## How much have I heard about FASD?

Please check True, False or Don't Know next to the following statements regarding the topic of FASD. You will be asked to review your answers at the end of the workshop and make any revisions as needed.

<ol> <li>FASD stands for Fetal Alcohol Syndrome Disorder.</li> </ol>		True
·		False
		Don't know
<ol> <li>After the first trimester of pregnancy, the fetus is effects of alcohol because most of the major organ formed.</li> </ol>	•	
		True
		False
		Don't know
3. The only way to prevent FASD is to abstain f	rom	drinking during True
γ· - 3······γ·		False
		Don't know
4. A bottle of beer, a glass of wine and a shot of hard	liguo	or all contain the
around the same amount of alcohol.	Ġ	True
		False
		Don't know
5. FASD means that a child is born drunk.		True
		False
		Don't know
6. If a pregnant woman has FAS, she will likely pass t	he d	isease on to her
children.		True
		False
		Don't know

7. Men that drink during their partner's pregnancy of FASD in their unborn children.	lo not	contribute to True False Don't know
8. We have suspected that alcohol exposure dame thousands of years.	ages th	ne fetus for True False Don't know
9. The rates of FAS are generally higher in communisolation and violence abound.	ities wl	nere poverty, True False Don't know
10. The facial characteristics of Fetal Alcohol Syndrom the child grows up.	e beco True False □	me subtler as Don't know
11. The placenta is an effective barrier that prote harmful substances such as alcohol.	cts the	e fetus from True False Don't know
12. A child born with birth defects whose mother during pregnancy cannot be diagnosed as having Ala Defects.		
13. Fetal Alcohol Effects is an older term used to de form of Fetal Alcohol Syndrome.	scribe	a less severe True False Don't know

#### FASD: What it IS and What it's NOT

It describes a range of physical, mental and behavioural problems in children born to women who drank alcohol during their pregnancy.

It varies in its characteristics, from person to person.

It is the most common birth defect, ahead of spina bifida and Down Syndrome.

It is the most frequent known cause of mental retardation in the Western world.

It is not an inherited disease.

It is not the diagnosis of alcohol intoxication of the newborn (i.e., "drunk child").

It is a life-long disability.

It is 100% preventable.

It has been around for centuries.

It is not restricted to any one racial, ethnic or socioeconomic group. There are many ways to classify Fetal Alcohol Spectrum Disorder (FASD), based on how it is diagnosed in affected children and adults. The most recently adopted classification of the disorder was proposed by the U.S. Institute of Medicine, in 1996, as follows:

- Fetal Alcohol Syndrome (FAS) WITH a confirmed history of maternal alcohol consumption during pregnancy. This includes evidence of:
  - ✓ Facial features associated with FAS

AND

✓ Growth retardation (evidenced in: low birth weight; failure to thrive; disproportional low weight to height)

AND

- ✓ Central Nervous System abnormalities (evidenced in: small head circumference at birth; structural brain abnormalities; and, neurological hard or soft signs)
- Petal Alcohol Syndrome (FAS) WITHOUT a confirmed history of maternal alcohol consumption during pregnancy. This includes evidence of:
  - ✓ Facial features associated with FAS

AND

✓ Growth retardation

AND

- ✓ Central Nervous System abnormalities
- Partial FAS (pFAS) WITH a confirmed history of maternal alcohol consumption during pregnancy. This includes evidence of:
  - ✓ Facial features associated with FAS (some or all)

AND EITHER

✓ Growth retardation

OR

✓ Central Nervous System abnormalities

OR

✓ Behavioural or cognitive abnormalities not explained by family background or environment alone.

Note: The term partial FAS does not imply the disease is less severe. Many children with partial FAS can have debilitating illness.

#### 4 Alcohol Related Birth Defects (ARBD).

This term describes a series of birth defects that have been observed in children that have also been exposed to alcohol in the womb (e.g., defects of the heart, skeleton, kidneys, eyes, ears). Many of these defects have been associated with alcohol exposure but all can also occur without it.

