

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL CENTER FOR INJURY PREVENTION AND CONTROL
ADVISORY COMMITTEE FOR INJURY PREVENTION AND CONTROL

Advisory Committee for Injury Prevention and Control

Minutes of the Forty-Sixth Meeting

June 8-9, 2005

Summary Report

The forty-sixth meeting of the Advisory Committee for Injury Prevention and Control (ACIPC) took place on Wednesday, June 8, 2005, from 1:00 p.m. to 5:30 p.m., and Thursday, June 9, 2005, from 8:30 a.m. to 3:30 p.m., with Dr. Carolyn Fowler serving as Chair.

The fourteenth meeting of the Science and Program Review Subcommittee (SPRS) took place on Monday, June 6, 2005, from 6:30 p.m. to 8:00 p.m., and Tuesday, June 7, 2005, from 9:00 a.m. to 5:30 p.m., with Dr. John Corrigan serving as Chair.

The fourth meeting of the Subcommittee on Intimate Partner Violence and Sexual Assault (SIPVSA) took place on Wednesday, June 8, 2005, from 10:00 a.m. to 11:30 a.m., with Ms. Anne Menard serving as Chair.



Wednesday
June 8, 2005

Early Afternoon General Session (Closed to the Public)

Vote on Results of Secondary Review

*Ms. Louise Galaska, Executive Secretary
Advisory Committee for Injury Prevention and Control (ACIPC)*

Ms. Louise Galaska welcomed ACIPC members to Atlanta and began the discussion of the results of the SPRS secondary review by ensuring that there was a quorum. She asked persons who were not voting members of ACIPC or federal employees to excuse themselves from the room for the closed portion of the meeting. She then turned the meeting over to Dr. Lynda Doll.

*Dr. Lynda Doll, Executive Secretary
Science and Program Review Subcommittee (SPRS)*

Dr. Lynda Doll explained that SPRS met for the last day and a half to review the results of the study section review of all grant applications for Fiscal Year (FY) 2005 on scientific merit. SPRS considers the results of the initial review group and makes a recommendation to the Director of the National Center for Injury Prevention and Control (NCIPC) regarding which application(s) in each of the RFAs should be funded. She introduced Dr. Hendricks Brown, co-Chair of SPRS, to present the committee's recommendations and call for ACIPC's votes.

*Dr. Hendricks Brown, Co-Chair
Science and Program Review Subcommittee (SPRS)*

Dr. Hendricks Brown acted on behalf of the SPRS Chair, Dr. John Corrigan, who was unable to attend the ACIPC meeting. He described SPRS's role, which is to perform the secondary review of grant applications received in response to NCIPC's program announcements that have been recommended by NCIPC for further consideration. The secondary review consists of a discussion of the programmatic merits of the applications. It is not another review of the scientific and technical merit of the applications.

On May 6-7, 2005, SPRS convened to review and vote on staff recommendations to fund the applications that received a qualifying priority score and to discuss justifications to fund out of rank order. ACIPC must hear the results of the review and vote on the recommendations that resulted from it. This review session is closed, Dr. Brown emphasized; therefore, any persons having a conflict of interest with any application must recuse themselves from the discussion of that application. Institutions and Principal Investigators (PIs) under consideration were displayed at the beginning of each review so that members could determine whether they had any conflicts of interest. When the confidential voting was complete, persons who recused themselves returned for discussion of other applications.

The University of Iowa
Principal Investigator: Craig Zwerling

Dr. Brown said that a mid-course review site visit was conducted at the University of Iowa. Staff reviewed two projects, with scores of 200 and 235. NCIPC staff recommended approving

continued funding of this grant. SPRS recommended accepting staff recommendations regarding this site.

Motion

Dr. Thomas Cole moved to approve SPRS recommendations regarding funding for the University of Iowa. **Dr. Fuzhong Li** seconded. The motion carried unanimously.

Discussion Points:

Dr. Wayne Meredith asked for a sense of the range of scores that all grant applications received. **Dr. Brown** replied that most funded applications had scores of 180 or better. The University of Iowa site received a special review in this case.

Dr. Rick Waxweiler further clarified that the Program Announcement (PA) that initially funded this site called for \$50,000 projects, which may be a reason for relatively low scores. Typically, young investigators who are becoming more involved with the ICRCs spearhead these efforts.

Dr. Lynda Doll added that the investigators will receive mentoring from the ICRC director.

Program Announcement #2004-02:
Small Business Innovation Research Grants (SBIR)

Dr. Brown said that two applications for the SBIR program had scores of 350 or better: System Technology Incorporated, and Pro Change Behavior Systems, Incorporated. Nine grants were received and reviewed by the National Institutes of Health (NIH). Of those nine, five were non-competitive. Four were scored, and two of them were not recommended for funding. No specific amount of money is set aside for this program; rather, CDC is required to contribute 2 ½ percent of their budget to support SBIRs. Staff recommended funding both applications with acceptable scores. The total funding level is \$200,000.

Dr. Doll clarified that these grants are for Phase One of the projects, which is 6 months long and establishes the feasibility of the product to be developed. These scores are roughly equivalent to the scores that NIH's SBIRs receive as well. **Dr. Brown** noted the wide variability in SBIR scores.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding for the two ranked applications under the SBIR Program Announcement. **Dr. Meredith** seconded. The motion carried unanimously.

R49 Grants: Investigator-Initiated Grants

Dr. Brown moved to the R49 grants, which are similar to R01 grants. A total of five announcements were released under this program. The majority of the applications were under

the Violence Program Announcement, and a substantial number of them were non-responsive. It is likely that these applications came from individual agencies without much experience in applying for federal grants. Of the 150 applications that were peer-reviewed, 61 were streamlined out and 89 were scored.

Program Announcement 05012

Drs. Ralph Frankowski, Carolyn Fowler, Hendricks Brown, and Sheryl Heron recused themselves based on the entities and/or Principal Investigators under consideration. **Dr. Mark Redfern** conducted this portion of the presentation.

