SAR PREVENTION REVIEW

Approved by ICSAR July, 1997

Results in Brief

The SAR Prevention Review revealed that there is no reliable information base by which to inform management of the impacts and the results of prevention activities. Moreover, the review indicates there is a need for improved interfacing of the separate prevention practices through increased information sharing. Prevention practitioners were very receptive to sharing lessons learned, best practices and receiving expert advice on other prevention activities.

The acronym **S.M.A.R.T**. embodies the future approach to SAR prevention recommended in this report. In short, the future of SAR prevention should be:

Specific - for future prevention activities to succeed - clear objectives and formal design procedures are needed along with a clear and detailed understanding of the target audiences.

Measurable - no clear picture of the impact and results of SAR prevention activities was discernible in the review. However, progress in the evaluation of prevention activities is being made in other areas such as crime prevention, AIDS prevention and health promotion. Thus, the techniques for conducting good evaluation do not need to be invented, two decades of evaluation research have provided a basic conceptual framework for undertaking such efforts. Every effort should be made by the SAR Program to build on past progress to ascertain results and impact information. The evaluation of SAR Prevention activities is not an easy task. It will take time and it will also require a long-term commitment of effort and resources. However, given the objective of reducing loss of life and injury, the commitment of adequate resources for careful evaluations of the effectiveness of SAR prevention programs should be viewed as an investment in the future.

Attainable - resources and expertise are needed for prevention activities to succeed now and in the future. However, within limited budgets it is not always possible to have the ideal resources for proposed education and promotion activities. Several solutions are offered as remedies for this problem: continued sharing of information and ideas on best practices amongst and between SAR departments should be pursued with vigor; using experts from other prevention areas to advise on efficient and economical approaches; referral at the design stage of a prevention activity to policy and front line staff in order to ensure that the proposed intervention is necessary and will make a difference; establishing partners to serve as alternate message delivery agents and as sources of funding; and understanding the culture and behavior of the targeted audience is key to attaining success in the "influencing" game.

Realistic - prevention in the form of education and information is a long term affair. Management cannot expect to see "attitudinal or behavioral" change overnight as most prevention efforts require a long-term commitment. Carefully planned and carefully measured/evaluated, education and information activities will bring results, but over time.

Timely - the business adage, that you have to produce the right product in the right manner at the right time and provide it to the right people, holds true for prevention activities. This review urges SAR managers to adopt a social marketing model in order to produce timely products which will provide the desired change in attitude/behaviour sought.

Review Scope

The SAR Prevention Review focuses on the non-regulatory prevention activities of education and promotion undertaken by the Interdepartmental Committee on Search and Rescue (ICSAR) departments. Appendix A, is a summary of the individual ICSAR departments' responsibilities for non-regulatory prevention activities. These activities cost approximately 7 million operating dollars per year out of the total 235 million annual program budget.

Study Objectives

On October 10, 1996, three study objectives were identified and approved by ICSAR:

Objective 1

Examine issues and current practices in the overall approach, design, delivery and evaluation of non-regulatory SAR Prevention activities carried out by ICSAR members.

Objective 2

Examine lessons learned and 'Best Practices' in the overall approach, design, delivery and evaluation of non-regulatory SAR Prevention activities carried out by ICSAR members.

Objective 3

Determine how to apply lessons learned and 'Best Practices' to non-regulatory SAR Prevention activities in the future, through NSS, NIF and individual ICSAR departments.

Led by the three study objectives, the Review primarily focused on how to develop the SAR Prevention Program in the future.

Review Methodology

Multiple lines of evidence were used in this review study. A comprehensive document review and interview program as well as an Expert Opinion Panel and a Focus Group (ICSAR Sub-Committee workshop) were conducted. However, the usual data analysis associated with reviews was not possible because of lack of data.

Summary of Findings

A key element of each of the review methodologies was to capture information on the 'best practices' of prevention services in general. The inclusion of a 'best practices' methodology in this review was a new initiative for the ICSAR Review Sub-Committee and will hopefully serve as a basis for developing further expertise in this area.[1]

The following summarizes the findings contained in the document review, interviews, expert panel and workshop session. Technical papers on the document review, interview sample and expert panel are available and provide detailed information against the study objectives.

These findings reflect the level of the study effort requested by ICSAR which was that objectives 1 & 2 should consume no more than 30% of the review study effort and objective 3 should consume the remaining 70%.