#### S Alcohol Related Neurodevelopmental Disorder (ARND).

This term describes a series of Central Nervous System abnormalities and/or behavioural and intellectual deficits that are not explained by heredity or environment alone, and that exist with evidence of prenatal alcohol exposure. This definition suggests that alcohol may have played a role in the observed condition(s) but it does not imply that alcohol is the cause.

## What happened to the term Fetal Alcohol Effects (FAE)?

Until the current classification scheme proposed by the Institute of Medicine, the term Fetal Alcohol Effects or FAE was widely accepted and used to describe any condition that did not meet all of the diagnostic criteria of FAS. It was a vague term that caused much confusion.

In the currently accepted classification scheme, FAE corresponds to categories 3 (pFAS) and 5 (ARND), above. The term is still used in older references of the disorder.

## The History of FAS

In 1973, Dr. David Smith and Dr. Ken Jones in Seattle, U.S., noted a constellation of symptoms that included growth deficiency, physical abnormalities, and intellectual, motor and behavioural problems in eight children born to alcoholic mothers. Later that year, the term Fetal Alcohol Syndrome was used for the first time.

#### YET IF WE GO BACK IN TIME ...

In ancient Carthage (8<sup>th</sup> to 3<sup>rd</sup> century B.C.), a city in North Africa, laws prohibited the use of alcohol by newlyweds in order to prevent conception during drunkenness.



**Hundreds of years B.C.**, the Greek philosopher Plato stated, "Children should not be made in bodies saturated with drunkenness; what is growing in the mother should be compact, well attached and calm".



**In 1734**, during the Gin Epidemic in England, the British College of Physicians and Surgeons suggested that the prenatal use of alcohol was the cause of the increase in "weak, feeble and distempered children".



**In the mid-1800s**, a French physician described some of the characteristics of FAS – small head, peculiar facial features and "nervousness".



In 1899, an English doctor, W. Sullivan, found that women prisoners consuming alcohol had a 2½ times greater chance of having a miscarriage than their first-degree relatives. He went on to question the notion that poor outcomes in children exposed to alcohol were due to genetic factors.



**In 1901**, Dr. Paul Ladrague demonstrated that alcohol could be transmitted through breast milk and affected the behaviour of the newborn.



**In 1910**, a study in Scotland showed that short stature in children was associated with a mother's alcohol intake but not the father's alcohol intake.



**In 1968**, Dr. Paul Lemoine of France described a syndrome of abnormal facial characteristics in 25 children born to alcoholic mothers.

#### **FAS** and the Brain

By Teresa Kellerman www.fasstar.com

Alcohol is a "teratogen" (substance that is toxic to the baby's developing brain). Damage can occur in various regions of the brain. The areas that might be affected depend on which areas are developing at the time the alcohol is consumed. Since the brain and the central nervous system are developing throughout the entire pregnancy, the baby's brain is always vulnerable to damage from alcohol exposure.

The regions of the brain that might be affected by prenatal alcohol exposure in terms of ability to function include:

<u>Corpus Callosum</u> - passes information from the left brain (rules, logic) to the right brain (impulse, feelings) and vice versa. The Corpus Callosum in an individual with Fetal Alcohol Syndrome (FAS) might be smaller than normal, and in some cases it is almost nonexistent.

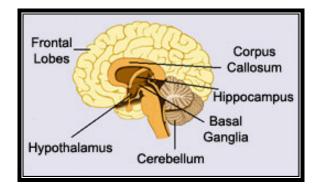
**Hippocampus** - plays a role in memory function.

**Cerebellum** - controls coordination and movement, <u>behavior and memory</u>.

**Basal Ganglia** - affects spatial memory and behaviors like perseveration and the inability to switch modes, work toward goals, and predict behavioral outcomes, and the <u>perception of time</u>.

**Frontal Lobes** - controls impulses and judgment. The most noteworthy damage to the brain probably occurs in the prefrontal cortex, which controls what are called the **Executive Functions**.

