Inflicted Infant Head Trauma  
(Shaken Baby Syndrome)  
Prevention Program Implementation Guide  

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1 Introduction:

This guide was developed for health professionals wanting to implement the ONF Shaken Baby Syndrome (SBS) Prevention Program in an effort to prevent head injuries sustained by young children after being violently shaken. The original Upstate New York Shaken Baby Syndrome Education Program has been operating for about 10 years and has been deemed by the Ontario Neurotrauma Foundation (ONF) as an effective evidenced-based “Best Practice” (Volpe & Lewko, 2006). The SBS Education Program was the only program to achieve this status in the latest ONF review of head and spinal cord injury prevention programs (Volpe & Lewko, 2006). Although many SBS information programs exist, this is the only one that has demonstrated an almost 45% reduction in incidence of SBS in a large population study (Dias et al., 2005). The program is now a legislated part of SBS education in New York and a number of other US states. Hence, the program has demonstrated transportability to new community and cultural contexts. Due to the support of the ONF, the latest locale to which the SBS Prevention Program has been transported is Ontario.

1.1 Description

SBS describes a cluster of brain and eye hemorrhages. Perhaps better described as inflicted infant head injury, this act of commission permanently injures or kills more children than any other form of physical abuse, with a 15-35% mortality rate (ONF, 2007). Previous research has documented the extensive personal and economic costs associated with SBS (e.g., King, MacKay, Sirnick, & the Canadian Shaken Baby Study Group; Smith, 2003).

The Upstate New York Shaken Baby Syndrome Education Program is cased by Hunchak in the Casebook of Evidence-based Practices (Volpe & Lewko, 2006) as a simple, time-limited program that can accommodate nurses’ busy schedules. The program offered a consistent message about the seriousness of SBS, with a non-threatening approach, to every parent who had a baby in an 8-county region of western New York State (Dias et al., 2005).
1.2 Ontario Context

The general goal of the Ontario SBS prevention program is to provide a comprehensive implementation evaluation (ONF, 2007). This research will be used as a base for province-wide SBS education and a part of ONF’s knowledge transfer activities—to generate, acquire, apply and make accessible the knowledge needed to reduce the incidence of SBS. This program also provides an opportunity to study SBS education in settings specific to Ontario (e.g., public health, midwife services, and medical offices) and to carefully examine the role of the care provider-client relationship in health education (ONF, 2007).

Specific Tasks

The main objectives of the ONF SBS Prevention Program are as follows (ONF, 2007):

- Provide educational materials about shaken baby syndrome to new parents.
- Verify parents’ comprehension of the dangers of violent infant shaking,
- Track success of program through returned commitment statements,
- Describe the implementation process,
- Provide knowledge for sustainability and scalability

1.3 Fidelity Features

Research suggests that effectiveness may be compromised when programs previously found to be effective are not implemented with fidelity, i.e., in the manner they were developed and validated (Elliott & Mihalic, 2004; Schoenwald, Sheidow, Letourneau, & Liao, 2003). Fidelity encompasses adherence, the degree to which the program is delivered as intended with all the prescribed components and processes. The following fidelity features of the original New York SBS Prevention Program are the result of practice experience and research on the distribution and determinants of SBS between 1992 and 1996 (Dias, 1996; Hunchak, 2006):

1. The incidence of shaken baby syndrome appears to be modifiable with timely parental education.

2. Education efforts must be targeted at parents, and particularly, at males, since 71% of perpetrators are parents and paramours, and males comprise the majority.

3. Many parents are already aware that violently shaking an infant is dangerous. Therefore, the aim of the education campaign should be to remind parents about shaken baby syndrome at the appropriate time – during a mother’s post-natal stay in the hospital – after which both parents will soon be immersed in the challenges of infant care.
4. Parents are optimal advocates for infant safety and care and may be most effective at disseminating information about shaken baby syndrome to caregivers that will be in contact with their child.

In addition, an important fidelity feature of the original SBS Parent Education Program is its simplicity and ease of implementation. The program is a relatively short and straightforward way for busy health care professionals to introduce the topic of SBS to mothers and fathers after the birth of their child (see Volpe & Thomas, 2004).

**Key Elements:**

The simplicity of the SBS Prevention Program is manifested in the following key elements:

The program can be administered by almost anyone. It takes approximately 15 minutes of the parents’ time, and asks them to do three simple things:

1. read a short brochure in which the dangers of violent infant shaking are described and which provides alternative options to parents needing to vent their frustration and anger over persistent infant crying;

2. view a short video that covers the same subject matter; and

3. voluntarily sign a commitment statement affirming their acknowledgment and understanding of the information, and agreeing to participate in a follow-up.