Dr. Redfern said that 78 grants were received under this announcement for Violence. Twenty-one were deemed non-responsive. Of the 57 peer-reviewed applications, 21 were streamlined and 36 were scored. Of those that were scored, 32 scored better than 350. Eight grants were to be funded. SPRS recommended that the ninth application, which had a high score, should be given high priority should additional funds become available to fund additional projects.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding the first eight ranked applications under Program Announcement 05012. **Dr. Li** seconded. The motion carried unanimously.

Drs. Frankowski, Fowler, Brown, and Heron rejoined the meeting.

Program Announcement 05021

Drs. Heron and Meredith recused themselves.

Dr. Brown resumed the presentation and explained that this program announcement is for new investigators.

Forty-one grant applications were received in this area. One was non-responsive, and approximately half of the applications were streamlined out. Five of the scored applications are recommended for funding, with a total RFA budget of \$500,000. He pointed out that this program for new investigators was not designated for a particular type of research, but there is still diversity in the applications that received the highest scores. NCIPC staff recommendations are to fund the five highest-ranked applications. As no other applications scored better than 250, staff does not recommend funding additional projects if funds become available.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding the first five ranked applications under Program Announcement 05021. **Dr. Li** seconded. The motion carried unanimously.

Drs. Heron and Meredith returned to the room.

Program Announcement 05022

Dr. Thomas Cole recused himself.

Dr. Brown explained that this program announcement was for Unintentional Injury. Twenty-seven applications were received, and six were non-responsive. Half of the remaining applications were streamlined out, 11 were scored, and 2 were recommended for total support of \$600,000. It was further recommended that should additional funds become available, applications scoring 250 or better should be considered for funding.

Motion

Dr. Redfern moved to approve SPRS recommendations regarding funding the first five ranked applications under Program Announcement 05022. **Dr. Li** seconded. The motion carried unanimously.

Program Announcement 05023

Dr. Cole recused himself.

Dr. Brown said that this program announcement was for Traumatic Injury Biomechanics. Twenty-five applications were received, and two were non-responsive. Fourteen were scored. Of those, 12 received scores between 100 and 350, and three of them are recommended funding. \$840,000 is available. Beyond the three recommended applications, NCIPC staff further recommended that the fourth application in rank order be funded as well, using FY 2006 funds when they become available on October 1. The rationale behind this recommendation is that only \$230,000 to \$250,000 will be available for biomechanics grants in 2006. It would be possible to write an RFA for these funds, but staff and SPRS felt that rather than engaging in the application process for a relatively small sum, their resources could be better spent in funding the fourth application with FY 2006 funds.

Further, staff recommended funding this 2006 grant out of order. This decision was based on the comparative priority areas addressed by the grant applications. The project that will examine children's neck injuries was considered to be of greater importance. The complete recommendation, then, is to fund the first three applications and to fund the fourth application with FY 2006 funds. Should additional funding become available, then it is recommended that applications scoring 250 or better should also be funded.

Motion

Dr. Meredith moved to approve SPRS recommendations regarding funding the first three ranked applications under Program Announcement 05023, funding the fourth application with FY 2006 funds, and funding applications with scores of 250 or better if additional funding becomes available. **Dr. Heron** seconded. The motion carried unanimously.

Discussion Points:

Dr. Brown noted the differential between the application that scored 159 and the applications that scored 182 and higher.

Dr. Cole returned to the room.

Program Announcement 05025

Drs. Fowler and Brown recused themselves.

Dr. Redfern led the presentation for the Dissertation Awards. Nine applications were received. All applications were reviewed, and one was streamlined out. Seven applications scored better than 350. Staff and SPRS recommend funding the top four applications.

Motion

Dr. Frankowski moved to approve SPRS recommendations regarding funding the first four ranked applications under Program Announcement 05025. **Dr. Cole** seconded. The motion carried unanimously.

Cooperative Agreement Research Applications

Drs. Fowler and Brown returned to the room.

Dr. Brown provided context for the next set of applications in five areas: Intimate Partner Violence, ACES, Youth Violence, Alcohol-Impaired Driving, and Fall Prevention. A total of 98 grant applications were received. Thirty-six of the proposals were non-responsive. Of the 62 that were reviewed, and 17 were streamlined out.

Program Announcement 05017

Ms. Galaska left the room.

Dr. Brown described the applications for intervention and evaluation trials to prevent intimate partner violence. Twenty-two applications were received. Seven were non-responsive and seven of the applications reviewed were streamlined out. Of the remaining eight, four were recommended to be funded for a total of \$1.8 million. In addition to the four recommended applications, staff further recommended that should additional funds become available, applications receiving scores of 250 or better should be funded.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding the first four ranked applications under Program Announcement 05017. **Dr. Li** seconded. The motion carried unanimously.

Discussion Points:

Dr. Leslie Beitsch observed that the applications from Portland State University and from Multnomah County, are both from groups in Portland, Oregon. He wondered whether there was a relationship between the projects and whether a policy exists regarding funding an institution or group more than one grant. **Dr. Lynda Doll** answered that there is no official prohibition against awarding grant funds from the same announcement to the same institution. A recently passed policy expresses a preference for funding only one grant per individual, per institution. The two projects in question are separate, however, so there should be no problem, but staff will double-check.

Dr. Beitsch questioned whether Multnomah County could perform a large, rigorous project without an association with a nearby academic program. **Dr. Doll** said that NCIPC would ensure that the staffs for the projects are not similar. The applications went through a rigorous peer review, and the applicants will have to respond to the reviewers' comments before the funds are disbursed.

Dr. Carolyn Fowler wondered whether there might be connecting or overlapping effects from two intervention programs working in the same community. **Dr. Rick Waxweiler** clarified that Multnomah County will collaborate with Oregon Health and Sciences University, which is separate from Portland State.

Dr. Fowler expressed hope that the proposed interventions were local enough not to overlap, leading to evaluation bias. **Dr. Waxweiler** explained that the two projects are vastly different and will work with different populations. One project will evaluate an existing intervention that is being conducted by the Volunteers of America, Oregon. The project will assess the cost effectiveness of an innovative housing intervention program for battered women, who will be identified through emergency housing shelters. The other project is an enhanced nurse visitation program to prevent intimate partner violence (IPV). There is the potential for the two populations to overlap. **Dr. Hendricks Brown** agreed that there may be some overlap, but the sampling of the two groups will be very different. **Dr. Waxweiler** added that 250 women will take part in the nurse visitation program, and the housing program already exists. Staff will ensure that there is no cross-contamination between the two projects.