Alcohol causes more damage to the developing fetus than any other substance, including marijuana, heroin, and cocaine. (Institute of Medicine, 1996)



# **Executive Functions** of the Prefrontal Cortex

Effects of alcohol exposure on behaviors related to executive functions of the prefrontal cortex:

- inhibitions: socially inappropriate behavior
- problem solving: inability to figure out solutions spontaneously
- > sexual urges: inability to control sexual impulses, especially in social situations
- planning: inability to apply consequences from past actions
- time perception: difficulty with abstract concepts of time and money
- internal ordering: like files out of order, difficulty processing information
- working memory: storing and/or retrieving information
- self-monitoring: needs frequent cues, requires "policing" by others
- verbal self-regulation: needs to talk to self out loud, needs feedback
- motor control: fine motor skills more affected than gross motor
- regulation of emotion: moody "roller coaster" emotions, may withdraw or lash out
- motivation: apparent lack of remorse, need external motivators

## Alcohol Exposure During the Three Stages of Pregnancy:

- 1. During the first trimester, as shown by the research of Drs. Clarren and Streissguth, alcohol interferes with the migration and organization of brain cells. [Journal of Pediatrics, 92(1):64-67]
- 2. Heavy drinking during the second trimester, particularly from the 10th to 20th week after conception, seems to cause more clinical features of FAS than at other times during pregnancy, according to a study in England. [Early-Human-Development; 1983 Jul Vol. 8(2) 99-111]
- 3. During the third trimester, according to Dr. Claire D. Coles, the hippocampus is greatly affected, which leads to problems with encoding visual and auditory information (reading and math). [Neurotoxicology And Teratology, 13:357-367, 1991]

Not all damage from alcohol exposure is seen on brain scans, as lesions might be too small to be detected, yet large enough to cause significant disabilities.

Children do not need to have full FAS to have significant difficulties due to prenatal exposure to alcohol. According to research done by Drs. Joanne L. Gusella and P.A. Fried, even light drinking (average one-quarter ounce of absolute alcohol daily) can have adverse affects on the child's verbal language and comprehension skills. [Neurobehavioral Toxicology and Teratology, Vol. 6:13-17, 1984] Drs. Mattson and Riley in San Diego have conducted research on the neurology of prenatal exposure to alcohol. Their studies show that children of mothers who drank but who do not have a diagnosis of FAS have many of the same neurological abnormalities as children who have been diagnosed with full FAS. [Neurotoxicology and Teratology, Vol. 16(3):283-289, 1994]

Damage to the brain from alcohol exposure can have an adverse affect on behavior. Alcohol exposure appears to damage some parts of the brain, while leaving other parts unaffected. Some children exposed to alcohol will have neurological problems in just a few brain areas. Other exposed children may have problems in several brain areas. The brain dysfunction is expressed in the form of inappropriate behaviors. Their behavior problems should be viewed with respect to neurological dysfunction. Although psychological factors such as abuse and neglect can exacerbate behavior problems in FAS, we are looking primarily at behavior that is organic in origin. When it comes to maintaining good behavior, it is not a matter of the child "won't" but "can't." (Diane Malbin, MSW, Trying Differently Rather Than Harder, )

Sometimes the person's behavior is misinterpreted as willful misconduct (Debra Evensen, www.fasalaska.com), but for the most part, maintaining good behavior is outside of the child's control, especially in stressful or stimulating situations. Behavior problems in children with FAS are often blamed on poor parenting skills. While good parenting skills are required, even alcohol exposed children raised in stable, healthy homes can exhibit unruly behavior. The most difficult behaviors are seen in children who were prenatally exposed to alcohol and who also suffer from Reactive Attachment Disorder.

Most children with FAS disorders have some attachment issues, may display inappropriate sexual behaviors, show poor judgment, have difficulty controlling their impulses, are emotionally immature, and need frequent reminders of rules. As a result, many will require the protection of close supervision for the rest of their lives.

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"Impulsivity is when the space between the thought and the action is missing, where the frontal lobes monitor the intentions of the rest of the brain. There is a gap in the thought process and the person goes directly from thought to action." FAS expert Dr. Susan Doctor, University of Nevada, Reno.