Both parents are asked to view the information and sign the commitment statement. The commitment statement is designed to accomplish two main objectives: 1. To actively engage parents in their own education about SBS; and 2. facilitate program data collection and tracking. The timing of the instruction is an important factor in the program’s success: the physical presence of the newborn infant is a significant focal point during program delivery. The program designers recommend that the educational material be provided to the parents after the child’s birth but before the baby’s discharge from hospital (Volpe & Thomas, 2004).

Program materials include posters to place on the walls of the maternity wards so visitors can also be educated about violent infant shaking, and information cards that teach parents and caregivers how to handle prolonged infant crying.

### 2 Implementation Guidelines

**Initial Implementation Plan**

The program designers have identified three implementation phases which are detailed in Volpe & Thomas (2004) and discussed further in this guide.
Phase I: The Planning Phase
Phase II: The Implementation Phase
Phase III: The Maintenance Phase

3 Phase I (About 3-6 months) Start Up

The SBS Prevention Program can follow the same implementation model employed in another program, Stay on Your Feet [SOYF]/Ontario. The first phase of implementation encompasses start up. First, recruit a volunteer SBS Advisory Group consisting of seven or eight individuals with diverse professional backgrounds who have experience in SBS and pediatrics (Corlett & Warren, 2006). Ensure the group is in place to direct the SBS team. Sustainability of the program should be an overriding objective of this team.

The important tasks during this phase are to learn about and promote the issue of SBS. Assess what SBS prevention resources already exist in the community. All important constituents must be recognized and their input and support secured. These may include (among others) relevant government and political leaders; children services, and other public and private agencies; hospital administrators and/or medical directors; regional obstetricians and pediatricians; and most importantly, nurse managers at all the hospitals that will ultimately provide the program (Volpe & Thomas, 2004). Define the scope of the issue by consulting literature and relevant organizations (See links in Web Resources section). Put together an Implementation Plan.

Once the Advisory Group reviews the Implementation Plan, the first step is to hire and train the project nurse coordinator. Ideally, a full time coordinator could deal with the many issues that arise during the implementation of the SBS prevention program. However, the nurse coordinator could work part-time if her jurisdiction area is small. The granting agency will also hire a research associate to work with the coordinator. The requisite number of hospitals/services will be selected (Volpe & Thomas, 2004).

3.1 Role of Coordinator:

The program designers recommend that a nurse coordinator be hired to coordinate the program and interact with nurse managers and others at each hospital (Dias et al., 2002). The role of the nurse coordinator has been described as follows:

1) to educate the nurse managers and their staff about the program, its importance, and its implementation;

2) to serve as a regional resource for education, dissemination of materials and other supplies;

3) to act as a conduit for ongoing communication with the nurse managers at each hospital to troubleshoot problems as they arise, provide supplies as necessary, and maintain records of the number of parents reached;
4) to track the success of the program if desired, identifying cases of abusive head injury as they arise by interacting with pediatricians or other physicians at hospitals that provide emergency services to these infants, regional coroner’s offices, child abuse agencies, and child death review teams.

The importance of this person as an experienced registered nurse has been highlighted in a number of publications (Dias, 2002; Dias, 2003; Dias, 2004). Since most of the people who will administer the program are nurses, the nurse-to-nurse interaction is extremely important as the nurse is a credible source of information.

3.2 Tasks of Coordinator:

Volpe and Thomas (2004) provide instruction for the nurse coordinator in their Implementation Plan as follows:

Define the community by identifying all hospitals that provide maternity care, as well as the name and phone number for the nurse manager for maternity or mother-child services. Each nurse manager should be contacted to introduce the concept and arrange a face-to-face meeting to give a brief presentation to the administrative staff. Once contact has been made and support enlisted from the nurse manager or designee, training of the maternity and neonatal nurses can begin. This can be done either by the nurse coordinator or nurse manager depending upon the individual circumstances. A standardized educational curriculum with slides and video is used in educating the nurses. During the training it is important to present the program in an enthusiastic manner and to emphasize the important role that they play in the success of the program and in saving children’s lives.

Depending upon the circumstances, the appropriate ethics review committees or hospital Institutional Review Boards need to be contacted at each hospital to ensure that any research and/or privacy issues are taken into account. Medical Records committee clearance may be necessary if the commitment statements will be entered into the patients’ medical record.

Finally, materials must be ordered, translated into appropriate languages, and distributed to participating hospitals. Once materials are in place and nurses are trained, the program is ready to begin. A program start date is set. The time required for Phase I is generally 3-6 months depending upon the size of the region, the number of hospitals, the speed with which support can be obtained, and the schedules for training nurses. Each hospital must find a reliable way to provide the educational video. Hospitals have either used a handcart with a video/television/DVD unit that can be wheeled into individual parents’ rooms, a centralized viewing area where several parents can view the video together, or educational channels where the video can be shown continuously or at predetermined times. Again, it is important to be flexible in finding a solution for each hospital.