Dr. Fowler recommended that staff not only work to prevent cross-contamination, but also require both applicants to conduct extensive dissemination in the community. Investing a large sum in that community to build that expertise should have an aspect of accountability. **Dr. Beitsch** commented that the overlap will likely be modest, as the two projects are not targeting the same groups.

Program Announcement 05018

Dr. Hendricks Brown described the program for the National Academic Centers of Excellence. The summary statements for these applications were not available for the secondary review at this time. There will be a secondary review via telephone in July.

Program Announcement 05020

Dr. Brown continued with the Program Announcement for the Youth Violence Prevention for Community-Level change. Thirty applications were received, and approximately half were non-responsive. After streamlining, the panel scored 10 applications. Three of those applications are recommended for funding for a total of \$1.2 million. Staff further recommended that if additional funding is available, applications scoring 250 or better should be funded.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding the first three ranked applications under Program Announcement 05020. **Dr. Li** seconded. The motion carried unanimously.

Program Announcement 05024

Dr. Brown moved to the grants for Community-Based Interventions for Alcohol-Impaired Driving. Nine grants were received; four were non-responsive; five were reviewed by the panel; two were streamlined; and one is recommended for funding for a total of \$350,000.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding the first ranked application under Program Announcement 05024. **Dr. Li** seconded. The motion carried unanimously.

Program Announcement 05029

Drs. Li and Cole recused themselves.

Dr. Brown described the Dissemination Research on Fall Prevention. Seventeen applications were received. Eleven were deemed non-responsive, and three were streamlined out by the panel. All 3 of the scored applications scored between 100 and 350. One of the projects is recommended for funding for a total amount of support of \$350,000.

NCIPC staff recommended not to fund the top-ranked application, scored at 160, but to fund Dr. Li's application, with a score of 165. This decision was based on the closeness of the scores and because the higher-ranked application did not meet all requirements of the RFA and was, therefore, less responsive. Dr. Brown emphasized that Dr. Li is a member of SPRS and ACIPC, but there has been no conflict at any point in the RFA deliberations and the staff made their funding recommendation independently from his membership on either committee.

Motion

Dr. Heron moved to approve SPRS recommendations regarding funding the second ranked application under Program Announcement 05029. **Dr. Frankowski** seconded. The motion carried unanimously.

Discussion Points:

Dr. Wayne Meredith asked whether the author of the application that was ranked higher, but not funded, would receive feedback regarding the scientific validity of the research instruments and the lack of responsiveness of the application.

Dr. Brown replied that summary statements are made available to the applicants. Additional information will be included based on the comments that were made in the secondary review and in staff discussion.

2005 Congressional Earmarks

Drs. Li and Cole returned to the room. Dr. Beitsch recused himself.

Dr. Brown explained that CDC staff now requires that all Congressional earmarks go through a review, even though the monies are earmarked. Four earmarks were reviewed. Three were recommended for funding. SPRS does not recommend funding the application from Iowa State University. It is important to note that this recommendation came from SPRS, not from NCIPC staff. The Iowa State application included no scientific discussion and no clear evidence of what the applicant planned to do with the funds. The narrative did not include a discussion of Human Subjects, a time frame, or an indication of how the money would be spent.

Motion

Dr. Cole moved to approve SPRS recommendations regarding funding for the Congressional earmarks. **Dr. Li** seconded.

Discussion Points:

Dr. Wayne Meredith asked whether the motion should be to accept staff recommendations. As there is a difference between staff and SPRS recommendations, **Dr. Carolyn Fowler** suggested re-stating the motion.

Dr. Brown clarified that SPRS recommended supporting funding for three of the applications, but not for the application from Iowa State University.

Dr. Lynda Doll emphasized that CDC is required to fund these applications. **Dr. Meredith** added that this funding is required by law.

Dr. Hendricks Brown explained that this recommendation is a “statement.” **Dr. Fowler** suggested stating that the application from Iowa State University was not being recommended for funding due to inferior scientific quality or because there are concerns regarding whether the project will do harm.

Motion (Amended)

Dr. Fowler moved to approve SPRS recommendations regarding funding three of the Congressional earmarks. Because of a commitment to ensuring that no harm is done and an observation of inferior scientific quality, the application from Iowa State is not recommended for funding. **Dr. Cole** seconded. The motion carried unanimously.

Dr. Beitsch returned to the room.

Ms. Louise Galaska thanked SPRS for their work in the secondary review. Before moving to an “open meeting,” she reminded attendees of the closed meeting that all information exchanged and discussed was confidential and not to be discussed with anyone.

Afternoon General Session (Open to the Public)

Call to Order/ Approval of May Meeting Minutes

Dr. Carolyn Fowler, Chair

Advisory Committee for Injury Prevention and Control (ACIPC)

Dr. Carolyn Fowler introduced herself to the group, welcomed the new members, and called the forty-sixth meeting of the Advisory Committee for Injury Prevention and Control to order. As they were slightly behind schedule, she suggested that they forgo the “introduction” portion of the meeting and proceed with the agenda.

Dr. Fowler directed the group’s attention to the November 2004 meeting minutes and asked for comments or corrections. Hearing none, she called for a motion to approve the minutes as written.

Motion

Dr. Hendricks Brown moved to approve the November 2004 meeting minutes as written. **Ms. Suzanne Brown-McBride** seconded. The motion carried unanimously, with one abstention.

Executive Secretary Announcements

*Ms. Louise Galaska, Executive Secretary
Advisory Committee for Injury Prevention and Control (ACIPC)*

Upcoming Meetings and Administrative Matters

Ms. Louise Galaska re-introduced herself and thanked ACIPC members for their attendance. She introduced **Ms. Dianne Clapp**, who has taken on responsibilities related to ACIPC following the retirement of **Ms. Iris Lansing**, the former ACIPC Committee Management Specialist. She asked the group to RSVP for dinner, directed their attention to a table of recent NCIPC publications, and reminded them to speak into microphone at all times. She introduced **Ms. Andrea Hatchett** of Maximum Technologies, who explained the procedure for travel reimbursement.