#### "Soft Signs"

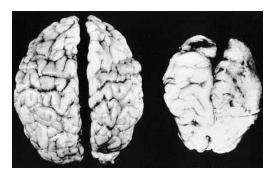
(Psychological signs of brain damage)

- Immature social development: overly friendly to strangers
- Emotional lability:
- Poorly developed conscience:
- Lack of consistent impulse control:
- Inability to learn from consequences
- Good expressive language skills
- Talented in art, music or mechanics.
- Attention deficits: not always hyperactive, but easily distracted by external stimuli
- Short-term memory deficits
- Inappropriate social interactions
- Difficulty managing money:
- Poor concept of time
- Grandiose ideas and unrealistic life goals, distorted perceptions
- Poor judgment
- Vulnerability and naiveté

"The greatest obstacle our children with FAS disorders must overcome is chronic frustration from not being able to meet the unrealistic expectations of others." – Dr. Calvin Sumner, nationally recognized expert on FAS.

Fetal Alcohol Syndrome Fasstar Information Series Brochure 0109B1

# FAS and the Brain



Brain of normal baby

Brain of a baby with FAS

#### How Prenatal Alcohol Exposure Affects Development of the Brain

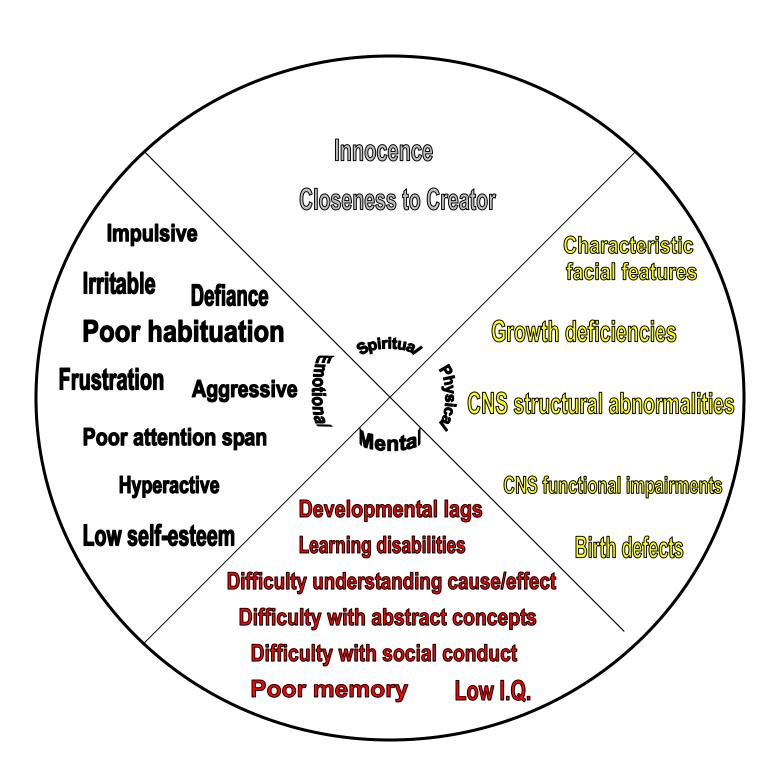
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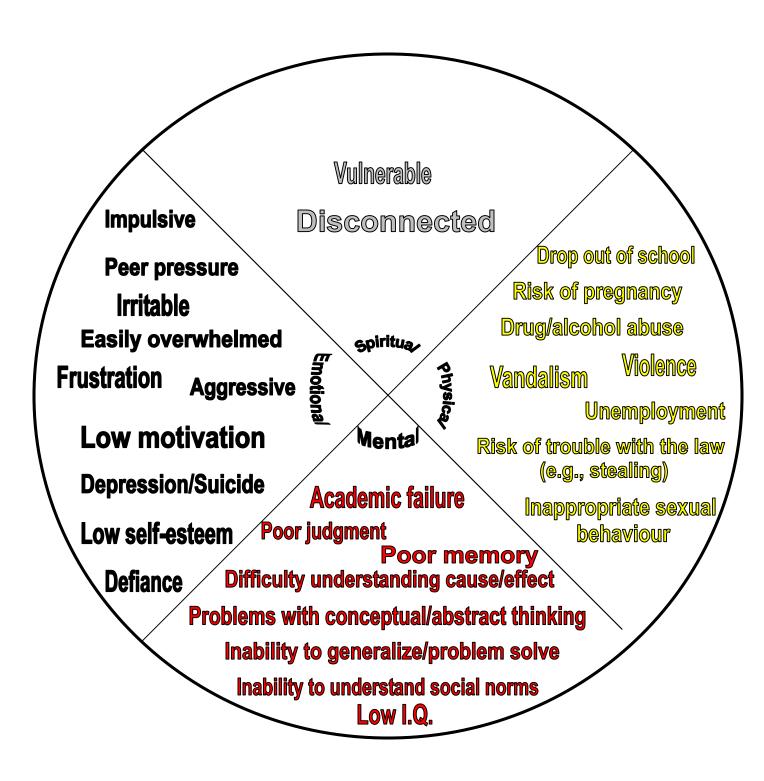
Fetal Alcohol Syndrome: Support, Training, Advocacy, & Resources