Objective 1

Examine issues and current practices in the overall approach, design, delivery and evaluation of non-regulatory SAR Prevention activities carried out by ICSAR members.

The focus of this study objective was to provide information on issues and current practices of SAR Prevention efforts. Although, narrowly focussed, this study objective provides the starting point for looking toward the future.

Approach (Overall conceptual vision and strategy)

Individual ICSAR departments support their own prevention activities. These activities vary from department to department with some departments offering much more comprehensive SAR prevention education and promotion activities than others.

No coordinated vision regarding SAR Prevention and no clear understanding of individual departmental roles within the larger SAR Prevention framework currently exists. As such, little if any, sharing of information regarding prevention theory and practice takes place between SAR prevention practitioners.

Design (Formal and detailed program planning)

Formal design processes are lacking for most SAR prevention programs.

C   SAR Prevention practitioners with the most comprehensive programs appear to determine their program priorities through the analysis of SAR incident data. In one ICSAR department, this has led to the establishment of a risk management framework. However, due to incomplete data, many prevention activities end up being founded on reasonable assumptions rather than on the specific data required to design effective prevention programs (see discussion on required information under Study Objective two, Best Practices, page 6, para 1).

C   Concern was expressed by SAR Prevention practitioners over a lack of monetary and human resources (expertise) needed to effectively carry out SAR prevention activities.

Delivery (Implementation)

Factors critical to project success such as the marketing and distribution of prevention services, generally receive little attention.[2]

Evaluation (Formative, Process, Impact)

The majority of SAR Prevention programs have limited, if any, mechanisms in place to measure the impacts of their activities. It is not definitively known if SAR prevention efforts are making a difference as the data required to measure the impact of education and promotion activities is seldom collected.

Objective 2

Examine lessons learned and 'Best Practices' in the overall approach, design, delivery and evaluation of non-regulatory SAR Prevention activities carried out by ICSAR members.

Building on an understanding of the issues and concerns outlined in study Objective 1, Objective 2 focuses on how SAR prevention activities at present, can be improved. Suggestions were drawn from the SAR prevention community, but also, suggestions were gathered from other prevention activities exemplifying the 'best' in their processes and practices. In short, study Objective 2 offers some solutions to present problems.

Approach (overall conceptual vision and strategy)

The basic objective of education and promotion activities is to influence human attitudes and behaviours. Successful interventions base their prevention approaches on a thorough understanding of the 'influence'

process, risk management processes in human thought and activity and an examination of the behaviour to be changed. These elements are the basis for constructing an approach. Specific 'best practices' in this regard are:

C   'SAR Prevention' needs to be clearly defined. This may be the first step towards formulating a conceptual vision/strategy aimed at coordinating SAR Prevention efforts on a national scale. It is important to establish a common vision for prevention activities amongst ICSAR members and to define the precise role of the various actors in this overall vision.

C   In certain cases, the marriage of other approaches (e.g. legislation, insurance, regulation, etc.)with educational and promotional activities may be required.

C   It is important to base SAR Prevention interventions on an understanding of the causal factors leading to incidents. To this end, a surveillance system that collects this type of data needs to be implemented. Ideally this system should capture information on the client population in terms of magnitude and the nature of the activity they were involved in which led to a SAR incident. In addition, the causes of incidents (chain of events) that placed these activities in a SAR situation need to be determined and recorded. This information is needed in order to direct the nature and content of the planned intervention. An analytical model such as the Haddon Matrix may then be used to plan the intervention.[3]

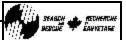*Design* (Formal and detailed program planning)

'Best practice' examples in prevention design included the following: statements of the intended client sub-population for each SAR prevention service being offered; measurable process and outcome objectives; and the specific interventions to be utilized and their components. These elements provide the prevention activity's design, implementation, and evaluation processes with adequate direction and focus.

C   One particular design criteria stood out: SAR Prevention activities need to tailor messages to specific audiences and their needs.[4] Knowing the "culture" that you are trying to influence and how best to influence this culture is very important.

Delivery (Implementation)

It is important to educate the media in order for them to portray SAR incidents as preventable occurrences rather than as acts of fate. This method of reporting has been coined 'educational journalism'.

Who delivers the message can be a critical factor in successfully influencing the targeted audience's attitude or behaviour. For example, using members of peer groups or front-line departmental staff are examples

of this 'best practice'.

