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health!

ML MIDDLESEX-LONDON
HEALTH UNIT

“Period of Purple Crying”

Shaken Baby Syndrome

Ontario Public Health Conference

November 1 – 4, 2009

Toronto Marriott,

Downtown Eaton Centre

Toronto, Ontario

Presented By:

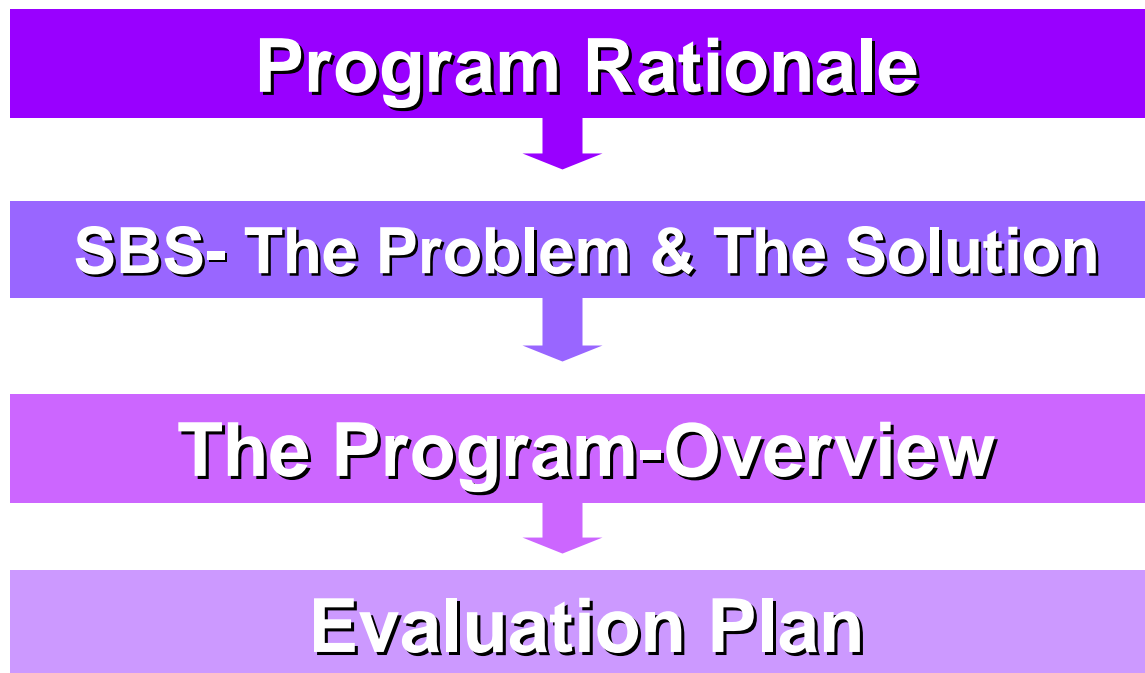
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Middlesex London Health Unit

London, Ontario

Overview of Presentation



Program Rationale

- ✦ May be severely underestimated due to missed diagnosis & underreporting¹
- ✦ No less than 40 cases of SBS each year in Canada²
- ✦ 40 confirmed cases (ISS>12) of SBS at Children's Hospital, LHSC, 1991/2009
- ✦ Poor outcome

¹ King, J., M. MacKay, and A. Sirnick. 2003. Shaken Baby Syndrome in Canada: Clinical Characteristics and Outcomes of Hospital Cases. *Canadian Medical Association Journal*. vol. 168, no. 2: 155-159