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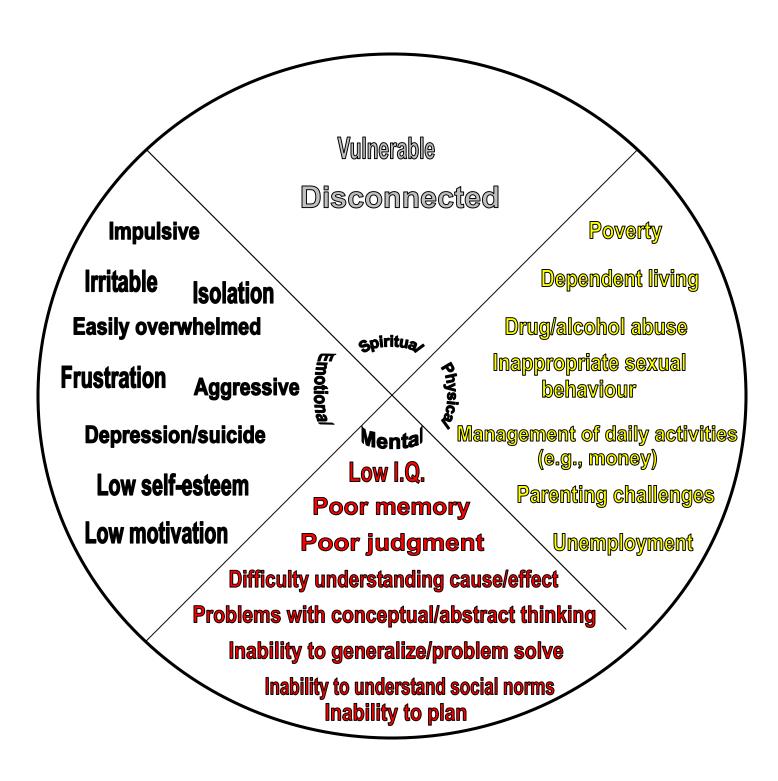
## Effects of FASD in the CHILD Stage



## Effects of FASD in the YOUTH Stage



## Effects of FASD in ADULT/ELDER Stage



#### **EFFECTS OF FASD IN THE CHILD STAGE**

Aspect	PHYSICAL	MENTAL	EMOTIONAL	SPIRITUAL
Stage				
CHILD	Characteristic	- Delays in	Poor	Innocence
	facial features	reaching	habituation (i.e.,	
	(e.g., smooth	developmental	inability to tune	Closeness
	philtrum, short	milestones	out stimulation)	to Creator
	eye slits, flat	- Learning		
	midface, thin	disabilities	Irritable babies	
	upper lip, etc.)	(e.g., reading,	- weak suckle,	
		speech,	poor sleep	
	Birth defects	writing)	patterns	
	(e.g., heart,	- Difficulty		
	skeletal, limbs,	understanding	Impulsive	
	cleft palate)	cause & effect		
		- Difficulty	Frustration	
	CNS structural	understanding		
	abnormalities	abstract	Aggressive	
	(e.g.,	concepts (e.g.,		
	microcephaly)	time, danger)	Poor attention	
		- Difficulty	span	
	CNS functional	with social		
	impairments (e.g.,	conduct (e.g.,	Hyperactive	
	poor	overly		
	coordination,	friendly with	Defiance	
	clumsiness upon	strangers)	1.0	
	walking)	- Poor memory - Low I.Q.	Low self-	
		20W 1.W.	esteem	
	Growth			
	deficiencies			
	(e.g., failure to			
	thrive)			

