Rebuilding from Resilience: Research Framework for a Randomized Controlled Trial of Community-led Interventions to Prevent Domestic Violence in Aboriginal Communities[1]

Neil Andersson
Beverley Shea
Carol Amaratunga
Patricia McGuire
Georges Sioui on behalf of the Rebuilding from Resilience Study Group.

Investigators
Madeleine Dion Stout
Anita Olsen Harper
Beverley Jacobs
Patricia Monture
Brenda Wilson
Cornelia Wieman

Collaborators
Dawn Harvard
Celeste McKay

Participating Organizations and Executive Directors
Caroline Anawak, ED, Agviik Society, Iqaluit, NU
Susanne Point, ED, Xolhemet Society, Chilliwack, BC

1. Acknowledgements: This proposal was funded under the CIHR operating grant 84489: Rebuilding from Resilience — research framework for a randomized controlled trial of community-led interventions to prevent domestic violence in Aboriginal communities.

Emma Johnson, ED, Nuxalk Nation Transition House, Bella Coola, BC
Darrell Royal, Family Wellness Coordinator, Siksika Nation Prevention of Family Violence, Siksika, AB
Mary Simpson, ED, Paspew House, Fort Chipewyan, AB
Donna Brooks, ED, YWCA of Prince Albert, Prince Albert, SK
Sharon Mason, Program Administrator, First Nations Healing Centre, Koostatak, MB
Cynthia Francois, ED, Mamawehetowin Crisis Centre, Pukatawagan, MB
Dorothy McKay, ED, Kitchenuhmaykoosib Equaygamik, Big Trout Lake, ON
Catherine Lelievre, Program Manager, Akwesasne Family Violence Program, Cornwall, ON
Louann Stacey, ED, Native Women's Shelter of Montreal, Montreal, QC
Debbie Boyd-Crawford, Program Supervisor, Mi'kmaq Family Healing Centre, Whycocomagh, NS
Sheila Swasson, Listuguj First Nation in Quebec.

Elders: Dan Smoke, Mary Lou Smoke

And in memory of Judy Ford, ED, Nain Safe House, Nain, LB

Abstract

This research framework, which competed successfully in the 2008 CIHR open operating grants competition, focuses on protocols to measure the impact of community-led interventions to reduce domestic violence in Aboriginal communities. The project develops and tests tools and procedures for a randomized controlled trial of prevention of family violence. Women's shelters mainly deal with victims of domestic violence, and the framework also addresses other types of domestic violence (male and female children, elderly, and disabled). The partner shelters are in Aboriginal communities across Canada, on and off reserve, in most provinces and territories. The baseline study applies a questionnaire developed by the shelters. Testing the stepped wedge design in an Aboriginal context, shelters randomized themselves to two waves of intervention, half the shelters receiving the resources for the first wave. A repeat survey after two years will measure the difference between first wave and second wave, after which the resources will shift to the second wave. At least two Aboriginal researchers will complete their doctoral studies in the project. The steering committee of 12 shelter directors guides the project and ensures ethical standards relat-

ed to their populations. Each participating community and the University of Ottawa reviewed and passed the proposal.

Background

Family violence affects all ethnic, cultural, age, religious, social and economic groups (Bennett, 2005; Family Violence Initiative, 2002). Women who experience intimate partner violence are at an increased risk of injury and death (Eisenstat and Bancroft, 1999; Campbell, 2002) and exposure to violence as a child places women at higher risk of poor health outcomes (Cohen and Maclean, 2003). Pregnant women are at greater risk of physical harm (Mahajarine and D'Arcy, 1999; Cokkinides et al., 1999). The experience of family violence is likely to be a pivot in gendered choice disability — people who are unable to implement their prevention choices, which puts them at risk of unwanted pregnancy and sexually transmitted infections including HIV (Andersson, 2006).

There is little epidemiological research on domestic violence in Canada and virtually none involving Aboriginal families. A systematic review of interventions for violence against women revealed that evidence-based approaches for preventing intimate partner violence are seriously lacking (Wathen and MacMillan, 2003). Shea and colleagues confirm this in their systematic review in this special issue of *Pimatisiwin* (Shea et al., 2010).

Rationale

Domestic violence is very common

First Nations, Inuit, and Métis report more domestic violence than the rest of Canada; both men and women can be victims. The overview article in this special issue catalogues the many studies that report domestic violence across the country (Andersson and Nahwegahbow, 2010). This level of occurrence has contributed to the idea that family violence is a normal and relatively accepted practice within Aboriginal communities. As Dion Stout puts it, for many Aboriginal children, domestic violence is a fact of life (Dion Stout, 1996; 1998).

Root causes

Susceptibility to family violence may be exacerbated by a history that disrupted the traditional balance between Aboriginal men and women (LaRocque, 1996; MacMillan and Wathen, 2005). Many victims of intergenerational violence become perpetrators (Green, 2001; Monture, 1995). The result is

family violence recycling in many homes; two out of every three victims of violent crime in Saskatchewan knew their assailant, and one in every four were abused by a family member (Saskatchewan Justice, 2006). In Aboriginal communities, 75% of sexual assault survivors are young women under 18 years of age; 50% are under 14 years of age and almost 25% are younger than 7 years of age (Metropolitan Action Committee on Violence against Women and Children [METRAC], 2001). Literature on Aboriginal peoples of New Zealand and Australia describe similar root causes of domestic violence and the associated impacts on women, children, and the community (Memmott et al., 2001; Dodson, 1991; Ministry of Social Development, 2002).

Little is done about it

In general, Canada does not address violence against women adequately and it categorically fails to address racism and bias when violent crimes are committed against Aboriginal women (Canadian Feminist Alliance, 2003). To date there has been no controlled trial to reduce sexual violence in First Nations, Inuit, and Métis communities.