Ms. Galaska explained that ACIPC plans meetings in advance. At the last meeting, it was agreed that the next meeting would take place in Atlanta on November 2-3, 2005, followed by the next meeting tentatively scheduled for May 23-24, 2006. In planning these meetings, staff tries to avoid conflicts with other meetings.

Discussion Points:

Dr. Carolyn Fowler pointed out that university graduations might be taking place on May 23-24, 2006.

Ms. Louise Galaska said that staff tries to schedule ACIPC meetings adjacent to the SPRS secondary review of extramural research applications, thus saving SPRS members travel time.

Dr. Jim Helmkamp commented that the American Public Health Association (APHA) meeting starts Saturday, November 5, 2005. **Ms. Galaska** asked whether that conflict would deter people from attending the ACIPC meeting. There were no stated conflicts.

Review Agenda

Ms. Galaska reviewed the agenda for the meeting, explaining the presentations and reports that were scheduled for the day. Thursday's meeting would include dividing into workgroups which are pre-assigned and which would meet at different tables in the room. Knowing that travel could be challenging, she indicated that they hoped to end at 3:30 p.m. Thursday.

Director's Update

*Dr. Ileana Arias, Acting Director
National Center for Injury Prevention and Control (NCIPC)*

Dr. Ileana Arias welcomed the group and encouraged them to interact with each other and to introduce themselves. She then proceeded to highlight the Center's recent achievements.

The 2005 Injury and Violence in America Conference was held in Denver, Colorado, on May 9-11, 2005. The conference was very successful, with over 750 attendees, 300 speakers, and 60 well-attended and well-received sessions. The conference's activities included plenary sessions, keynote speakers, breakout sessions, skills-building classes, and other opportunities to carry injury prevention forward. She thanked their co-sponsors, the Society for the Advancement of Violence and Injury Research (SAVIR) the State and Territorial Injury Prevention Directors' Association (STIPDA), and the numerous partners who contributed to the experience. Not only was a great deal of information exchanged at the conference, but also the gathering was also fun for everyone in attendance. Staff is gathering ideas and suggestions for the next Injury Prevention Conference. Five of the plenary sessions will be Web-cast from the center homepage in the next week.

A highlight of the conference was the rollout of the Acute Injury Care Research Agenda. The CDC Injury Center identified gaps in the area of acute injury care research in 2003 and began an update of the CDC injury research agenda. This two-year process included input from experts from the continuum of acute injury care and public health, and the result is the new research agenda, which is available on hard copy, CD-ROM, or through the Center web page. The agenda ensures that staff members are thinking proactively and in the long-term about the research that CDC should fund to move the field forward. The research agenda also serves as a reference for policymakers, educators, service providers, and others who can have an impact on acute injury care. The implementation of the agenda will be challenging. An infrastructure to carry the agenda forward and to have an impact on acute injury care must be addressed. The Center is ready to meet those challenges and to overcome them to implement the research agenda and to profit from the work that it produces.

NCIPC is improving its Web-Based Injury Statistics Query and Reporting System (WISQARS), a great resource for accessing fatal and non-fatal injury data. It is used a great deal in the injury field and receives positive feedback. The recent enhancements include:

- Charts and tables for fatal data are significantly more detailed, including specific ICD codes.
- The data from these data tables and charts can be downloaded into spreadsheets.
- A printer-friendly version of the data is available.

Staff are interested in suggestions and feedback regarding how to improve the system further. The Office of Statistics and Programming (OSP) and the Office of Communication Resources (OCR) have helped to make these great improvements. Dr. Arias thanked them and also thanked

their colleagues from the National Center of Health Statistics (NCHS) for providing annual mortality data through the National Vital Statistics System (NVSS). NCHS has also helped to conceptualize how the data can be used, presented, and disseminated.

NCIPC has embarked on new projects that will contribute to the field of injury prevention, and Dr. Arias shared the projects with the group:

Heads UP: Concussion in High School Sports

Heads UP: Concussion in High School Sports is a toolkit for high school athletic coaches. It is designed to help coaches prevent, recognize, and manage concussions when they occur. It also provides tools for educating athletes, parents, and other school officials regarding concussions. This project is the result of an earlier effort to raise awareness of mild traumatic brain injury (MTBI) among healthcare professionals and physicians. Feedback from that initiative led to *Heads UP*, as coaches have opportunities for intervening and preventing head injuries. All of this work is the result of input from experts, literature reviews, formative research to determine target audiences' informational needs, and product pre-testing and refining. The centerpiece of *Heads UP* is a video featuring Brandon Schultz, a young athlete who became disabled after sustaining two concussions in high school football games. His experiences and consequences will motivate parents, coaches, and young athletes. The toolkit includes a concussion guide, wallet card, clipboard sticker, a CD-ROM with downloadable materials and other resources, and posters and fact sheets in English and Spanish for athletes and their parents.

Pilot studies of the initiative were conducted in April and May of 2005 in Maine, California, Texas, Michigan, and North Carolina. The kits were distributed to coaches in those states and then a random sample of those coaches was contacted for a telephone survey to assess how they were using the toolkit and whether they could offer recommendations for improvements. The majority of the 414 interviews were positive regarding the toolkit. The most significant suggestion is to include a DVD with the kit. The next step will be to review the findings from the survey in more detail, to make appropriate changes, and to engage in national dissemination in the fall. A number of government and medical associations have expressed a willingness to partner with CDC in the national dissemination.

Choose Respect

Choose Respect is a communication campaign aimed at 11 to 14 year olds. It targets primary prevention of dating or relationship violence by promoting positive, respectful behaviors in relationships and by helping young boys and girls recognize unhealthy relationship patterns. The campaign was developed from evidence-based research and includes materials for youth, parents, teachers, school administrators, and the community at large. Public service announcements, radio commercials, and cinema slides are aspects of the program. An interactive music video is available on the webpage, where visitors can build their own music videos as they interact with the program and answer questions regarding relationship functioning and violence. This entertaining tool both engages youth and conveys information to them.