#### **EFFECTS OF FASD IN THE YOUTH STAGE**

Aspect	PHYSICAL	MENTAL	EMOTIONAL	SPIRITUAL
Stage	5 16 1			27.1
YOUTH	Facial features	- Academic	Vulnerable to	Vulnerable
	and growth	failure	peer pressure	
	deficiencies	- Low I.Q.		Disconnected
	become more	- Poor judgment	Impulsive	
	subtle	- Poor memory		
		- Difficulty	Aggressive	
	Secondary	understanding		
	disabilities	cause & effect	Irritable	
	surface:	- Difficulty with		
		conceptual and	Easily	
	- Inappropriate	abstract	overwhelmed	
	sexual behaviour	thinking (e.g.,	by	
	- Drop out of	perceptions of	information	
	school	danger)	overload	
	- Begin to abuse	- Inability to		
	alcohol/drugs	generalize and	Defiance	
	- Risk of trouble	problem solve		
	with the law (e.g,	(i.e., linking past	Low self-	
	stealing,	experiences to	esteem	
	vandalism)	current		
	- Unemployment	situations and	Frustration	
	- Inability to live	choices)		
	independently	- Inability to	Depression/	
		understand	suicide	
	Risk of	social norms		
	pregnancy	(i.e., concepts of	Low motivation	
	. 5 ,	personal space		
		and boundaries)		

#### **EFFECTS OF FASD IN ADULT/ELDER STAGE**

Aspect	PHYSICAL	MENTAL	EMOTIONAL	SPIRITUAL
Stage				
ADULT &	Poverty	- Low I.Q. - Poor memory	Isolation due to inability to	Vulnerable
ELDER	Unemployment	- Poor	make friends	Disconnected
	Inability to live independently	judgment - Difficulty understanding	Impulsive	
	Drug/alcohol	cause & effect	Aggressive	
	abuse	- Problems with	Irritable	
	Inability to manage daily life (e.g., money)  Inappropriate sexual behaviour  Face parenting challenges	conceptual & abstract thinking - Inability to generalize (i.e., learn from past experiences) - Inability to	Easily overwhelmed by information overload  Low self- esteem  Frustration	
		problem solve - Inability to understand social cues - Inability to plan for the future (i.e., live in the present)	Depression/ suicide Low motivation	

### Secondary Disabilities

- → Are not part of the FASD diagnosis
- → Surface as a result of primary disabilities (e.g., dropping out of school as a result of CNS cognitive impairments resulting in academic failure)
- → Can be reduced or prevented through timely interventions
- → Severely impair the quality of life of individuals with FASD
- → Are extremely costly to society

#### SOME CATEGORIES:

Mental Health Problems - Having a mental health problem

- Going to a therapist/counsellor

Disrupted School Experiences - Dropping out of school

- Being expelled

- Being suspended

Trouble with the Law - Being in trouble with authorities

- Being charged

- Being convicted

Confinement - Inpatient treatment for mental health and/or

alcohol/drug abuse problem

- Incarceration

Inappropriate Sexual Behaviour - Inappropriate behaviour

- Sentencing to sexual offenders' program

#### Secondary Disabilities

Alcohol and Drug Problems

- Having a problem
- Being in treatment

Problems with Independent Living

Problems with Employment

#### Some Observations ...

- \* Youth and adults with FASD appear to have higher rates of all secondary disabilities than children, except mental health problems.
- \* Compared to individuals with FAS, those with pFAS and ARND appear to have a higher rate of all secondary disabilities, except mental health problems.
- \* An I.Q. above 70 is associated with a higher level of secondary disabilities.
- \* It appears that males have higher rates of disrupted school experiences, trouble with the law and confinement, than do females. In all other cases, the rates of secondary disabilities are nearly equal for males and females.
- \* One of the strongest factors that lower the odds that an individual with FASD will develop secondary disabilities is an early diagnosis of the disorder.