Aboriginal resilience

Resilience is the means by which people choose to use individual and community strengths to protect themselves and to build their future. In prevention research, we see resilience as more than just traits or behaviour that protects against domestic violence. It is a complex interplay of social, cultural, and behavioural factors that operate at individual, family, and community levels (Dion Stout and Kipling, 2003; Anthony, 1987). We understand resilience to combine spirituality, family strength, elders, ceremonial rituals, oral traditions, identity, and support networks (HeavyRunner and Marshall, 2003) — beyond the negative tone implicit in "the capability of individuals and systems to cope and flourish successfully in the face of significant adversity or risk"(Reid et al., 1996). It is necessary to prepare the ground to gather hard scientific evidence about how resilience can be built upon to reduce domestic violence.

Aboriginal controlled high-level health research

Randomized controlled trials (RCTs) are considered the high water mark of contemporary health research. Because of their ability to attribute an impact to a specific intervention, and to unpack cause and effect in a way that is largely free of bias and confounding, RCTs tend to have more impact on national resource allocation than, for example, a cross-sectional study or

participatory action research. To date, RCTs have been the almost exclusive preserve of non-Aboriginal researchers. This project will lead to a large scale RCT on one of the most pressing issues faced by Aboriginal communities — an issue not usually subjected to formal intervention studies. In addition, it will be run by Aboriginal researchers.

Central Hypothesis

With appropriate resources, many Aboriginal communities have the resilience to develop and implement their own effective solutions to domestic violence. A key resource is culturally appropriate scientific method to test the impact of community-led interventions. This grant will develop the scientific basis to measure the impact of evidence-based interventions to reduce domestic violence in Aboriginal communities across Canada. It will develop and test tools and procedures for future randomized controlled trials (RCTs) of domestic violence prevention.

Research Question

Building on their cultural and spiritual resilience, how can Aboriginal communities best reduce domestic violence? What does it take to measure this?

The Specific Objectives of this Proposal

1. Build partnerships with communities to develop and test culturally appropriate methods that characterize resilience protecting against domestic violence among Aboriginal people, with a view to basing unbiased prevention trials on this resilience.
2. Develop and test culturally appropriate protocols to formulate evidence-based community-led interventions that reduce domestic violence in Aboriginal communities.
3. Implement the pilot community-led interventions and develop a framework to assess their impact at the individual, family, and community level.

Preparation for this Project

In 2003, through the Ottawa ACADRE, the five national Aboriginal organizations approved seed funds to develop research into Aboriginal family violence. Consultations with women's shelters across the country showed broad support for this research. The Native Women's Association of Canada (NWAC), for whom domestic violence is a priority, convened a national

steering committee to oversee development of a research framework that could lead to serious research in the area. Committee membership includes Aboriginal faculty at the universities of Ottawa and Saskatchewan, several community-based Aboriginal organizations involved with domestic violence, the RCMP, and elders.

New Knowledge the Project will Obtain

Resilience and domestic violence

Most health research is not geared to Aboriginal paradigms and Aboriginal groups are increasingly critical of research that views them as objects (Reading and Nowgesic, 2000). By focusing on resilience and protective behaviours, communities can develop interventions that reduce domestic violence. A resilience focus counters a dominant research trend of "what is wrong" in Aboriginal communities; it ensures research is framed in a positive manner and results in practical benefit for Aboriginal peoples. This shift has several effects: it increases relevance and acceptability of the research to Aboriginal peoples, and it increases immediacy of solutions. Resilience offers a pathway by which disadvantaged populations can learn about domestic violence, take responsibility to reduce risks, engage with Aboriginal and Canadian social services and health care systems, and share experience (Jessica, 2004).

Improved health outcomes for Aboriginal peoples

For too many people, home is not a safe haven but a site of family violence (Blackstock et al., 2004; Klein, 1998). Men are also at an increased risk of emotional and physical abuse (O'Leary, 2000; Schmiedel, 2006). This project will enable Aboriginal communities as a whole to build on their resilience, and not just target high-risk subgroups. For many Aboriginal people, improving resiliency at the individual, family, or community level is itself an important outcome. This could have reduce delinquency, alcohol and substance abuse.

Apart from the direct positive effect of less domestic violence (less physical and mental trauma), reduced domestic violence will probably mean an *increase in the proportion of "decision enabled."* These are people who can choose their sexual and reproductive risks, rather than having these imposed in a violent way. This has implications for unwanted pregnancies, sexually transmitted infections, and blood-borne viruses.

A final product of this project will be a *research proposal* for a national RCT to test multiple interventions developed by Aboriginal communities to reduce domestic violence. Successful randomization by the communities themselves contributes to a new clarity on randomization methods in an Aboriginal context. Additional advances could include community engagement strategies and methods of dealing with unsympathetic community leadership, individual questionnaire design and administration protocols, support and counselling, action planning and implementation processes, confidentiality, data security, and a range of issues relating to analysis and reporting.

Work Plan, Timeline, Analysis, and Interpretation of Results

The five years cover three phases, corresponding to the three main objectives.

Phase 1 (years 1–2): Build partnerships with communities to develop and test culturally appropriate methods to identify resilience factors that protect against domestic violence among Aboriginal people, with a view to using these in unbiased prevention trials;

1. *Literature review*: The process will be the completion of a systematic review of the international qualitative and quantitative literature on resiliency as this affects Aboriginal communities, and of risk factors for domestic violence in Aboriginal communities. A focus on community-based initiatives will increase relevance of this part of the review. We will also review all published validated measurement instruments designed to assess domestic violence and/or resiliency.
2. *Community involvement*: Shelters, the main partners in the proposal, deal with women who are victims of domestic violence, and the framework also addresses other types of domestic violence (male and female children, elderly, and disabled). For purposes of this operating grant, we will address communities served by the 12 partner shelters rather than, for example, a random sample of reserves. Shelters are a local research base that is familiar with domestic violence and wants to see it reduced (some Band council members may not be so keen). Without exception, they have already given a lot of thought to what it would take to reduce domestic violence in their communities. Where there is a shelter, there

is support and counselling for individuals who disclose in the course of interviews or focus groups. Importantly, the shelters requested we locate the research with them as a way of strengthening their role in prevention of domestic violence.