Partnerships between prevention program practitioners and private sector organizations have proven to be effective as an alternate or complimentary forms of information dissemination.[5]

In order to accomplish program goals and objectives it is important to have sufficient resources with which to implement prevention programs. This may entail either procuring alternate resources such as sponsorships, or restructuring goals and objectives to meet available resources[6].

C   'Social marketing', a modified form of conventional product and service marketing which has proven to be a potent element in health promotion campaigns intended to reach, inform and influence people, can serve as a valuable 'best practice' in SAR Prevention - education and promotion activities. There are seven distinct steps to the social marketing approach: situation analysis, setting objectives, allocating resources, managing program elements, liaison with partners, measuring effectiveness, and follow-up.

Evaluation (Formative, Process, Impact Evaluations)

The evaluation of SAR prevention activities is not an easy task. Throughout the Review's interviews, document review, expert panel and workshop session, it became clear that the effort to "measure" prevention activities was daunting to some and a waste of time to others. However, progress toward defining how to establish impact and results of prevention activities has been made in other areas such as AIDS prevention, crime prevention and health promotion.

The following is a synthesis of their 'best practice' tenets in evaluation. Without question, these suggestions require resources and effort; however, this commitment should be viewed as an investment in the future. Evaluation findings serve as a valuable reserve of knowledge in terms of 'lessons learned' and 'best practices' for future project applications.

C   In order to confirm a prevention project's success, it must be established whether the project was implemented as planned and whether the stated objectives were met. As such, certain evaluation mechanisms that address these questions should be included as part of the program plan.

C   A 'formative' evaluation needs to be conducted as part of the program plan in order to understand the need for the intervention and to make decisions about how to implement it (e.g. to decide what delivery mechanisms work best for the client audience). This is a special type of evaluation that occurs at an early stage of the project cycle.[7]

C Once an intervention has been implemented programs need to be subjected to a careful 'process' evaluation by project management to ensure that services are delivered according to plan. Ordinarily this type of evaluation is to be carried out at some point in the life cycle of a project to determine how and how well the delivery goals of a program are being met. [8]

C 'Impact' evaluations should be conducted in order to determine program results. These evaluations involve evaluating the audiences' response in terms of attitudinal impact achieved.[9] This type of evaluation tends to be more reliable if conducted by qualified personnel outside the program realm.[10]

Objective 3

Determine how to apply lessons learned and 'Best Practices' to non-regulatory SAR Prevention activities in the future, through NSS, NIF and individual ICSAR departments.

The following outlines, in the opinion of the review team, "what" should be done (Observations) and "how" it should be done (Recommendations).

Approach Planning forum needed

<u>Observation</u>

SAR Prevention practitioners should develop a forum(a) to share information and practices as well as information on best practices in other types of prevention activities (such as health promotion and crime prevention).

To this end, several possible forums were discussed at the review workshop including creating a separate ICSAR prevention sub committee and the establishment of a planning forum to discuss and coordinate issues and planned interventions relating to SAR prevention.

Recommendation 1:

It is recommended that the ICSAR Coordination Subcommittee hold an annual prevention planning meeting . The purpose of this special Subcommittee meeting should be to allow ICSAR prevention members to share planned activities and approaches and to share lessons learned on past years activities. A panel of experts (similar to those experts used in the review) should be invited to assist the members and provide insight into similar activities outside of the SAR prevention world.

Approach

improve planning information

Observation

Throughout the review, the necessity to have information on the type and severity of incidents and their causality was seen to be a critical ingredient in carrying out effective SAR prevention activities. In developing a strategic approach to prevention, the review of best practices, expert discussions and the document review were unanimous in advocating the need to analyze data on causality and type and severity of incidents. Collecting this type of data is the foundation for deciding whether preventions activities may be the right type of intervention and how the intervention should proceed. Analytical frameworks for reviewing the information exist, the Haddon Matrix being one of the best known.

For SAR prevention, the requirement for the future should be to improve "needs" information and the challenge is to overcome any additional resource implications that improving data may pose. A best practice example in this regard is the Lifesaving /Red Cross initiative to create an economical and effective surveillance system using coroner's information. The SAR program has a unique strength in this regard in that pooling the efforts of six departments with a view to improving the information system has a better chance to succeed than acting individually.

Recommendation 2:

It is recommended that a system(s) similar to the surveillance system developed for the Lifesaving Society and the Red Cross Society be developed for compiling data on the cause of SAR incidents, the targeted population and its nature and the need for prevention interventions. This system should be developed as a partnership endeavor between ICSAR departments.