Choose Respect was pilot-tested from February to May, 2005, in Austin, Texas, and Kansas City, Missouri. The reception and support for the dissemination in those areas was strong. The First Lady of Texas spoke on behalf of the campaign, there was significant press coverage, and the Mayor of Austin was involved in promoting the campaign as well. Media tracking and surveys with primary and secondary audiences such as parents, teachers, and counselors, are part of the pilot. Data collection will end in June. This information will further refine the campaign, and then the national launch will occur between April and the summer of 2006. The national launch will include national and local spokespeople, training states in implementing the campaign, and establishing partnerships with organizations that are crucial for success. Dr. Arias encouraged the group to visit the webpage to see the interactive music video.

Publications

Several publications have recently come from NCIPC. A special issue of the *Journal of Head Trauma Rehabilitation* concentrated on TBI research and programs at CDC. These articles provide background regarding public health principles and legislative mandates that guide CDC's TBI activities, examples of CDC's use of TBI data, state-based data from CDC-funded TBI surveillance systems, education and awareness activities, and CDC-funded efforts to support states to explore the feasibility of using their data and data systems to help people with TBI to educate themselves and to access appropriate services.

NCIPC has published the *Atlas of Injury and Mortality among American Indians and Alaska Native Children and Youth*. From 1989 to 1998, injuries caused the deaths of almost 4,000 Native American children ages 0 to 19 residing in Indian Health Service areas. Injury is the leading cause of death for all American children, but it is pronounced among Native American children. This information should highlight the scope of the problem and garner support for addressing it.

The center also published the CDC's *Unintentional Injury Activities 2004*, which contains information regarding the center's programs and research accomplishments in the areas of motor vehicle and home and recreation injury from 2002 to 2004. The projects funded, lessons learned, and directions in unintentional injuries are addressed.

The first data from the National Violent Death Reporting System (NVDRS) was published in the April 22, 2005, issue of the *MMWR*. This data came from the first six states that were supported to implement NVDRS, and increases in both suicide and homicide rates for 2002 and 2003 are indicated. These increases contrast decreases in violent deaths in these states and nationwide from 1993 to 2000. NVDRS has the ability to assess violent deaths early and quickly, picking up changes and trends and signaling a need to respond differently and appropriately to those changes. Information on risk factors was not included in the *MMWR* article, as the data only came from six states. A total of 17 states are funded to participate in the NVDRS, and the next report from the system will include data from the six original states and the next seven funded states. The final four states' data will be released in 2006.

Dr. Arias provided an update on the search for a Director for the Injury Center. A total of 34 applications were received in response to the position announcement. A search committee reviewed those application and narrowed them to the 12 most competitive. After further evaluation, the top seven candidates were identified to be interviewed. One of the candidates withdrew, leaving six candidates to participate in a day-long process that included meeting with Dr. Henry Falk and Coordinating Center senior staff. Each candidate made presentations to Injury Center staff as well regarding their ideas and plans. Reference checks are being completed on selected candidates, and Dr. Falk hopes to make an offer of the position by the end of the month.

Discussion Points:

Capt. Stephanie Bryn asked for the names of the Project Officers overseeing *Heads Up* and *Project Respect*. **Dr. Ileana Arias** suggested contacting Jane Mitchko and Jim Enders regarding *Heads Up* and Corrine Graffunder regarding *Choose Respect*.

Dr. Carolyn Fowler thanked Dr. Arias and congratulated her on the success of the Injury Conference. She dismissed the group for a brief break, from which they reconvened at 2:50 p.m.

CDC's Research Agenda

***Dr. Robert Spengler, Director
Office of Public Health Research (OPHR)
Centers for Disease Control and Prevention (CDC)***

Dr. Robert Spengler began by noting that CDC's research agenda is still a work-in-progress. He acknowledged Dr. Robin Wagner, the Associate Director for Research Planning and Evaluation in the Office of Public Health Research.

This agenda is the first-ever CDC-wide research agenda. Previous attempts to create such an agenda did not come to fruition, and his 9-month old office is responsible for the task. One of the chief purposes of the research agenda is to support research to achieve the public health protection goals of CDC. In general, the agenda is framed around these goals, which are:

- Healthy People in Life Stages
- Healthy Places
- Preparedness
- Global Health

In addition, the agenda will provide critical evidence to improve existing, or establish new, programs and interventions. The agenda will identify broad research themes and focus areas that can provide guidance to the new coordinating center offices and to the centers. Further, the agenda will be a tool in planning, communicating, and marketing CDC research. Finally, the agenda will assist in monitoring progress toward the health protection goals. Its broad context will illuminate both intramural and extramural research priorities.

In August 2004, the CDC Advisory Committee to the Director developed a workgroup on goals and research agenda. Under this workgroup are two subworkgroups: one group, led by Dr. Deborah Lippine, is working on the 2015 Health Protection Goals; and the other, the Research Agenda Steering Subgroup, is led by Drs. Robert Galli and Sandra Mahkorn. Under the guidance of the steering subworkgroup, a core team is comprised of co-leads, one CDC staff scientist, and one external partner who oversee the work of six agenda development workgroups comprised of roughly half internal and half external representation. Each of the six workgroups were formed around the new structure of CDC:

- Environmental Injury and Occupational Safety and Health
- Health Information Services
- Global Health
- Health Promotion
- Infectious Diseases
- Community Preparedness and Response

To formulate lists of research ideas, themes, and strategies, each group engaged in a criteria-setting process using these four criteria:

- It addresses an important public health need or problem;
- It is relevant to reducing health disparities;
- It has potential for broader impact; and
- It is relevant to the CDC mission and new health protection goals.

The current rough draft of the agenda is structured around CDC's new architecture and health protection goals, so the main headings are:

- Healthy People
- Preparedness
- Healthy Places
- Global Health
- Cross-Cutting (innovation and infrastructure), including CDC's intention to continue to support and enhance research around innovation and supporting infrastructure

Dr. Spengler described five research themes in the current draft of the agenda that may be of interest to NCIPC and ACIPC:

- Injury and violence prevention* and its interventions, specifically interventions to prevent and reduce the consequences of interpersonal violence, suicidal behavior, and unintentional injuries.
- Risk and protective factors for unintentional injury*, including factors associated with the leading causes of injury in all life stages, with a special emphasis on adolescence.
- Risk and protective factors in youth violence* and suicidal behavior.
- Trauma systems research*: identifying and evaluating the specific components of trauma systems that contribute to improvements in outcome.
- The connection between multiple forms of violence*: identifying the relationships among

different forms of violence and other public health problems and evaluating those integrative strategies to create effective interventions.