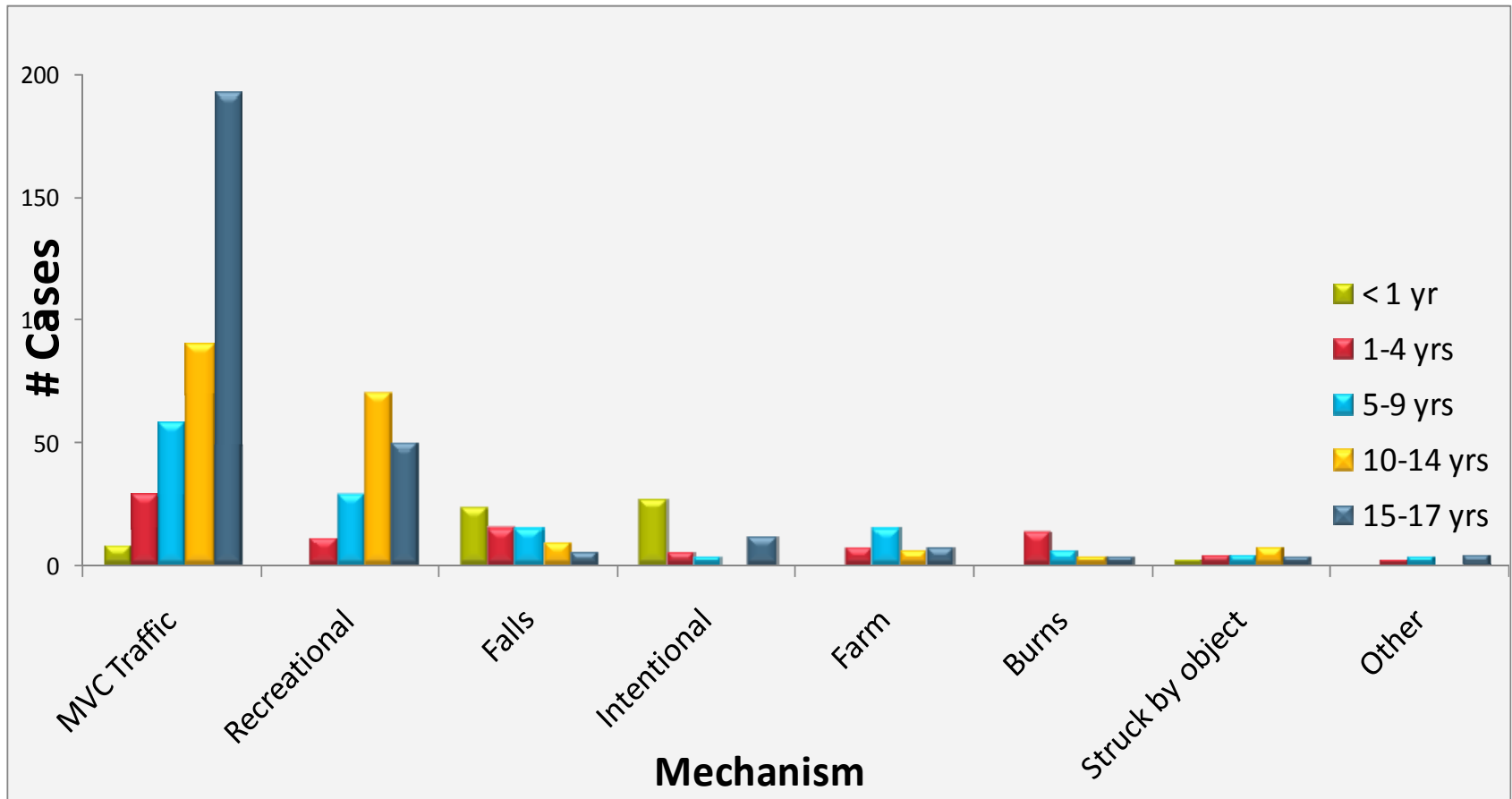
² Health Canada. 2001. *Joint Statement on Shaken Baby Syndrome*. Ottawa: Minister of Public Works and Government Services