It is further recommended that the ICSAR, acting as a partnership, agree on the use of an analytic tool such as the Haddon Matrix which will provide a common planning framework for understanding how prevention activities should use the data collection.

Approach

develop a program based objective and an overall message

Observation

As pointed out at the outset of this review, the SAR prevention program is carried out on an individual departmental basis. The exercise of reviewing best practices both within the SAR program and in other prevention areas demonstrated that the individual efforts by SAR departments all have some common

objectives and elements. It was also demonstrated that enthusiasm exists amongst SAR prevention practitioners to work together in order to better all departmental efforts.

Specifically, actions such as the pooling of ideas and approaches to prevention activities and the sharing of best practices and available expertise were identified as useful and value added activities. However, a framework is needed to develop where practical, the overall goal and objective of SAR Prevention and to provide assistance on how to better coordinate efforts. The start of a more communicative and cooperative approach should be agreement on an overall common goal (e.g. of a safer culture? or to minimize or eradicate loss of life?) and an overall message (for example, one prevention program examined in the review announces that 90% of accidents are preventable and asks that people not cross the "stupid line"). Developing the overall objective and message should not be viewed as a bureaucratic "nicety" but a concrete step towards solidifying the enthusiasm of SAR prevention practitioners to work together.
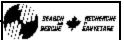
Recommendation 3:

It is recommended that a vision for SAR prevention be developed at the program level. The vision should have two basic tenets - an overall objective providing the bottom line goal of prevention activities and a corresponding "cultural change" message.

Design
better access to expertise and the use of generic models and improved design processes

Designing an intervention to influence and change attitudes/ behaviours is a process requiring specific expertise in social psychology and social marketing. An equally important ingredient in designing SAR prevention activities is knowledge of different sub populations in the SAR world and applicable policies and regulations which may affect these groups. Access to this expertise and knowledge at the design stage is critical and has to be accomplished within the current confines of having to provide timely products with limited resources. Obtaining adequate access to expert knowledge can therefore be a major challenge.

Within the review of best practices, one innovative practice was identified which may address this particular challenge. Natural Resources Canada's development of a Research and Development Impact Assessment Network between itself, other departments and industry, has some direct applicability to the SAR prevention world. If ICSAR departments were able, as a group, to finance a similar venture, which would allow, at the design stage, coordination through on-line computer access or contacts to in person consultations with experts in social marketing and social psychology, a very useful service would be created. Preliminary analysis of the cost of financing such a network appear to be reasonable and the

benefits high.

Access to, and use of other successful models in similar areas in designing a SAR prevention intervention are equally useful. Among the best practices identified in the review which should be used as generic design models   are: applying cost benefit analyses to assess programming options, making use of checklists to ensure program design is on track and adopting 'social marketing' processes to ensure a holistic approach to SAR Prevention program design.

Recommendation 4:

It is recommended that a process be created which allows access to experts in other prevention areas and to psychology and social marketing experts for all ICSAR prevention practitioners. Consideration should be given to developing access through a partnership of ICSAR practitioners whereby referral to the experts occurs either in person (in a planning forum) or via online computer access at the design stage of an intervention.

In addition generic models proven to work in other fields, then tailored to SAR Prevention, should be utilized and the funding of future SAR Prevention initiatives (e.g. NIF, individual ICSAR departmental funding, etc.) should be contingent on the inclusion of a formal design phase, including mechanisms to evaluate the impact of the program.

Evaluation
an under used and under-valued tool

Evaluation of prevention activities is a neglected tool for most SAR prevention practitioners. It is seen as requiring time, expertise, more information than is currently available and additional resources; all items which are in short supply. Evaluation also suffers from a negative image - few SAR prevention practitioners see it as adding value to their work.

The reality is that given the right tools and used in appropriate ways, evaluation should, in the future, be an essential tool for SAR prevention managers. A review of how evaluation is utilized in other prevention practices validates that with a bit of innovation and commitment, evaluation can reach the deserved status of "useful". Firstly, the review revealed that evaluation should not be viewed as only a "post action" tool for assessing impact and results. Rather, successful prevention practitioners see it as an element in the total management process (i.e. evaluation mechanisms should be used for formulating the design of the intervention, monitoring the intervention once it is implemented and for assessing impact). However, impact evaluation is still a contentious subject for many managers of prevention. In today's fast paced world, the need to have quick and concrete results statements often make the difference between a

program being funded or not . Unfortunately, obtaining impact and results information on prevention activities does not necessarily fit into the "quick and easy to obtain" mode. The realization that assessing the impact of the "influence" process takes time, has to be accepted when prevention activities are funded.