1 The New York program and ONF SBS program implementers may be able to provide guidance with respect to the educational curriculum (see ONF contact information).
3.3 **Suggestions:**

- Make a case for the program. An SBS prevention program is generally non-controversial—people want to prevent child abuse. The challenging task is to convince the various stakeholders that the strategies that you want to use are effective.
- Establish a web site (Cost/benefit should be evaluated here—perhaps link with the already existing healthcare agency to decrease costs).
- Remember: Document your progress.

3.4 **Recommended Documents to Distribute to Hospital During Phase 1 (For Examples See Appendix):**

- Job Description for Nurse Coordinator
- Commitment statement
- Follow up Survey
- Follow up Survey Guidelines
- Parent resource list
- Parent information pamphlet
- Educational Poster
- Educational Video
- Literature Review Reference List

4 **Phase II (About 18-24 months):**

Phase II and III are characterized by the maturation of the program. Thus, there is more difficulty in prescribing defined tasks at these phases. The experience, expertise, and local knowledge of the nurse coordinator and other stakeholders become integral to the program’s operation.

According to Volpe and Thomas (2004), Phase II starts when the participating hospitals begin to administer the education to parents and families – written material is handed out, the video is viewed, and commitment statements are collected. During this time, frequent contact with the hospital nurse managers helps to iron out various problems as they arise and to answer questions. Repeated nurse education may be required for those who did not initially receive it or for new hires. Reinforcing the central message to nurses and managers is important during this time so that they begin to incorporate the educational program into their daily routine and the program becomes second nature. New problems may arise as unforeseen circumstances change the nature or administration of the program.

Responsibility may be handed off to another nurse or educator, or even other hospital personnel such as a social worker or lactation specialist; it is important that these people have the resources, education, and training to effectively administer and coordinate the program. Phase II ends when greater than 75% of the commitment statements are being signed by parents; by this time, the
program has become incorporated into the culture of the maternity ward and becomes a matter of routine for the nurses. Make an effort to establish the regional baseline incidence rate of SBS by tracking incidence data at your hospital from the program’s inception (Hunchak, 2006).

4.1 Tasks of Nurse Coordinator during Phase II

The nurse coordinator, once trained, will deliver a standardized in-service training program to maternity and neonatal intensive care nurses at all hospitals. The training program emphasizes the nature, purpose and importance of the program; provides information about the consequences of violent infant shaking and long term medical and developmental outcomes; reviews the results of the pilot programs; trains nurses how to approach parents with program information to educate them in a consistent manner, engender their support for the program, obtain their signatures on the commitment form, and answer any questions. It emphasizes the importance of seeking out both fathers and father figures for education; if that is not possible, having a mother share this information with her partner (if not present) and with other child care providers.

Nurses on the maternity wards will administer the program to parents. Nurses will be requested to ask both parents to read the brochure and view the short educational video. Nurses will be asked to provide the SBS program information separate from other discharge planning information and child safety information that might detract from the central message. They will be encouraged to discuss issues with parents and answer any questions. Hospitals will be asked to display educational posters (Never, Never, Never, Never Shake a Baby) in the halls of the maternity wards to provide additional public information for families and visitors. Both parents will also be asked to voluntarily sign a commitment form affirming their receipt of the information. All educational materials are being provided in community-relevant languages. The hospital nurse managers will report monthly to the study coordinators: 1) the total number of deliveries, 2) the aggregate number of signed commitment forms, and 3) the number of commitment forms signed by mothers, fathers/father figures, or both parents. The proportion of returned commitment forms will determine each hospital’s compliance with the program.

5 Phase 3 (Maintenance of program):

Phase III: The final phase begins the program has become routine and the nurses generally are educating each other about its requirements (Volpe & Thomas, 2004). The program should be firmly established and consistently meeting targeted program performance goals.

The role of the nurse coordinators shifts primarily to involve data input, follow up calling, incidence tracking, and public relations (Hunchak, 2006). Ongoing input and communication by the nurse coordinator is still necessary for educating new hires; alleviating disruptions in program operation when there is a turn over in a nurse manager or other person responsible for coordinating the program (in some instances, this can result in the dissolution of the program within a hospital); and when other barriers or complications arise that make it difficult to administer the program. Nurses need to be reminded periodically about the whole purpose of the program and their tremendous importance to its success. This last point cannot be overemphasized. Continuous feedback to the nurses is extremely important: it is essential that
they understand their efforts are in fact bearing fruit, that they are saving a baby’s life, and that they are participating in a program with demonstrated success. Ongoing short face-to-face meetings or periodic newsletters to the nurse managers and their staffs with updates will provide continuous positive reinforcement and continued success. Altogether it takes approximately 2 years for the program to be up and running smoothly with good active participation from all involved hospitals (Volpe & Thomas, 2004).
6 Resources