Shaken Baby Syndrome

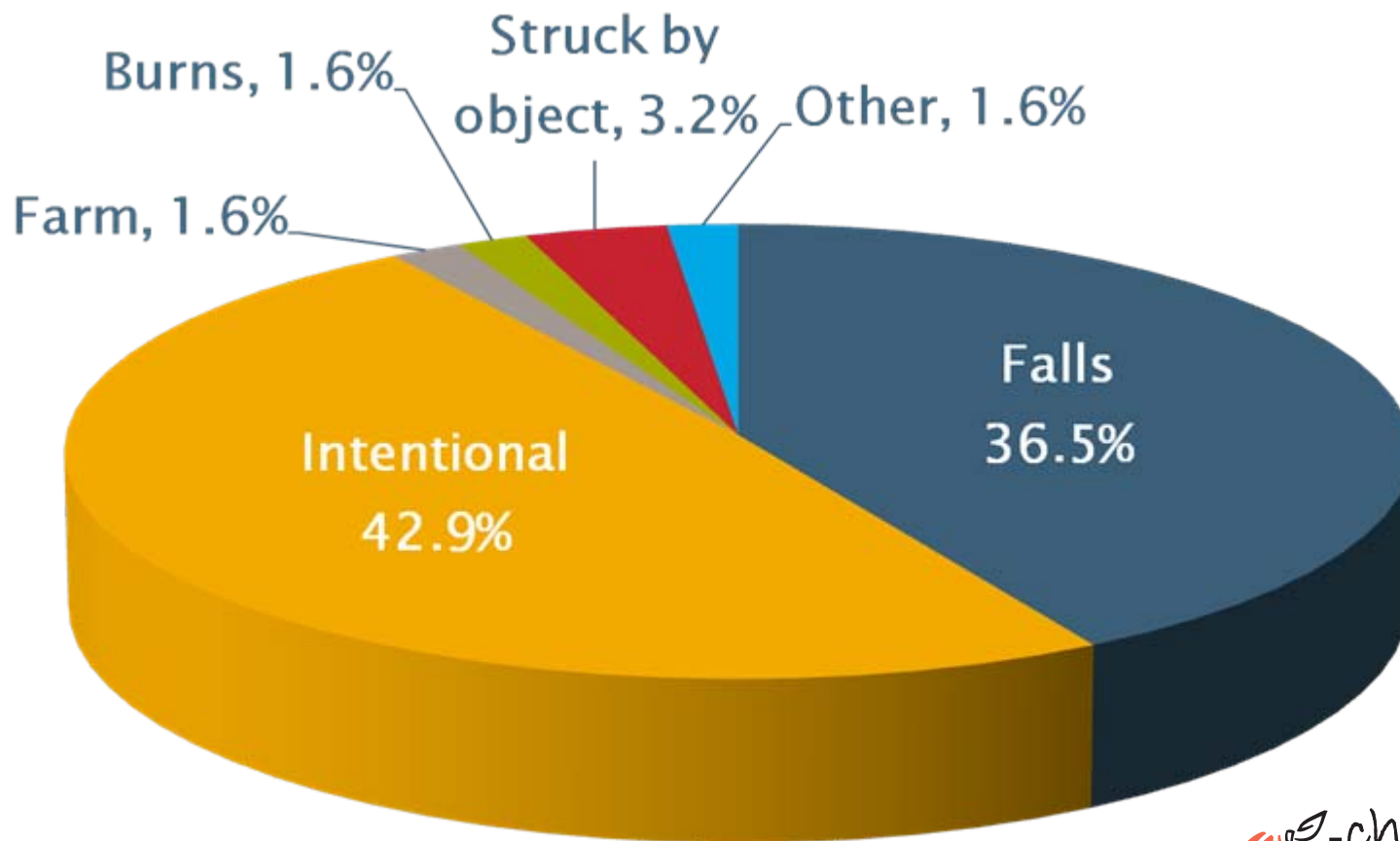
“Violent shaking of an infant or young child.”

A child of any age can be shaken. Most cases occur in the first few years of life.

Mechanisms of Injury: Age Groups at Children's Hospital, LHSC



Mechanisms of Injury, Children's Hospital, LHSC - % of Cases <1yr



Injury Ranking - Paediatric IP Priorities

Overall Rank	Topic	Age group	Quantitative Rank	+	Qualitative Rank	=	Rank Sum
1	SBS	< 1 yr	2		1		3
2	Bullying	5-17 yrs	3		2		5
2	Drugs & Driving	15-17 yrs	1		4		5
2	MVC Speeding	15-17 yrs	1		4		5
5	Suicide/Self Mutilation	10-17 yrs	4		3		7

Anatomy of Babies Heads

- Relatively large & heavy
- 25 % of their total body weight
- Neck muscles are too weak to support large head
- Immature & more easily injured by shaking
- Blood vessels around the brain are more susceptible to tearing

Immediate Consequences

- ✦ Breathing may stop or be compromised
- ✦ Extreme irritability
- ✦ Seizures
- ✦ Limp arms & legs or rigidity/posturing
- ✦ Vomiting; poor feeding
- ✦ Inability to suck or swallow
- ✦ Decreased level of consciousness
- ✦ Death

Long-Term Consequences

- ❖ Learning disabilities
- ❖ Physical disabilities
- ❖ Visual disabilities
or blindness
- ❖ Hearing impairment
- ❖ Speech disabilities
- ❖ Cerebral Palsy
- ❖ Seizures
- ❖ Behaviour disorders
- ❖ Cognitive impairment
- ❖ Death

Outcomes

- 59 % had neurological, visual impairment and/or other health effects
- 22% appeared well at discharge
- 19% died

Risk Factors

- ❖ Social isolation
- ❖ Family violence
- ❖ Substance abuse
- ❖ Lack of parenting experience
- ❖ Previous history of abuse
- ❖ Life stressors
- ❖ *Inconsolable crying*