Investment in improved evaluation for SAR prevention activities must address the constraints of a lack of resources and available expertise and a paucity of measurement data. These challenges are being met in other areas in a variety of innovative ways. For example, meeting the resource challenge in one area means that evaluations are conducted at reduced costs by utilizing graduate students vice expensive staff resources. Other prevention areas are attempting to address the shortfall (and cost of collecting) information for evaluation purposes by obtaining representative samples of project impacts versus wider program surveys.

Despite the innovations and progress made in other areas, findings in this review indicate that improving evaluation of SAR prevention will inevitably entail some investment of additional resources. Suggesting expenditure of more resources will likely be unpopular; but the reality is that obtaining information for both short term and long term results on prevention activities is essential. As noted earlier in the section under "approach", information on causality and type and severity of incidents is important in the design of projects. Such information is equally important for establishing long term trends and results. Without this type of information, it will be virtually impossible to know if attitudes and behaviour patterns have changed and that the incident rate is correspondingly down.

Recommendation 5:

Along with other recommendations in this review which focus on improving information systems and the clarity and focus of prevention objectives, it is recommended that evaluation components become an integral part of all SAR prevention interventions at all stages of the project.

It is further recommended that no prevention project be funded unless it contains an evaluation plan.

Appendix A - Summary of Individual ICSAR Department Activities

Individual SAR departments support their own prevention programs. These programs range from department to department, some offering much more comprehensive programs than others. A summary description of these individual efforts follows:

Department of Fisheries and Oceans- Canadian Coast Guard

Prevention activities are carried by the Office of Boating Safety, the Rescue and Environmental Response Branch at headquarters and the regions, volunteers, associations and other groups involved in marine safety.

Canadian Coast Guard (CCG) uses a variety of methods to communicate its safety boating message: courtesy inspections; marine safety related publications and audio-visual safety material; displays; talks; presentations at yacht clubs, marinas, schools; safety promotion campaigns; and, a 1-800 information hotline.

The design of SAR prevention programs is founded on the analysis of data. It is important to note however that the CCG's database is largely incomplete so often programs are founded on reasonable assumptions rather than data trends. Other factors in project design such as marketing and distribution generally receive little attention.

Transport Canada

The Department of Transport, through Transport Canada Aviation's System Safety Directorate, actively seeks out hazards and uses this information to develop safety awareness educational programs aimed at reducing SAR aviation incidents in Canada. There are six Regional Aviation Safety Officers (RASO's) who are responsible for the delivery of these programs in their regions.

Transport Canada Aviation uses a variety of methods to communicate its aviation safety message. These methods consist of publications (aviation safety newsletters), safety management programs, videos and courses.

Department of Canadian Heritage- Parks Canada

Canadian Heritage through Parks Canada is responsible for the coordination and delivery of education and SAR Prevention within its parks. Parks across Canada each have their own individual safety programs akin to their demographics. In recent years however, a *national* Risk Management Program has been

developed by Parks Canada which places an emphasis on visitors being more self-reliant and taking responsibility for their own personal safety. The Visitor Risk Management Guide, which integrates risk management principles into existing "public safety" programs and includes SAR prevention measures, has been adopted by Parks nation wide. Through its Visitor Risk Management framework, individual parks estimate risk in order to assist with their public safety planning.

Through visitor education, brochures, pamphlets, videos, and school community presentations, Parks Canada communicates its safety message.

Solicitor General - RCMP

The RCMP's safety and SAR prevention messages are communicated through the distribution of brochures, the establishment of certain programs, and presentations to the public. As well, the RCMP participates in the delivery of marine SAR prevention and safety education programs to civilian groups involved in activities such as recreational boating and fishing. Its most notable contribution in safety education that corresponds to SAR Prevention, is the Hug-a-tree program launched in October 1996.

Environment Canada-Atmospheric Environment Service

Environment Canada through the Atmospheric Environment Service provides aviation, land and marine weather products and services for the prevention of SAR incidents.

AES communicates its safety message through weather guides, weather broadcasts and answering weather information requests via fax, the Internet and pre-recorded telephone weather messages.