We recognize that working only with communities with shelters will bias the sample, which is not intended to represent all Aboriginal communities. The selection of shelters, however, includes a spread of urban, rural, remote, and special-access Aboriginal communities, on and off reserve, with a view to developing methods, procedures, and instruments relevant to all Aboriginal groups. We included Montreal's Native Women's Shelter (off reserve, urban), for example, to include its Inuit clientele. Prince Albert (off reserve, urban) is operated by a non-Aboriginal organization (YWCA), but its Executive Director, many staff members and 87% of its clients are Aboriginal. The team has already spent approximately twelve months discussing and planning with shelter directors. Table 1 lists the activities to guarantee community ownership of the research process, including nomination of researchers for training, participation in the steering committee guided by elders, and establishment of working groups in each community.

3. *Training*: The shelters will identify a community-based researcher (CBR) in each community. The trainee will be part of the community working group convened to discuss and oversee the research objectives, contents, and process.

4. *Instrument development*: A recently published RCT of screening for intimate partner violence in health care settings revealed that women who have experienced domestic violence prefer to disclose this using a written questionnaire (MacMillan et al., 2006). The team will develop instruments in partnership with the twelve communities. This will begin with standards-based approaches to risk and resilience factors associated with domestic violence, sharing with stakeholders the current state of instrument development. The communities will clarify their own priority outcomes related to domestic violence. One objective of this operating grant is to customize several international instruments for domestic violence to the Canadian Aboriginal context. This will require several iterations and pilots before implementation at community level. We see the final instruments as an important research product.

   i. Individual questionnaire: for both men and women, this will document views of resilience, childhood and adolescent exposure to sup-

Table 1: Proposed Community Involvement with the Research Design Process

Action	*Implementation*	*Responsibilities to the communities*
Identify and involve relevant community stakeholders to guide the development of the research process	The 12 communities, through the shelter directors, will designate Aboriginal research trainees, community working groups, and additional members of the steering committee. Research will be guided by the concerns and input of the research working group members.	Provide support: Respond to the needs of working members as they participate in the research process and provide support to help the community stakeholders with its tasks.
Develop a national Aboriginal community-led research network on domestic violence	This may be the first network of its kind. Shelter directors from the various locations across the country will be connected with the common research goal to reduce or eliminate domestic violence in all Aboriginal communities. This community-led research network will strengthen the process.	
Identify relevant resilience factors for Aboriginal communities	Communities will be involved in the systematic review process at the beginning, so they have a good sense of the evidence base that exists on domestic violence. Resilience factors identified from existing literature will initiate discussions. Stakeholders will provide input in their multiple contexts of individual, families, and communities.	Provide clear expectations: Design specific terms of reference that describe possible roles for the various communities and stakeholder groups.
Identify relevant instruments for measuring resilience in Aboriginal communities. Develop a draft survey for wider community consultation	Working groups will review all survey instruments. Ongoing discussions will provide continued fine-tuning. Piloting of the instruments in the communities will further ensure that questions are suitable and clear.	
Develop an Aboriginal stakeholder process to increase depth and breadth of understanding of research and resilience	Researchers and communities will jointly establish a procedure for data collection. Communities will participate in discussions of the ethical consideration of the project.	Communicate: Listen and provide feedback. Give communities reports about how their advice has been used to advance the research process and acknowledge the community contribution.
Develop a national research mentoring mechanism for community team members	Establish a direct link to senior researchers and research associates involved in the project. Create a 1 800 number for the project (a successful strategy in CIET's evaluation of the CPNP).	
Maximize data quality while protecting community privacy and safety.	Ensure ongoing adequate high quality for data collection and analysis.	Provide training: Respond to the needs of community members for continuing education in research, the systematic review process, and knowledge translation; create decision tools for domestic violence. Training of CBRs is integral to this research process, but capacity building reaches more than the researchers, as several stakeholders are involved in discussions about the research problem and the development and implementation of intervention strategies. The interaction among local groups and organizations will empower communities to develop and implement evidence-based solutions. This may be of much wider relevance than just domestic violence risk.
Create a structured set of outcomes for testing and measuring domestic violence in future trials	Using Talking Circles, Delphi, and Nominal Group consensus mechanisms, communities will agree on a structured/standard set of instruments to be included in all future RCTs of domestic violence in Aboriginal communities.	Maintain an openness:
Assist in developing the research proposal to design and evaluate interventions for domestic violence using RCT methodology	Develop with the community a short basic methods course for planners on a) proposal development b) RCT cluster designs for testing complex interventions.	Enhance and welcome the creation of new methods for conducting future RCTs.

port mechanisms, integration within the community and external factors, and several layers of domestic violence outcomes. Although this remains an issue for testing and piloting, we anticipate this will be a confidential but facilitated self-administered questionnaire: the researcher will read each question in turn, but will be unable to see the responses marked by the respondents.

ii. The key informant instrument will be completed by elders, police and justice workers, Child & Family Services, health practitioners, CHRs, school guidance counsellors, principal and teachers, chief and council, welfare and housing personnel. The objective here is to draw on the experience of these resources for the prescriptive aspects of reducing domestic violence and to identify how these key resources might contribute.

iii. Cognitive mapping, focus groups, or talking circles, depending on the community preference, will play an important role at several junctures: design of individual questionnaires, analysis of results, and action planning. Group participants may include clients of the shelters, volunteers or individuals invited from the community, depending on the objective of the session.

In an important sense, shelter residents are experts in domestic violence. Unless they insist on participating, the research will not involve shelter residents soon after admission. Longer stay residents may volunteer to participate in the design and testing of questions for the individual questionnaire, or development and testing of the focus group guides. Yet this project is also about primary prevention (avoid the risk factors) and secondary prevention (avoid the risk factors becoming domestic violence). It must therefore also reach upstream, to interact with those who are not (yet) involved in domestic violence.