Myths about SBS

**SBS always
occurs in
low socio-
economic
levels**

**A risk
factor is
found in all
SBS cases**

**Boy & girl
infants are
equally
affected by
SBS**

**SBS only
affects
infants
under the
age of 1**

PURPLE[®] Acronym

P:

Peaks
2
months

U:

Un-pred
icatable

R:

Resistant
to
soothing

P:

Pain -like
expression

L:

Long
bouts

E:

Evening
crying
common

Program Overview

Educate parents of new infants
prior to leaving the hospital

Every family receives the education
materials, (DVD & pamphlet) to take home

Public Health follows up in community

Period of *PURPLE Crying*[®] Program

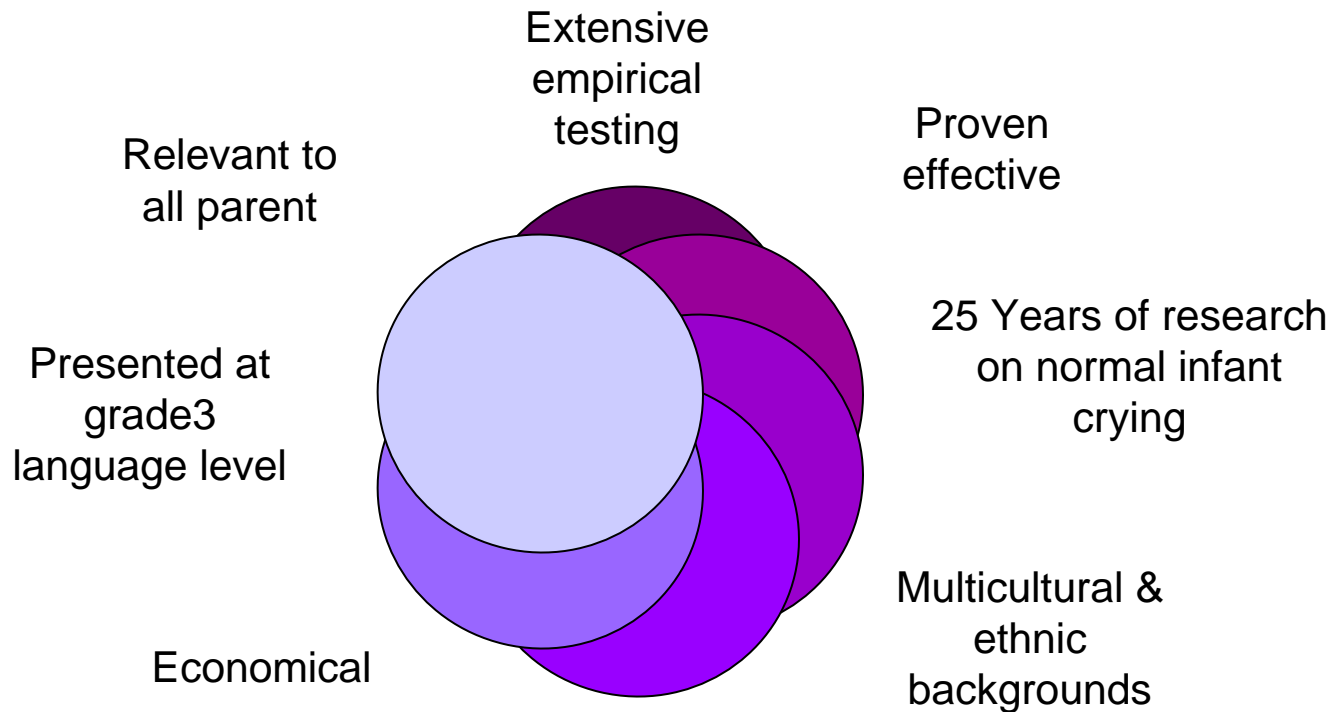
**Full colour 11- page booklet
& 10 minute DVD**