#### PROTECTIVE AND RISK FACTORS (page 1)

#### **Protective Factors**

A **protective factor** is a characteristic or condition that <u>decreases</u> the odds of a secondary disability occurring.

Eight protective factors that will reduce the rates of <u>all</u> secondary disabilities have been identified. They are listed in order of decreasing importance, as follows:

- 1) Living in a stable and nurturing home for over 72% of life;
- 2) Being diagnosed before the age of 6 years;
- 3) Never having experienced violence against oneself (e.g., physical or sexual abuse, domestic violence);
- 4) Staying in each living situation for an average of more than 2.8 years (i.e., not having frequent changes of household);
- 5) Experiencing a good quality home from age 8 to 12 years;
- 6) Being found eligible for government services to aid in case management, job training, supervised housing needs, etc.;
- 7) Having a diagnosis of FAS (rather than pFAS or ARND); and,
- 8) Having basic needs met for at least 13% of life.

Seven of these eight factors (except #7) are environmental and, thus, can presumably be modified to achieve the best possible outcomes for individuals with FASD, as they grow up.

#### PROTECTIVE AND RISK FACTORS (page 2)

There are some protective factors that have been associated with specific secondary disabilities:

- Having lived with an alcohol abuser less than 30% of life is a protective factor for alcohol and drug problems.
- Low I.Q. score (below 70) is a protective factor for disrupted school experiences.
- Being diagnosed before 6 years of age is a protective factor for problems with independent living.

#### **Risk Factors**

A **risk factor** is a characteristic or condition that INCREASES the odds of a particular secondary disability occurring.

- In general, an I.Q. score above 70 and being diagnosed with pFAS or ARND, rather than FAS, are associated with a higher rate of secondary disabilities.
- An I.Q. score below 70 is a specific risk factor for problems with independent living, and problems with employment.

Being a victim of violence is a strong risk factor for inappropriate sexual behaviour.

#### Cultural Approaches

- \* Participation in cultural ceremonies and traditions builds a sense of security, identity and belonging in individuals with FASD
- ★ Involving children with FASD in crafts, music, dance and ceremony helps them develop motor skills, enhance selfesteem and build a sense of pride.
- \* As they grow older, children should be encouraged to make their own dance outfits, participate in activities such as fishing and hunting, and do chores at home which help make them feel valued as a member of their family and community.
- \* As the child enters puberty, it is important to involve him/her in the special ceremonies marking and welcoming his/her passage into adolescence. An Elder in the community is the best person to consult regarding those ceremonies that a young person with FASD would be able to comfortably participate in.

#### Learn to Think Differently

- ⇒ Helps cope with child rearing and gives better results!
  - o Don't expect to fix your child.
  - o Set realistic expectations for your child, and reevaluate expectations on a regular basis.
  - o Learn to control only what you can.
  - o Learn to roll with the punches.
  - o Avoid negative thinking. Focus on recognizing and validating your child's strengths.
  - o Do only what you can reasonably do at any one time.
  - o Pay attention to the needs of your other children.
- Shift from interpreting your child's behaviours as a function of "non-compliance" (won't) to seeing them as an issue of "non-competence" (can't)

This shift includes moving from:

#### Seeing the child as:

#### To understanding the child as:

Won't	<b></b>	Can't
Lazy	<b></b>	Tries hard
Bad	<b></b>	Frustrated, challenged
Lies	<b></b>	Confabulates
Mean	<b></b>	Defensive, hurt, abused
Doesn't care, shut down		Can't show feelings
Refuses to sit still		Overstimulated
Fussy, demanding		Oversensitive
Resisting		Doesn't "get it"
Trying to make me mad	<b>——</b>	Can't remember
Trying to get attention		Needing contact, support
Acting younger	<b></b>	Being younger
Thief	<b></b>	Doesn't understand ownership
Doesn't try	<b>—</b>	Tired of always failing
Inappropriate	<b></b>	Does not understand what is "proper"
Doesn't get the obvious		Needs to be taught repeatedly

## How much have I heard about FASD?

Please check True, False or Don't Know next to the following statements regarding the topic of FASD. You will be asked to review your answers at the end of the workshop and make any revisions as needed.