5. *Deepening the enquiry*: An important aspect is identification of gaps in the knowledge of the burden and impact of domestic violence in Aboriginal communities. CIET has developed a model of seven "layers" of individual outcomes that can be attuned to Aboriginal communities. The proposal is that it is possible to measure several layers of outcome between conscious knowledge and behaviour change (CASCADA): **C**onscious knowledge, **A**ttitudes, **S**ubjective norms (how others in this community see domestic violence), intention to **C**hange, sense of

Agency (individual and collective ability) to change domestic violence, **D**iscussion of these issues in everyday interaction and preventive **A**ction related to domestic violence, including involvement in traditional (especially spiritual) activities. The progression between these outcome layers is not linear and cannot be predicted *a priori.* The approach has been used with HIV, suicide, dengue, and childhood immunization. This operating grant will document the impact on each of these layers of community-led interventions. Interviews with elders and a community environment assessment (availability of externally motivated health messages) will provide a community context for this exploration.

6. *Sampling*: Twelve Aboriginal communities have joined this operating grant to develop methods and protocols. Although reflecting conditions across Canada, they are *not* a random sample and there are only twelve of them. Much larger numbers will be needed beyond this pilot phase, ideally, to address all Aboriginal communities, not just those with shelters. In the large scale RCT seen as the outcome of this grant, communities will be a random selection of all urban and rural Aboriginal communities, on and off reserve. In smaller communities there will be no subsampling. This engages the entire community in the enquiry. Where the shelter serves a community bigger than 150 households, a sampling process will be developed that, in urban areas, concentrates the Aboriginal community. On larger reserves, an appropriate subsample will be drawn, for example, every fifth house.
7. *Model for randomization*: No community could welcome being "experimented upon." In discussions with the twelve participating shelters, however, it seems acceptable for equity (no favouritism in order of starting) and ethical (all communities get the project) to randomize the delay before starting. After explanation of the implications of a stepped wedge design, participating shelters drew their participation order (first wave or second wave) from a hat. For statistical purposes, at the point of analysis of the follow-up survey where the first wave of shelters hands the project resources to the second wave, this has the same effect as random allocation into an intervention or control series. Its acceptability to Aboriginal communities and oversight by First Nations elders is a nontrivial methodological development.
8. *Data collection:* With informed consent, we will use facilitated (someone reads the question and explains the format for answers) confidential an-

onymous self-administered questionnaires. Previous experience in other Aboriginal communities of Canada using the same approach has yielded very high response and disclosure rates. We will train a CBR as an "in-house" resource to each shelter, who will facilitate the self-administered confidential individual questionnaires to as many residents as possible. In some settings, it may be appropriate for shelters to "swap" CBRs. Working in groups of two or three, CBRs might support each other for a few days at a time. We anticipate the individual questionnaire being filled out by male and female members of the community served by the shelter. The shelter directors are a key resource on community-led interventions, and will complete the key informant interview. In the rest of the research, the directors will be involved to the extent their workload allows. They will facilitate the links with the community, selection of CBRs, and possibly conduct some of the key informant interviews.

9. *Minimizing bias*: Self-selection (decision not to participate or to answer certain questions) is a concern. Those who opt not to respond or those who have problems of literacy may be most at risk. Additional methods and special attention may be needed to address the issue, for example, the "back to back" individual interview where the interviewer reads the question but cannot see which option the respondent marks.
10. *Data entry*: Completed questionnaires will be sealed in front of the respondents and removed from the community for anonymous digitizing using public domain software.

Phase 2 (years 2–3): Develop and test culturally appropriate protocols to formulate evidence-based community-led interventions that increase resilience of Aboriginal populations in regard to domestic violence

The main activity to achieve this objective is in-depth analysis and socialization of evidence generated by Phase 1. The epidemiological analysis of data collected in Phase 1 will include:

1. Basic frequencies including knowledge about domestic violence risk, access to information, and all outcomes identified by the communities. We will stratify these by sex, age, education, etc., to identify resilient groups.
2. Quantifying associations between domestic violence risks and preventive factors, including congruency with perceived social norms; confidants; family control and guidance; community integration; group

membership; recognition of risk behaviour; desire to change; ability to change; and the ability to express opinions about risk taking not in accordance with those of peers and family member (deviation from subjective norms). Initial epidemiological analysis will be cross-sectional, with recognizable limits of interpreting causality. With the limited size of the domestic violence survey, we may not obtain decisive results about the *absence* of effect from mainstream messages. However, we do expect to identify the strongest resilience associations. Analysis will use CIETmap freeware and the primary analysis will begin with simple comparisons between groups (t-test for groups); secondary analysis will use generalized estimating equations with exchangeable correlation matrix. We propose to develop multilevel models incorporate local services and community contexts. Where necessary we will analyze resilience using random effects regression model.

3. To develop culturally appropriate intervention strategies we will submit results to relevant health/shelter personnel and to elders in the communities served by the communities. Focus groups stratified by gender and generation and talking circles will process and interpret key findings. The interest is primary prevention (avoid the risk factor). It is not possible at this time to identify specific interventions but these could include content development and distribution of materials to inform protective behaviours against domestic violence (for example, via community organizations or schools). They may improve service offers (counselling and treatment) or enhance access to harm reduction or domestic violence programs.
4. Based on their evidence, each community will determine its own suite of interventions to reduce domestic violence. A series of feedback and action planning mechanisms will be tested across the 12 sites, including working through the Band council, working with elders, talking circles, working with young people, social activities and, where appropriate, community assemblies. A small seed fund is available to help with those actions that require little investment. For longer term changes, we have budgeted support for development of proposals that can be directed to Band councils, provinces, and federal funding sources.

Phase 3 (years 3-5): Implementation and assessment of pilot interventions.
Implementation involves three sets of stakeholders. The first deals with social services, represented in this project by the 12 shelter directors. The

second set includes the community-based organizations involved in domestic violence risk education, represented in this project by the 12 community working groups and their respective elders. Third is the public health initiative recommended to the Canadian government, represented in this project by the Native Women's Association of Canada supported by the project steering committee and elders. The central activity of Phase 3 is to promote implementation of the intervention(s) to increase resilience of Aboriginal people to domestic violence.