**Designed by pediatricians, public health
nurses, child experts & parents**

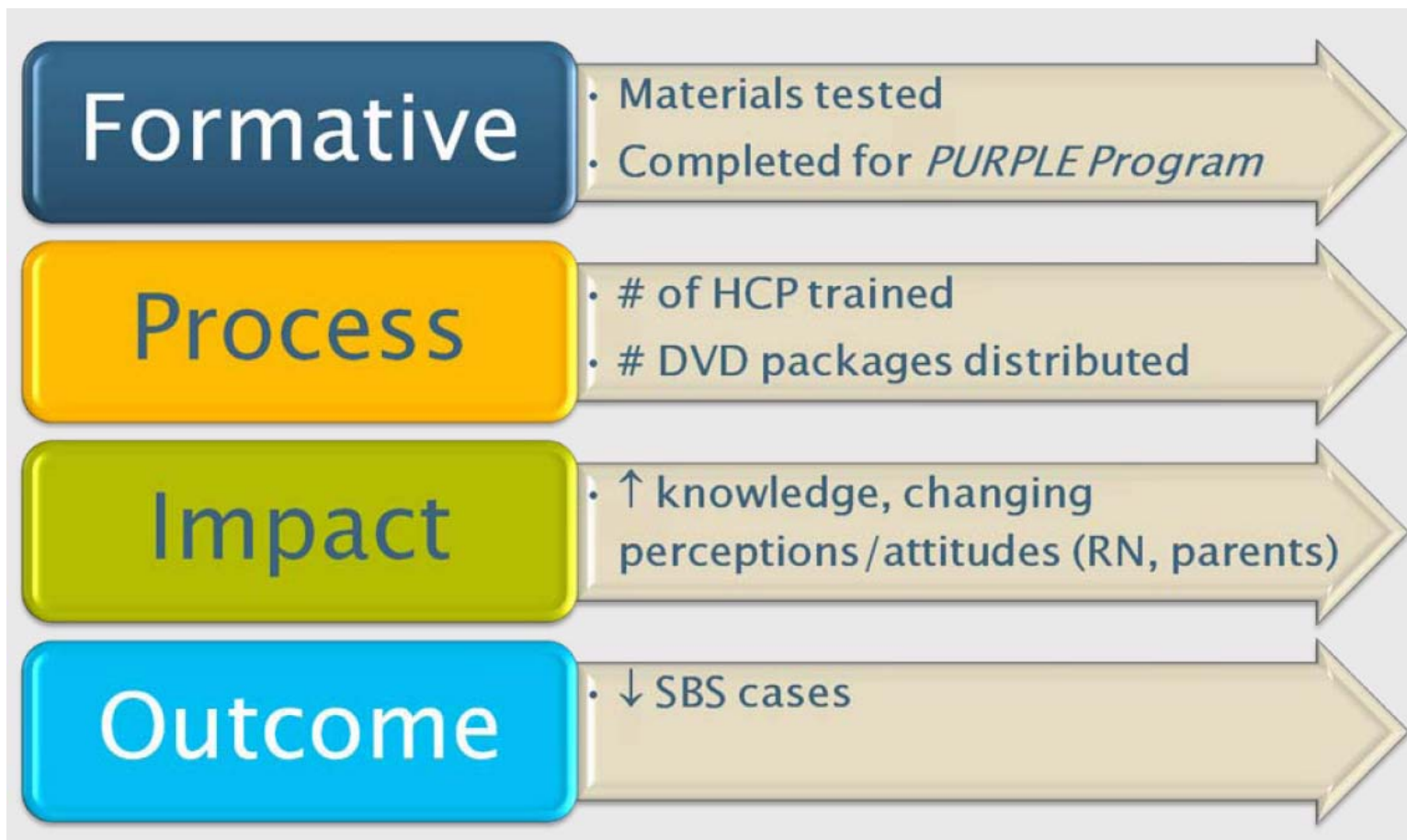
8 languages available

Gold standard of research

Why *PURPLE Crying*[®] program



Evaluation Plan



Patient Satisfaction Survey- Impact

- ✦ 96% recommended
- ✦ 64 % agreed optimal time for learning was in hospital
- ✦ Program rated 6 out of 7 for usefulness



Conclusion

- SBS is a problem in Ontario
- It is the #1 cause of severe injury for infants in SW Ontario
- Opportunity to address the issue
- We can save babies' lives & decrease the devastating consequences from SBS
- We will make a difference!

Interested in Implementing ?

- Call National Center on Shaken Baby Syndrome for Period of **PURPLE Crying**[®] at: 1-888 or 273-0071 or www.dontshake.com
- Contact Denise Polgar - Injury Prevention Specialist, LHSC for Hospital Implementation process at: 519-685-8500 x 75339 or denise.polgar@lhsc.on.ca
- Contact Bonnie Wooten, Manager FHS, MLHU or PHN Implementation process at: 519-663-5317 x 2248 or bonnie.wooten@mlhu.on.ca