Further information regarding the development of the agenda is available at www.CDC.gov/od/ophr.

Discussion Points:

Dr. Leslie Beitsch asked for more detail regarding the “innovation and infrastructure” research agenda. **Dr. Robert Spengler** replied that many areas of CDC, such as public health informatics, require continued development and improvement. These areas do not fit under “health protection goals” because they pertain to multiple centers and how they can best utilize health services information databases or linkages to other types of health outcome information. **Dr. Robin Wagner** added that this section of the agenda emphasizes aspects of public health in which CDC has not been heavily engaged in the past, but which are important, such as mental health and substance abuse or public health policy and law. Staff called these “cross-cutting areas” because they apply across several areas of the research agenda.

Dr. Beitsch commented that the research agenda does not seem to refer to public health systems research or public health practice research. **Dr. Spengler** noted that these ideas fall under the “cross-cutting” category that were not presented at this meeting.

Dr. Carolyn Fowler asked about “enhanced community preparedness and response” and whether this idea solely covers bioterrorism or whether it addresses the total spectrum of preparedness for any public health need. **Dr. Spengler** replied that the item intends to be total preparedness in a broad context, including responding to communities in an appropriate way as well as pre-event, event, and post-event concerns.

Discussion of Research Agenda and How Injury Research Can Fit

Dr. David Sleet, Associate Director for Science
Division of Unintentional Injury Prevention (DUIP)
National Center for Injury Prevention and Control (NCIPC)

Dr. David Sleet offered more specifics regarding how the Injury Center created their agenda themes and how those themes integrate with the CDC-wide research agenda. He acknowledged the staff members and external partners who had participated in the process. The Coordinating Center charged this group with creating a “starter list” of 20 to 25 research themes that would represent their units. These units are:

- Environmental Health
- Occupational Safety and Health
- Injury

The “starter list” reflects the health protection goals and reflects the four standardized criteria described by Dr. Spengler:

- Burden, or importance of the issue to public health
- Health disparities
- Broad impact
- Appropriateness to the CDC mission

These persons polled staff of their divisions and branches to collect ideas for the “starter list.” Most priorities offered came from the 2002 Injury Center Research Agenda. The final list included 10 to 15 themes, plus some cross-cutting themes, breaking down to 4 or 5 themes per division. NCIPC then met with counterparts from the National Institute for Occupational Safety and Health (NIOSH), National Center for Environmental Health to review all of the themes, looking for synergy such as health disparities or dissemination research that might appear on more than one list. Input from external partners was also gathered.

The list had to be narrowed, so the group applied the priority-setting criteria listed above. The Research Agenda Priority Areas served as a starting point. The agenda emphasizes adolescent health and adolescent injury prevention as a priority area, not only because of injury burden, but also because it is a main priority for all of CDC. The group sought a balance of coverage across the divisions and consolidated items to make them more broad. They worked to ensure that the agenda focused on risk factors, intervention, dissemination, and trauma systems research. Through this process, the coordinating center group listed approximately 21 themes across the three areas: NCIPC had 8, the National Center for Environmental Health (NCEH) had 6, and NIOSH had 7. Two themes were “cross-cutting.” The NIOSH priorities are from their National Occupational Research Agenda (NORA). Four public meetings in four cities provided opportunities to gather feedback. A special meeting for other HHS agencies was also held. The starter lists were posted on the CDC website for public comment, and over 130 comments were contributed. The group revised the themes accordingly, moving some themes to other areas:

- Global injury prevention moved to the Global Health Working Group. This category includes causes, consequences, costs, and prevention of global violence and global road traffic injury.
- NCEH and NCIPC both included the built environment on their lists, so they were combined to determine the relationship between land use policy and the built environment, human health, and injury. Occupational Injury will focus on identifying high-risk industrial sectors, occupations, exposures, and risk factors associated with fatal and non-fatal injuries and to evaluate preventive interventions at the worksite.

NCIPC contributed the following overall themes:

- Develop and evaluate interventions to prevent and reduce the consequences of interpersonal violence, suicide, and unintentional injury*, including behavioral and social, environmental and policy engineering, legislative enforcement, and healthcare systems research.
- Risk and protective factors for unintentional injury* to identify factors associated with the leading causes of both fatal and nonfatal injuries in all life stages, but with particular emphasis on adolescents. The scope includes factors related to injury and injury risk behaviors, the influence of peers, family, social and physical environments and the

community, and interventions to address adolescent injury prevention.

- ❑ *Risk and protective factors for youth violence and suicide*—identifying factors associated with interpersonal violence and suicide behavior among youth. The scope includes items such as pathways to violence and suicide, risk factors associated with those behaviors, factors that might buffer and protect, such as connectedness to parents, peers, other family, or organizations or community services.
- ❑ *Trauma systems research*—identifying and evaluating specific components of trauma systems that will contribute to improvements in outcomes for the injured. The scope includes pre-hospital, emergency department, and trauma center components; disability and rehabilitation services; and short and long term health outcomes and costs associated with these improvements in care.
- ❑ *Connections between multiple forms of violence*—identifying the relationships among different forms of violence and the resulting health problems and evaluating integrated strategies to address them. The scope includes establishing the overlap of populations at high risk for different forms of violence, the extent to which different forms of violence carry a common risk factor, developing interventions to address those commonalities, and to assess mental health outcomes.

The cross-cutting themes were:

- ❑ *Translation and dissemination research*—develop and evaluate strategies to translate, disseminate, and sustain interventions to prevent and reduce the severity of violence, unintentional injuries, and occupational and environmental disease.
- ❑ *Identify ethnic, geographic, and racial disparities* related to violence, unintentional injuries, and occupational and environmental diseases and exposures and develop interventions for those high-risk groups.