The team will explore ways to transfer the findings to government and nongovernment organizations, promoting culturally appropriate interventions and policies. Guided by the communities in the appropriate format (talking circle, Band council, elders, or community meetings), a dissemina-

Table 2. Dissemination

What will be communicated	*To whom*	*Timing (When)*	*Communication method (How)*	*Communication outcome (Why)*
Concepts behind the research. How it applies in this community	Community stakeholders (including service providers, elders and community members)*	1. During initial contact. 2. Revisited as required throughout process	1. Initial presentation to band council and/ or initial meeting with stakeholders. 2. Discussions with working group	Identify appropriateness of goals and methodology for each community
Ethical considerations pertaining to this project	Steering comm. Community (including band leaders, providers, elders) Working groups	1. During initial contact 2. Revisited as required throughout research process.	1. Initial presentation to band council and / or initial meeting with stakeholders. 2. Discussion with working group	1.Address concerns about protecting individual participants and community 2. Encourage discussion of ethics and community rights
Detailed presentation of the research instruments and data collection methodologies	Community stakeholders Designated community working group	1. During initial presentations 2. During working group discussions throughout project.	Via ongoing discussions 1) Reasons information is important to community 2) Lessons learned (feedback about domestic violence risk work done in other Aboriginal communities)	Customized community process to increase understanding of and involvement in methods
Research results and intervention plans	Community stakeholders Working group Steering comm.	During analysis	Involvement in the planned analysis.	Identify concerns of steering committee and ensure relevance of research at community level
Outcome assessment	Board of social services and education; NGOs; government agencies	Post analysis Throughout project for modification of interventions	Intercommunity meetings or work shops.	Stronger capacity to change community institutions through lessons learned.

tion strategy throughout the research process will be directed to a range of knowledge users (Table 2), evolving as community requirements are articulated more clearly.

The follow-up survey in year 4 will be appropriately comparable to the baseline: in the same communities although not linked to the same individuals. As in the baseline, as many members as possible of each of the 12 communities will be asked to complete the follow-up survey. It will be administered under exactly the same conditions and will assess uptake and acceptability of the pilot intervention. Outcomes of interest will depend on actual interventions, but could include resilience, knowledge, attitudes/perceptions, behavioural intention, discussion/socialization around the issue of domestic violence, reported behaviour, availability of care and other services, utilization of services, and incidence of domestic violence each year over the three years intervening years.

Pitfalls, Ways around the Pitfalls, Alternatives

1. *Representative starting point:* This research framework will be built in partnership with existing Aboriginal shelters. However, few communities have shelters and this links the project very firmly to tertiary prevention (dealing with the victims). We see work with the shelters as a starting point, from which we can identify a range of possible mechanisms to interact with Aboriginal communities. This operating grant intends to identify protocols and instruments, not to declare the exact achievable impact. A large-scale trial would have to work in a wider range of communities, probably with different local champions.
2. *Potential conflicts of interest with Band councils* regarding domestic violence. In some cases, prominent members of the Band council might be involved in domestic violence and not welcome an enquiry of this nature. This is one reason why we opted to work through the shelters, which already have defined relationships with Band councils and key opinion makers in their communities. In the event that specific Band councils or influential individuals have contrary opinions, the local shelter and management team will devise alternative but legitimate ways to work, for example with elders.
3. *Disclosure:* Reluctance to answer questions about domestic violence may result in underreporting. The extent to which people can discuss their

experiences of violence is also influenced by the sex, skill, and training of the interviewers. The local partners (shelters, CBR and local committee) will decide who should conduct the interviews (not necessarily from their own communities) and how. The questionnaires could be completed outside the family home. There will be no way of linking individuals with questionnaires once these are placed in the envelopes. All communities can access their analysis but, to protect respondents, the data will be stored by CIET at a central secure area. No disclosure is required in the group discussions that typically focus on solutions. Well-trained facilitators can infuse a sense of trust, safety, and intimacy into the process. Groups for men will be separate from those of women, making discussion easier. Facilitators will be trained in scenarios that increase their confidence and capability to manage focus group dynamics.

4. *Potential harm from disclosure*: At the individual level, disclosure about violence could put the respondent at risk. As the extent of this is unknown we have opted to work with the existing shelters where it is possible to find safety and counselling. One way to avoid this is to ensure careful instrument design, scrupulous anonymity and confidentiality, and team members carefully selected and appropriately trained. At the discretion of the shelter director, shelter residents may be invited to participate in design, piloting, or to take on the role as a community-based researcher. These women have a deep understanding of the need for research and the development of meaningful interventions, but it could also be a part of their empowerment. We do not anticipate that all CBRs will be trained as counsellors, but they will all know where and who to refer respondents to in the event that disclosure causes discomfort. They will also be debriefed by someone with appropriate training after each day of interviewing.
5. *No uptake of results:* In some communities the baseline survey could be of little interest and people may lack commitment or have other reasons not to solve the issue of domestic violence. We believe community readiness is self-defined and there are some places where it is simply not the right time for this research. We do not believe this is the case with the 12 communities that have come forward for this project, although we expect to find different levels of community readiness.
6. *Financial and other partner expectations.* The shelters are all hard pressed for resources and could easily have unrealistic hopes for much needed

funding. Although this has been discussed already, transparency about the budget will limit unrealistic expectations from the earliest stages. Any figure divided among 12 communities becomes much smaller, although considerable advantage can be had from randomizing the delay to work in some communities in the second half of the grant period. There are strategies that will work to reduce domestic violence, but directors should not expect immediate results or unrealistic results.

7. *Negative results:* Harm to the community could result from findings stated negatively, or if individual responses became inappropriately public. Particular care will be taken during the presentation of the research findings that the information presented is sufficiently aggregated to ensure that no single community or individual can be identified. The steering committee, elders, and communities will decide how they want the information reported. Data sharing agreements and all publishing rights will be signed between the researchers and communities.
8. *Expectations of peer research/university community:* Researchers have an obligation to ensure their findings are properly interpreted and used appropriately. Findings should feed into advocacy, policy making, and intervention activities. Too often critical research findings never reach the attention of policy makers and advocates best positioned to use them. For these reasons, the steering committee, elders, and shelters will play key roles in applying the project's findings.