American Academy of Pediatrics
See policy statements at http://aappolicy.aappublications.org/

Canadian Pediatric Society
See position paper at http://www.cps.ca/english/statements/pp/cps01-01.htm;

National Center on Shaken Baby Syndrome (NCSBS)
http://www.dontshake.com/

Ontario Neurotrauma Foundation (ONF)
http://www.onf.org/

ONF Shaken Baby Syndrome Prevention Program Home Page
http://www.oise.utoronto.ca/research/ONF-SBSPrevention/index.htm

ONF Shaken Baby Syndrome Prevention Program Contact Information
http://www.oise.utoronto.ca/research/ONF-SBSPrevention/Contact%20Info/Contact%20info.htm

Public Health Agency of Canada
References


Appendix
**Job Responsibilities**

*Coordinator (Dias, 2002)*

This job description can be used as a guide for sites that plan to implement the program.

1. Coordinate the program under the direction of principal investigator(s) (PI).
2. Maintain communication with both principal investigators and project coordinator …
3. Coordinate and implement the purchase, receipt, and delivery of all materials to participating hospitals.
4. Develop a training program for nurses, train the Nurse Managers, and coordinate the training of the maternity, NICU and Special Care Nursery unit nurses.
5. Maintain monthly contact (phone and correspondence) with the Nurse Managers, identifying and solving any logistical problems.
6. Prepare and conduct in-services for staff as needed.
7. Verify the return of commitment statements from the participating hospitals.
8. Monthly monitoring of commitment statement return rate compared to monthly deliveries at each hospital.
9. Enter all of the data from the commitment statements into the database.
10. Contact county medical examiner’s offices, child mortality review board, child protective services, and pediatric directors at other hospitals as necessary to identify any “missed” cases of SBS.
11. Gather information for any identified cases of SBS for tracking.
12. If a case of SBS is identified, notify principal investigator and check database to determine if there is a signed commitment statement.
13. Maintain database of identified SBS cases.
14. Generate monthly list for random follow-up survey phone calls.
15. Conduct phone calls for the follow-up surveys (30 per month).
16. Generate and maintain a database of responses from the follow-up surveys.
17. Monthly preparation of data for statistical analysis.
18. Responsible for preparation of quarterly budgets.
19. Compile statistical data for quarterly progress report and submit to PI.
20. Maintain content and prepare quarterly newsletter to update all hospitals about ongoing concerns, progress, and status of program.
21. Speak publicly as needed on the topic and the program to other public service groups.
22. Respond to all requests for information about program. Strive to promote the program’s success through any media outlets.
23. Consult by phone or in person with parties interested in replicating program.
24. Maintain inventory of informational packets for distribution to interested parties.
25. Assist Web Team with design and revision of web page.
26. Obtain and maintain collection of articles to create an SBS information library.
27. Participate in continuing education to develop proficiency in computer and grant seeking skills.
28. Secure alternate funding sources as grant monies decrease.
**General Breakdown of duties and time allotted per month for a .9FTE (9 days per 2 weeks) position:**

1 day - Maintain contact with the Nurse Managers of units participating in program to review progress, troubleshoot problems and conduct in-services for staff, if necessary. Verify the monthly return of commitment statements from the participating hospitals.

1 day - Conduct follow-up surveys (30 per month) randomly selected from database. The process includes compiling random list, conducting the call, recording and entering information into a separate database.

1 day - Preparation of quarterly budget and report. This includes monitoring on-line budget reports, calculating figures and securing required approval through guidelines at institution.

1/4 day - Coordinate and implement the purchase, receipt and delivery of materials to participating hospitals including research on cost-cutting measures.

1/2 day - Maintain content and prepare quarterly newsletter to update all hospitals about ongoing concerns, progress, and status of program.

1/4 day - Maintain contact with program coordinator in New York State Office of Children and Family Services, Principal Investigators, Child Fatality Review Board, and Child Protective Services.

1/4 day - If a case of SBS is identified, research and gather information on case for tracking. Enter information and maintain database of SBS cases.

1/2 day - Respond to various mail, phone and e-mail requests for information about program. Consult with parties interested in replicating program. Strive to promote the program’s success through any media outlets.

2 days - Data entry of information received on commitment statements including analysis of data for compliancy programs at participating hospitals.

1/4 day - Participate in continuing education to develop proficiency in computer and grant writing/seeking skills.

1 day - Research ways to secure alternate funding and apply to foundations, private corporations, or local, state, and federal granting agencies.

1 day - Miscellaneous:
- Assist with web page design and update
- Obtain and maintain collection of articles for SBS resources
- Maintain inventory of information packets for distribution to interested parties
- Maintain and renew IRB approvals as needed from hospitals
- Participate in conferences highlighting SBS prevention.