if you have open cuts/sores on your hands

Don't share toothbrushes or razors



#### Reducing the risk of infection for baby

- Use universal precautions
- Keep immunizations up to date (baby and your family)
- Keep baby away from crowded areas, especially during the winter cold and flu season
- Restrict visitors who are sick
- Maintain a smoke free environment



Caregivers should have yearly flu shot

## A head to toe look at the baby

- Breathing, temperature, heart beat
- Color
- Tummy and genitalia
- Urine and bowel movements
- Skin
- Activity, sleep, and rest
- Health pattern



# Sleep-wake cycles

- Occur through the day
- Range of total sleep hours is 12-16 hours/24 hours
- As infant matures, periods of sleep and wake cycles lengthen
   often takes longer for infants with substance exposure
- Caregivers that are sensitive to infant states infant regulate their behavior



# Promoting sleep

- First 4 weeks little difference between day and night sleeping
- After 4 weeks consistent bedtime routine to promote sleep

   quiet room, promote self-soothing activity, massage, bath
   (each infant will have their own preferred strategies)
- 2-3 months put infant to bed awake or drowsy so infant learns to self-soothe

#### Infant states

- Quiet sleep
- Active sleep
- Drowsy
- Quiet alert
- Active alert
- Crying











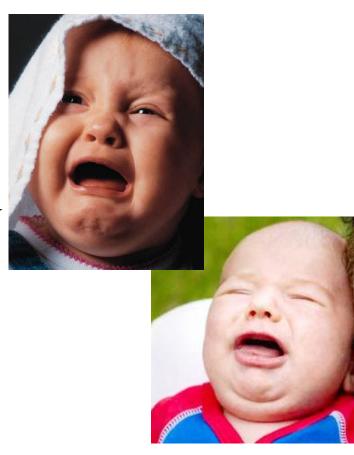
# PICC strategies for therapeutic handling

- Swaddling
- C-position
- Head-to-toe movement
- Vertical rock
- Clapping
- Feeding
- Controlling environment
- Introducing stimuli



# Some signs of stress in the infant

- Crying, fussing
- Turning head away
- Falling asleep ("shutting down")
- Squirming, kicking, pulling away
- Pale or red skin
- Spitting up/vomiting



# How caregivers can help infants to cope with stress

- Make environment calmer
- Allow baby to look away
- Talk quietly and slowly
- Swaddle, rock, cuddle
- Provide pacifier



# Signs or readiness for interaction

- Eye contact
- Smiling
- Reaching hands out to you
- Cooing, baby noises
- Stops moving
- Calm movements of extremities



Dr. Ron Barr's research on infant crying (PURPLE Crying):

• Peaks around 2 months

• Unpredictable, often happens for no apparent reason

Resistant to soothing

• Pain like expression on baby's face

 Long bouts, lasting 30-40 minutes or more

• Evening crying is common

## When to call your doctor

- Temperature >37.2, respiratory distress
- Persistent rash
- Lethargy, increased irritability, seizure activity
- Persistent change in feeding pattern
- Diarrhea or vomiting
- Greenish, watery, mucousy or bloody stools
- Persistent sinking or bulging of fontanel
- If you are not sure, CALL! You know baby best.

# Call 911 if baby

- Has a seizure
- Turns blue
- Is distressed with breathing or has stopped breathing

# Supporting the health of babies

- Safe sleeping
- Nutrition
- Dental health
- Growth and development
- Physical health knowing your baby
- Home and car safety
- Immunization



#### Useful websites

- www.motherisk.ca
- www.cps.org
- www.dialadietician.org
- www.bchealthguide.ca
- www.hcip-bc.ca
- Health Canada Product Recall

# Reflection

Do you have any questions or comments that you would like to share with the group?



# Thank you for participating.



Please remember to complete your evaluation form.