Relevant Prior Experience and Skills

The research team includes the Native Women's Association of Canada (NWAC), CIET at the University of Ottawa, an Aboriginal Steering Committee, two elders, and 12 Aboriginal communities.

NWAC has links with Aboriginal communities across Canada and advocates for equity oriented community-based participatory research involving Aboriginal communities. CIET has experience in community-based research in Aboriginal populations in Canada and conducts large scale epidemiological studies, training, and policy development related to sexual violence. The team brings in collaborators from the Universities of Ottawa, Toronto, and Saskatchewan.

The Steering Committee will be involved in all aspects of the project (design, data collection, analyses, interpretation, dissemination, etc.), to ensure meaningful involvement of the communities. The advisory com-

mittee prior to submission had academic, shelter, youth, and elder representatives from universities, RCMP, several Aboriginal women's shelters and friendship centres. The steering committee taking the project into its implementation phase comprised the directors of 12 participating shelters. It is anticipated that the Committee would meet once a year face to face, and by teleconference as required. Comparisons will identify best-practice solutions and learning about resilience of Aboriginal people. The budget allows a national meeting each year, coinciding with relevant national conferences. Annual meetings will allow team learning and transfer of successful models between provinces.

The project pays for staff to support the work in each shelter; the part time prevention convener/CBR will answer to the shelter director. Exchanges of trainees and community-based researchers will promote a national network of emerging Aboriginal researchers.

Two First Nations Elders guide the technical support team. Their participation in the project preparation and implementation provided mental, spiritual and emotional insights. They emphasized the importance of children and youth participating in all stages of the project, so that that intergenerational transmission of values and traditions can be continued. They are a vital link to traditional wisdom and will participate in the project for its duration.

The training and involvement of Aboriginal trainee researchers is integral to this research process. The project funds two First Nations PhD candidates. Capacity building also entails community involvement in discussions about the research problem and, importantly, in the development and implementation of intervention strategies. The evidence-based interaction among community service organizations will increase awareness of the social resources that can protect families.

Preliminary Data Showing Feasibility

Since 1995, CIET has built capacities in Aboriginal communities to enable them to design and carry out their own research. CIET works with all 5 national Aboriginal organizations and has trained CBRs in 250 Bands across the country: tobacco abuse among Native Canadian youth (Winnipeg, 1995); problems of urban Aboriginal youth (Victoria, 1996); substance abuse among youth of the James Bay Cree (8 communities, 1996, 1997); First Nations national youth inquiry into tobacco use (97 communities, 1996–7), First Nations youth resilience to HIV/AIDS (4 communities, 1998);

AFN evaluation of the Canada Prenatal Nutrition Program (80 communities, 2001–3); Aboriginal Community Youth Resilience Network (ACYRN) (12 eastern Mi'kmaw and 8 western Métis communities, 2005–9); and Aboriginal youth resilience to STIs and blood borne viruses (23 Treaty 8 and 4 urban communities). CIET also runs the Ottawa ACADRE, training Aboriginal researchers through Masters and PhD levels, and emphasizing scientific methods attuned to Aboriginal paradigms.

CIET's experience in Canada is not limited to Aboriginal communities. From 1998–2000, CIET led a Health Canada pilot project in the Atlantic provinces. The aim was to increase local capacity to plan strategically, access existing data, obtain local evidence, and put it to work for better health. Health regions focused on perinatal care and caring, youth risk and resiliency, breastfeeding, and heart health. Public health nurses received additional training; four of them pursued Master's degrees in epidemiology through the CIET capacity building program.

CIET's international work includes several projects on domestic violence.

- A series of studies led to the 2001 national youth survey of sexual violence in South Africa. Reaching 283,000 learners nationwide, the study explored the culture of sexual violence. The results were turned into curricular materials now included in schools in four of the nine provinces. The materials also reached radio audiences, educators, social workers, and NGOs.
- The groundbreaking social audit of abuse against women in Pakistan (2001–4) defined the extent of domestic violence and identified protective factors to guide locally generated prevention. CIET used results from 23,000 women respondents to raise awareness among communities and their leaders about abuse against women, options for preventive actions, and defined an action plan for the Government of Pakistan to help eliminate abuse against women.
- In Mexico in 2001, CIET interviewed all women of childbearing age in a predominantly Aboriginal town of 11,500 people, in the absence of their partners. No less than 21% reported a history of physical abuse and 5.6% reported physical abuse during the last pregnancy. Physical abuse during pregnancy was associated with violent attitudes towards children (Paredes-Solis et al., 2005).
- CIET has also conducted cross sectional studies of domestic abuse in 8 southern African countries, with funding from the European Union.

Ethical Considerations during Design and Implementation

General

We submitted the proposal for ethical review to the University of Ottawa REB. Permission to work in the community, usually from the Band council, will be obtained through the shelter before beginning training and preparations for fieldwork. Community discussions will involve social services personnel, councillors, and elders. These are well positioned to identify shortfalls of support mechanisms, and they will be the beneficiaries of the research results.

Informed consent of participants

The researchers will discuss objectives with CBRs in participating communities to ensure clear goals and research that flows from community beliefs and traditions. Prior to starting the facilitated self-administered questionnaire, CBRs will read the consent form to each participant, explain the instrument, that participation is strictly voluntary, that any question which proves uncomfortable can be skipped, and that they may stop at any time. For minors below legal age, parental consent will be required. Several shelters are concerned they may be blocked from hearing the voice of abused minors by parents who deny consent. The guidance from the elders on this project is that each community will need to choose an appropriate format for consent in these (hopefully few) cases. Once that is decided at community level, we will submit the solution to the REB for consideration. Where parental consent has been given but a minor declines to participate, the child's wish will prevail.

Confidentiality

The research will be administered in a way that guarantees confidentiality and anonymity as part of the inducement to disclose. Participants will be informed that their responses are confidential. No identifying marks or names will appear on the completed form. Focus groups and talking circles will not register any identities and participants will be asked to respect privacy and confidentiality.