There will be other opportunities to insert injury-related items such as data systems, injury in healthy communities, evaluating injury interventions, translation research, mental health and well-being, and preparedness into other aspects of the overall research agenda. The next step is to continue to align the large CDC Research Agenda with the CDC Goals Structure, which is under development, and to produce a final draft of the CDC Research Agenda for public comment. This draft should be ready near the end of the summer. The final research agenda is subject to the CDC Director's approval. Dr. Sleet invited ACIPC to provide their input into this process.

Discussion Points:

Dr. Jim Helmkamp wondered whether a co-release of RFAs addressing occupational injury with NIOSH and NCIPC is possible. **Dr. David Sleet** replied that the groups have not discussed collaborating on a single RFA yet, but NCIPC has considered how to link with other agencies who are issuing RFAs in similar areas. **Dr. Henry Falk** added that there should be no limitations on doing collaborative work with different groups at CDC. If NIOSH is interested, then collaborative approaches to different issues are possible.

Dr. Helmkamp noted that his Injury Center has NIOSH consultants on injury projects, but the

granting mechanisms are separate. Historically, ICRCs have not conducted a great deal of occupational injury research, but his center has ongoing projects that are work-related.

Ms. Anne Menard asked whether ACIPC members had been notified when the “starter list” became available on the website for comment. **Dr. Sleet** replied that an announcement was made on the listserv. **Dr. Robin Wagner** added that there were notices in the *Federal Register* in February regarding the four public meetings and the availability on the website. CDC staff were informed as well.

Ms. Menard said that ACIPC should be alerted when the draft form is available for comment. **Dr. Wagner** said that all advisory committees will be notified. **Dr. Carolyn Fowler** added that CDC’s partner agencies, which have their own listservs, should also be informed when the draft is on the website.

Ms. Lisa Dawson commented that she had attended one of the four city meetings and felt that it had been productive. She wondered whether participatory research would be part of the agenda’s implementation. **Dr. Sleet** replied that participatory research is included in the “cross-cutting” area of the agenda, as it applies to all health and injury issues.

Ms. Marilena Amoni commented that it has been difficult to conduct collaborative research across federal agencies due to differences in funding and cycles. She wondered how NCIPC planned to gather federal partners to create these opportunities. **Dr. Sleet** answered that one of the four public meetings had been exclusively for federal partners, largely within HHS. **Dr. Robert Spengler** added that senior level science representation was included from across HHS. The meeting focused on how to best network and develop collaborations. If injury wanted to promote not just the agenda, but the research around it, then NCIPC could convene a meeting of all of their federal and other partners to discuss how best to align resources, coordinate, and perhaps create co-announcements for research. CDC will address important public health research needs, and collaborative research could benefit many partners.

Dr. Sleet noted that research staff from the division are meeting with representatives from the National Highway Traffic Safety Administration (NHTSA) to consider ways to collaborate, and it is important to get input from federal agencies outside of HHS.

Dr. Fowler recalled that a priority area in the agenda is to assess more than one injury. She wondered about the possibility of research that cuts across other areas but includes injury, for example, pedestrian injury and asthma. **Dr. Sleet** expected more broad themes are likely to emerge as all of the different areas of CDC provide input into the agenda. **Dr. Fowler** encouraged NCIPC to support making these connections, perhaps even helping higher-level CDC staff see them. **Dr. Wagner** agreed, adding that the “cross-cutting” category and the preamble to the agenda will emphasize these connections. The agenda is a platform for identifying new opportunities and connections.

Ms. Menard asked about the flexibility of funding received by CDC and to what degree the research priorities will match the available dollars. **Dr. Spengler** answered that CDC received money in several ways, including Congressional earmarks or special line items that might be

health-even focused. There is an interest in conducting cross-center activities that are funded with an eye toward a holistic approach.

Dr. Falk commented that this effort is in its infancy. He asked for more clarification regarding how overall CDC funds will relate to the Injury Center. **Dr. Spengler** replied that CDC commits over \$600 million to research each year. In looking at the total scope of resources, cross-cutting research opportunities are attractive. As applications are chosen for funded, the projects are then assigned to the appropriate center. Collaborative opportunities across CDC could blend resources and leverage health impacts.

Dr. Ron Davis asked about the impact of research agendas and whether research agendas have ever been evaluated. **Dr. Wagner** replied that this effort is the culmination of 4 years of work. An early step in the process was to review literature regarding the effectiveness of research agendas and recommending an approach for CDC based on that review. **Dr. Sleet** added that NCIPC's research agenda is helpful in guiding directions for priority research and hoped that the CDC agenda would similarly guide CDC's direction around priority topics.

Dr. Fowler wondered whether the research agenda could not only inform work in research, but also work in the Office of Workforce and Career Development (OWCD) and in Public Health Practice Advising (PHPA), which might save time in assessing training gaps. **Dr. Wagner** answered that those offices are represented in the agenda-setting process, and their issues are addressed in the cross-cutting component of the agenda. **Dr. Sleet** added that one agenda theme relates to workforce development for injury prevention training. There will likely be a set of themes around workforce development in all aspects of public health.

Subcommittee and Workgroup Reports and Discussion

Science and Program Review Subcommittee Report

Dr. Hendricks Brown, Co-Chair

Science and Program Review Subcommittee (SPRS)

Dr. Hendricks Brown observed that the grant review process now used by NCIPC is not identical to NIH's system, but it is coming close. The process is moving forward and being fine-tuned, providing an opportunity to move the field forward and to consider good collaborations and co-funding. Now is a good time to work together, since all federal agencies are concerned about budget cuts. The federal government's priority issues such as suicide prevention are good areas for combining efforts and funding.

The SPRS meeting included a major presentation of the Violence Research Portfolio. Most of the staff in the Violence Prevention Group are involved in this process. This process could be a guideline for the next portfolio reviews. The presentation highlighted a ten-step research evaluation methodology. These steps included developing a logic model with indicators and considering how to collect that data; considering a universe of projects; analyzing data; preparing a report; and convening a review panel of the draft report.