1. FASD stands for Fetal Alcohol Syndrome Disorder.	□ ✓ □	True False Don't know
FALSE: FASD stands for Fetal Alcohol Spectrum Disord	der.	
<ol> <li>After the first trimester of pregnancy, the fetus is effects of alcohol because most of the major organs formed.</li> </ol>	•	
	□ ✓ □	True False Don't know
FALSE: The fetus is vulnerable throughout pregnancy alcohol. The CNS continues to develop until birth, and at	<i>4</i>	
3. The only way to prevent FASD is to abstain fo pregnancy.	rom dr ✓	rinking during True False Don't know
TRUE: Since there is no known level of alcohol that is so pregnancy, abstention makes the best sense in terms of		_
4. A bottle of beer, a glass of wine and a shot of hard around the same amount of alcohol.	liquor a	all contain the True
a. ca came amount of alcohol.		False
		Don't know

liquor all contain approximately the same amount of abso are equally damaging to the developing fetus.	lute alc	ohol. They
5. FASD means that a child is born drunk.	□ ✓ □	True False Don't know
FALSE: FASD is caused while the fetus is developing in when the child is born. It is the result of alcohol considuring pregnancy.		
6. If a pregnant woman has FAS, she will likely pass the children.	he dise □ ✓ □	ase on to her True False Don't know
FALSE: FAS is not a hereditary disease. A pregnant only pass the disorder to her child if she drinks pregnancy.		
7. Men that drink during their partner's pregnancy of FASD in their unborn children.	do not d □ ✓	contribute to True False Don't know
FALSE: Although it is not clear whether men who dring contribute to their children having FASD (by way of the it is proven that men play a key role in influencing their drinking behaviour. If he drinks, she is more likely to contribute to FASD.	eir defe r pregr	ective sperm), nant partner's
8. We have suspected that alcohol exposure dame thousands of years.	ages th ✓ □ □	ne fetus for True False Don't know

TRUE: A 12 oz. bottle of beer, a 4 oz. glass of wine and a 1 oz. shot of hard

The rates of FAS are generally higher in communities where poverty, isolation and violence abound. True False Don't know П TRUE: Although FAS crosses all cultural, racial, ethnic and socio-economic boundaries, higher rates are reported in communities where poverty, isolation, unemployment, family violence, lack of support systems, and lack of knowledge about the disorder are also higher. The facial characteristics of Fetal Alcohol Syndrome become more subtle as the child grows up. True False Don't know П TRUE: This is why it is very difficult to make a diagnosis of FAS in the adolescent or adult The placenta is an effective barrier that protects the fetus from 11. harmful substances such as alcohol. True False Don't know FALSE: The placenta is a permeable barrier that allows free passage of nutrients and many substances, including teratogens such as alcohol, from the mother's blood to the fetus. 12. A child born with birth defects whose mother did not drink alcohol during pregnancy cannot be diagnosed as having Alcohol Related Birth Defects. True False П Don't know

TRUE: There are several references that point to the damaging effects of

alcohol on the unborn child, dating back thousands of years.

TRUE: History of maternal alcohol exposure is a requirement for a diagnosis of Alcohol Related Birth Defects. This is because many other factors can cause the same birth defects evidenced in children with ARDBs.

13. Fetal Alcohol Effects is an older term use	ed to describe	a less severe
form of Fetal Alcohol Syndrome.		True
	✓	False
		Don't know

FALSE: Although FAE is an older term, it has never described a less severe form of FAS. Rather, individuals diagnosed with FAE experience many more difficulties as they grow up because their behavioural disabilities are "hidden" ones that society finds much harder to understand and accept.

## The Seven Sacred Teachings

- 1. Wisdom
- 2. Love
- 3. Respect
- 4. Bravery
- 5. Honesty
- 6. Humility
- 7. Truth