Discomfort/distress from questions

The project identifies community and home factors that protect communities from domestic violence. The personal nature of these issues can make

responding to questionnaires uncomfortable. At the individual level, questions about violence could be injurious to the respondent. Harm to the community could result from research findings stated negatively, or if individual responses became inappropriately public. Before and after completing the questionnaire, respondents will be reminded of the availability of a counsellor at the shelter, and encouraged to make use of these services as appropriate.

Protection of interviewers

Since we will be working with and from the shelters in each community, we will have detailed information about any risks to interviewers. Fieldwork will proceed only with support and recognition from the Band councils, where these exist. We anticipate that CBRs will work together in each others communities, providing support and momentum for the community survey. Typically CBRs work within sight of each other, not entering the homes of people they interview.

Ownership, control, access and possession

All data gathered in this project will the property of the communities from which they came. However, the potential for breach of confidentiality increases with local data sets. We deal with this by accessing the data set on behalf of the community, answering their queries with anonymized tables with no fewer than five individuals in any cell. Paper records from which the data were derived (kept for a minimum of five years in case any of the results are challenged) are stored in accordance with a set of CIET guidelines for security, storage, and eventual destruction of paper records.

A *data sharing agreement* with each participating community will specify community ownership of data with data stewardship. This will allows access to results by the communities, while protecting the individual rights of people who participate. The project will also have to clarify and complement the usual interpretation of OCAP for application in this gender and victim sensitive context, where individuals who represent local decision taking may also be the perpetrators of domestic violence. A sample of this agreement follows.

Appendix 1. Sample Data Sharing Agreement

BETWEEN: CIETcanada, as represented by its Executive Director

AND: <Community name>

1. Preamble
It is acknowledged and respected that the right to self-determination of the First Nations, Métis and Inuit includes the jurisdiction to make decisions about research in their communities. The benefits to the communities, to each region and to the national effort should be strengthened by the research. Research should facilitate these communities to take control and manage their own community information and to assist is the promotion of healthy lifestyles, practices and effective program planning.

2. Purpose
This agreement formalizes an arrangement between CIET and <Community name> regarding the research process, protocols and products, including the data collected as part of the to the CIHR-funded project: *Community-led Reduction of Domestic Violence in Aboriginal Communities: Rebuilding from Resilience.* The project will identify and help to initiate community-led interventions that reduce domestic violence.

3. Background
Domestic violence is a well known problem in many communities, and Aboriginal communities are not exempt from this risk. This research project focuses on protocols assist communities in the design of their own interventions, and to measure the impact of these interventions in the reduction of domestic violence. The project will develop and test tools and procedures, develop proposals for and generate community buy-in to, further studies at prevention of domestic violence in Aboriginal communities.

4. Guiding Principles
1. The Rebuilding from Resilience project will build on existing skills and work with community members identified as community-based researchers as well as the project research team;
2. The community will be involved as partners in all aspects of the research. Feedback, input, participation in analysis and interpretation and com-

munication should always characterize the research relationship;

3. The survey participants will remain anonymous when the results are reported and their responses will be aggregated into a database to be housed at CIET;
4. <Community name> will own and control the data. CIET will provide data stewardship, accessing the data only on the terms agreed; and
5. No prejudice: all communication efforts should benefit <Community name> and not cause harm in any way.

5. Roles

The parties therefore agree that the *Rebuilding from Resilience* project will take place as follows:

1. <Community name> will participate in the conceptualization and design of instruments, and determine their suitability to local conditions;
2. <Community name> will name a community-based researcher to be trained and paid by the project;
3. <Community name> will conduct the baseline and follow-up surveys through the duly trained community-based researcher(s);
4. Following the agreed protocol for data security, the questionnaires will be transmitted from <Community name> to CIET;
5. <Community name> will, with support from CIET, generate a discussion of the results with a view to identifying local solutions;
6. CIET will provide financial support for a part time researcher named by <Community name> for two years;
7. CIET will provide training in questionnaire design, implementation of questionnaires, data entry, aspects of epidemiological analysis and evidence-based action planning;
8. CIET will arrange digitization of the questionnaires under secure and anonymous conditions;
9. CIET will support initiation of the community-led interventions emerging from this process and, where the action is not within financial reach of the Project, at the request of the community, CIET will assist in development of formal proposals for external funding; and
10. In its role as data steward, CIET will maintain the data according to the principals and provisions set out in this agreement.

6. Use of information

The data from this project will only be used to meet the goals and objectives of the Rebuilding from Resilience project. The goals and objectives of the Rebuilding from Resilience are:

Goal

Enable the participating Aboriginal communities to examine domestic violence, using scientific yet culturally appropriate methods to identify community-led interventions that reduce violent behaviours.

Objectives

1. Build partnerships with communities to develop and to test culturally appropriate methods that characterize resilience protecting against domestic violence among Aboriginal people, with a view to developing unbiased prevention trials based on this resilience;
2. Develop and test culturally appropriate protocols to formulate evidence-based community-led interventions that reduce domestic violence in Aboriginal communities;
3. Implement the pilot community-led interventions and develop a framework to assess their impact at the individual, family and community level.

7. Confidentiality

As custodians of this data, <community name> and CIET agree to safeguard the privacy and security of all information containing personal and/or community identifiers. Permission from survey participants will be obtained prior to collecting personal information. Survey questions of a personal nature will remain completely anonymous.

8. Further Disclosure

<community name> and CIET will not release the information collected for any purpose unless agreed to by the parties.

9. Changes to this Agreement

Amendments to this agreement may only be made in writing and agreed upon by both parties.

IN WITNESS WHEREOF THE PARTIES HAVE SIGNED THEIR NAMES effective

The _____day of _____, 2009.

_____
Executive Director
CIETcanada

_____
Witness

_____
(Position of signer)

_____
<Community name>

_____
Witness

References

Andersson, N. (2006). Prevention for those who have freedom of choice or among the choice-disabled: Confronting equity in the AIDS epidemic. *AIDS Research and Therapy, 3*, 23.

Anthony, E.J. (1987). Risk, vulnerability and resilience: An overview. In: E.J. Anthony and B.J. Cohler, eds., *The Invulnerable Child.* New York: Guilford Press, pp. 3–48.