National Defence

The Department of National Defence, through its marine, land and air rescue coordination efforts has an indirect involvement on SAR prevention activities. DND's involvement in SAR Prevention activities include: presentations to various groups on lessons-learned from SAR incidents; training for CASARA personnel; tours of facilities; an advisory role to other SAR counterparts engaged in prevention; information dissemination on past incidents to those counterparts engaged in SAR prevention; and use of the media in which DND discloses incident details that serve to educate the public at large.

Endnotes

1. 'Best Practices' refer to the processes, practices and systems identified in private and public sector organizations that perform exceptionally well and are recognized as improving performance and efficiency in specific areas. In the SAR Prevention Review, the 'best practices' methodology, collected , reviewed and highlighted evidence of success in the design and delivery of prevention services in SAR and other fields.

2. KPMG, *Review of Effectiveness of New Initiatives Fund*, Vol. 1 (May 15, 1996)pg.32.

3. It is now recognized that fatal or severe injuries result when certain combinations of personal, environmental and equipment risk factors or determinants interact to raise the probability of an incident occurring. The principles of injury control emphasize consideration of various types of interventions to modify, personal, equipment and environmental risk factors during the three time phases of an incident. These include the periods before, during, and after the occurrence of an injury event. The **Haddon matrix** provides a structure for consideration of multiple approaches to technical aspects of injury prevention structured by risk factors and time. The cross-tabulation by Haddon of the three major categories of injury intervention with the three major time phases around the injury incident, provide a nine cell matrix that has been a powerful stimulus to lateral thinking in planning interventions (Red Cross Drowning Report, 1996:162).

	Personal	*Equipment*	*Environment*
Pre-Incident (Prevention)	Avoid alcohol consumption	Boat with safety equipment in order	Frequent weather reports on local radio
Incident (Survival)	swimming ability	PFD's	
Post-Incident (Response)	knowledge of CPR	First-aid kit	Communication and transportation network

For more details on Haddon's Matrix and its applications consult the, "National Drowning Report", Canadian Red Cross Society, 1996.

4. A psychographic analysis of the targeted population is generally the most effective means of identifying what issues are important to the audience and what messages they will likely respond to. This analysis should be combined with consumer/client behavioural research, as well as research relevant to changing risk-behaviours.

5. In some cases, prevention programs may be 'piggy-backed' onto already existing mediums thereby reducing costs and ensuring the distribution of the message to an already established audience.

6. Sponsorship is a relationship in which one party, the sponsor, supports the activities, program, or cause of the other partner, in return for some type of recognition. *For more on this topic* see "Corporate Sponsorship" by J. Mintz and G. Wallace (1994).

7. A formative evaluation involves a small-scale effort to identify and resolve intervention issues before a program is largely implemented. "What communication's medium works best for the targeted audience?" is the salient question for formative evaluation.

8. A process evaluation addresses two broad questions, "What was done?" and "To whom and how?" When interventions continue over a long period of time, as may be the case for some SAR prevention activities, measurements at several times are warranted to ensure that components of the intervention continue to be delivered to the right people at the right time.

9. This type of evaluation assesses the effectiveness of a prevention program and is used to answer the question, "Do the interventions make a difference?" Like process evaluation, this evaluation can also be conducted at intervals during an on-going program. There are several ways in which these evaluations can be conducted. Ideally to assess the effect of a prevention program on program participants, one would like to know what would have happened to the same participants in the absence of the program. Because it is not possible to make this comparison directly, inference strategies that rely on proxies have to be used. The most common of these strategies is the before and after study (i.e. pre-test, post-test strategy). In this design, pre-intervention measurements are compared with post-intervention measurements to detect change in the outcome variables that the intervention was designed to influence. Another strategy is the control group design in which the control group is selected by matching non-participants to participants in the group exposed to the program on the basis of selected characteristics. The groups are then tested in order to attribute program effects. Possibly the best strategy, in terms of resource efficiency and accuracy, is that of randomized experiments. In such experiments, one singly constituted group is established for study. A subset of the group is then randomly chosen to receive the prevention activity, with the other sub-set becoming the control group. Randomized experiments provide for clear causal inferences and effectively answer the questions "Does the intervention work?" and " What works better?"

10. Technical Report- Expert Opinion Panel Proceedings, SAR Prevention Review (February, 1997)pg.13.