Bennett, M. (2005). *Annotated Bibliography of Aboriginal Women's Health and Healing Research.* Vancouver: Aboriginal Women's Health and Healing Research Group, pp. 146-148.

Blackstock, C., Trocmé, N., and Bennett, M. (2004). Child maltreatment investigations among Aboriginal and non-Aboriginal families in Canada. *Violence against Women, 10*(8), 901–916.

Canadian Feminist Alliance for International Action. (2003). Canada's failure to act: Women's inequality deepens. Submission to the UN Committee on the Elimination of Discrimination against Women on the Occasion of the Committee's Review of Canada's 5th Report, pp. 41, 42.

Campbell, J.C. (2002). Health consequences of intimate partner violence. *Lancet, 359*, 1331–1336.

Cohen, M. and Maclean, H. (2003). Violence against Canadian women. In: M. DesMeules and D. Stewart, eds., *Women's Health: Surveillance Report.* Ottawa: Canadian Institute for Health Information, pp. 45–46.

Cokkinides, V.E., Coker, A.L., Sanderson, M., Addy, C., and Bethea, L. (1999). Physical violence during pregnancy: Maternal complications and birth outcomes. *Obstetrics and Gynecology, 93*(5 pt 1), 661–666.

Dion Stout, M. (1996). Stopping family violence: Aboriginal communities enspirited. In: J.R. Ponting, ed., *First Nations in Canada: Perspectives on Opportunity.* Toronto: McGraw-Hill Ryerson Ltd.

—— (1998). Stopping family violence: Aboriginal communities inspirit. In: J. Rick Ponting, ed., *First Nations in Canada: Perspectives on Opportunities, Empowerment and Self-Determination.* Whitby, ON: McGraw-Hill Ryerson.

Dion Stout, M. and Kipling, G. (2003). Aboriginal Healing Foundation. *Aboriginal People, Resilience and the Residential School Legacy.* Ottawa: Aboriginal Healing Foundation Research Series, Canada.

Dodson, P. (1991). *Regional Report of Inquiry into Underlying Issues in Western Australia 1. Royal Commission into Aboriginal Deaths in Custody.* AGPS. Canberra.

Eisenstat, S.A. and Bancroft, L. (1999). Domestic violence. *New England Journal of Medicine, 341*, 886–892.

Family Violence Initiative. National Clearinghouse on Family Violence. (2002). http://www.phac-aspc.gc.ca/nc-cn.

Green, Karen. (2001). Family violence in Aboriginal communities. *B.C. Institute Against Family Violence Newsletter, 8*(2).

HeavyRunner, I. and Marshall, K. (2003). Miracle survivors: Promoting resilience in Indian students. *Tribal College Journal, 14*, 15–18.

Jessica, B. (2004). As if Indigenous knowledge and communities mattered: Transformational education in First Nations communities in Canada. *American Indian Quarterly, 28*(3), 4454–4479.

Klein, R. (1998). *Multidisciplinary Perspectives on Family Violence*. London: Routledge.

LaRocque, E. (1996). The colonization of a Native woman scholar. In: Christine Miller and Patricia Chuchryk, eds., *Women of the First Nations: Power, Wisdom and Strength*. Winnipeg: University of Manitoba Press.

MacMillan, H.L. and Wathen, C.N. (2005). Family violence research: Lessons learned and where from here? *Journal of the American Medical Association, 294*(5), 618–620.

MacMillan, H.L., Wathen, C.N., Jamieson, E., Boyle, M., McNutt, L.A., Worster, A., Lent, B., Webb, M., and McMaster Violence Against Women Research Group. (2006). Approaches to screening for intimate partner violence in health care settings: A randomized trial. *Journal of the American Medical Association, 296*(5), 530–536.

Mahajarine, N. and D'Arcy, C. (1999). Physical abuse during pregnancy: Prevalence and risk factors. *Canadian Medical Association Journal, 160*, 1007–1011.

Memmott, P., Stacey, R., Chambers, C. and Keys, C. (2001). *Violence in Indigenous Communities*. Canberra: Attorney General's Department.

Metropolitan Action Committee on Violence Against Women & Children METRAC, 2001.

Ministry of Social Development Te Rito: New Zealand Family Violence Prevention Strategy. Wellington. 2002.

Monture-Okanee, P.A. (1995a). The violence we women do: A First Nations view. In: *Thunder in My Soul.* Toronto: Women's Press.

—— (1995b). The roles and responsibilities of Aboriginal women in reclaiming justice. In: *Thunder in My Soul: A Mohawk Woman Speaks*. Halifax: Fernwood

Publishing.

O'Leary, K. (2000). Are women really more aggressive than men in intimate relationships? *Psychological Bulletin, 126*(5), 685–689.

Paredes-Solís, S., Villegas-Arrizón, A., Meneses-Rentería, A., Rodríguez-Ramos, I.E., Reyes-de Jesús, M.L. and Andersson, N. (2005). Violencia física contra la embarazada: un estudio con base poblacional en Ometepec, Guerrero, México. *Salud Pública México, 47*, 335–341.

Reading, J. and Nowgesic, E. (2000). Improving the health of future generations: The Canadian Institutes of Health Research Institute of Aboriginal Peoples' Health. *American Journal of Public Health, 92*(9), 1396–1400.

Reid, G., Stewart, M., Mangham, C., and McGrath, P. (1996/97). Resiliency: Implications for health promotion. *Health and Canadian Society, 4*(1), 83–116.

Saskatchewan Justice. (2006). Fact Sheet in Crime Statistics in Canada 2005. http://www.saskjustice.gov.sk.ca/pdfdocs. July 2006.

Schmiedel, Laponte S. (2006). The hidden face of violence. *Capital* 2006: 62–65.

Wathen, C.N. and MacMillan, H.L. (2003). Interventions for violence against women: Scientific review. *Journal of the American Medical Association, 289*, 589–600. available at: http://jama.ama-assn.org/cgi/reprint/289/5/589.pdf