The logic model builds from center activities, particularly research projects to outputs, including immediate effects as well as long term impacts. Specific indicators were gathered from interviews with grantees and staff members. The inclusion criteria for the Youth Violence Review are based on projects that were funded through a grant cooperative agreement or contract from NCIPC from 1999 to 2004 that focused on youth violence, homicide, or weapon-related homicides or assaults. Staff decided from the beginning of the effort not to include surveillance projects in the evaluation. The process of collecting information was elaborate, but detailed information was obtained. Sixty-three projects were identified, and they vary widely, especially since the center funds many small seed projects. The review also collected information about the history of research funding. Three major appropriations have occurred, and \$62 million has been devoted to youth violence. Two-thirds of the budget has gone to cooperative agreements. The remainder has largely gone to grants to centers rather than to R49s. Less than \$1 million has gone to contracts. Each mechanism has a set of funding priorities.

The surveys of principal investigators asked for information about projects such as key findings, dissemination, training, and collaboration. The overall response rate was 71 percent, but it was higher for recently-funded projects. Projects funded before 1995 did not respond as well. The raw data from these surveys can be used to indicate which states received the most money, target populations of the projects, study designs, and representative key findings for descriptive and etiological research. Efficacy and effectiveness are indicated. For instance, interventions with school-age children have had positive effects on proximal targets. Impact on more distal effects such as aggression and physical fighting, is not always seen, but the information does depend on fidelity, implementation, and context. All of this information is essential to learn which programs work, for whom, and for how long. The survey yielded information publications. Three hundred and thirty-three publications were identified, and 88 percent of those appear in professional journals. There is a great deal of value in developing new research methods, not only in data collection and analytic techniques, but in contextual models as well.

Despite this success, certain data elements were not easy to collect, and the information in the evaluation is probably not complete. For example, principal investigators were asked to identify presentations that came from their work, and only 63 presentations were identified since 1990. Four of those presentations refer to local, state, and federal policymakers. There was clear under-counting in this area. Collaborations were under-counted, particularly given that collaborations are a requirement of virtually every grant from the center. The translation of findings is likely under-reported as well. While it is possible to identify areas in which practice and/or policy changes have occurred as a result of these projects, creating a list of those changes is not easy, and a retrospective survey is probably not the best way to collect that information. The survey yielded good information about training: 545 trainees were identified, and more than half of them are still in the injury research field. This influence of the center's work needs to be expanded in the portfolio evaluation.

After the draft report was generated, a review group comprised of SPRS members and other youth violence researchers in the field evaluated it and provided feedback. The group concluded that the evaluation needs stronger statements regarding the strengths of the research portfolio itself. The data collected from the surveys was not sufficient to make such a bold statement, though. Key findings in the field, collaborations, and dissemination need to be strengthened and

emphasized. Finally, future research directions should have greater focus. The evaluation should capture the special role that CDC has played in taking a public health approach to violence. The landscape has changed since 1990, when many did not believe that violence was a public health issue. CDC has also been a change agent in encouraging foundations to accept and use public health approaches and perspectives. Further, CDC's surveillance work and its role in creating an infrastructure to develop and support research need to be addressed in the evaluation. The review group made recommendations to the center on these topics. The group also suggested collecting information from lab researchers and conducting meta-analyses on youth violence to see which refer to CDC projects. They suggested including impact statements based on citations.

The review group also commented that CDC can encourage unique work in youth violence. For instance, research on contagion issues, bystanders, and gangs fall under CDC's purview. Regarding the review process itself, the group noted that the approach of collecting data from as far back as 1990 was not successful. Therefore, it was recommended that the data be collected prospectively, perhaps in a web-based form, and CDC staff agreed. Intensive interviews with select principal investigators in the field might be more fruitful than asking them to fill out a form. It is important to distinguish impact on science from impact on practice. Both are essential, and CDC-related work is included in many peer-reviewed journals, but at times, inclusion in non-peer-reviewed magazines can be useful. Finally, the review group encouraged sharing information regarding non-funded projects. The next step in the plan is to complete the final report in September and to consider opportunities for its publication.

Discussion Points:

Dr. Ron Davis commented that in recent years, the AMA has tried to focus attention on the problem of bullying, which can be an antecedent to youth homicide and youth suicide. He asked about bullying in youth violence research activity, adding that if there is little research in this area, it could be an additional "gap." **Dr. Jim Mercy** replied that there are some studies on bullying, and many on aggressive behavior in youth. They learned that there are many implications for school-based programs in bullying prevention.

Capt. Stephanie Bryn added that 4 years ago through an earmark and CDC-awarded monies, the Health Resources and Services Administration (HRSA) received \$3.4 million to address bullying. She shared brochures regarding this work with the group.

Acute Injury Care Research Agenda: Guiding Research for the Future

Dr. Hendricks Brown, Co-Chair Science and Program Review Subcommittee (SPRS)

Dr. Hendricks Brown then reported on Dr. Richard Sattin's review of the Acute Injury Care Research Agenda. The Agenda was presented in a plenary session at the conference in Denver 2005. Major stakeholders as well as CDC representatives were involved in the presentation and in the 2-year long process of developing the agenda. The agenda is available in hard copy, on a CD-ROM, and on the CDC website.

The future of this agenda has two strategies, one involving federal partners and the other involving non-federal partners. On the federal side, this agenda will be incorporated into the CDC-wide research agenda. Collaboration with federal agencies is planned, as is conducting CDC projects. Some small projects have already begun, including one to help and support the American College of Surgeons (ACS) to develop a population-based national trauma database. Another project is to revise the field triage guidelines, and another is to develop a set of cost-effectiveness statements. The agenda reports \$80 billion in direct medical costs. If the agenda is implemented, then a 10 percent savings is estimated. The strategy for external partners was developed via separate meetings. These national organizations will endorse and support the agenda and link to it on their websites. A goal is to develop a consistent message to educate different audiences and to develop life stories of trauma survivors.

***Dr. Richard Sattin, Associate Director for Science
Division of Injury and Disability Outcomes and Programs (DIDOP)
National Center for Injury Prevention and Control (NCIPC)***

Dr. Richard Sattin added that the creation of the agenda was an extra- and intramural collaboration through the 2-year process. Feedback was solicited internally, externally, and from constituents. The Chair, Dr. Brent Eastman, and the Vice-Chair, Dr. Ralph Frankowski, consolidated the many ideas from many sources into a useable format to encourage future research in this area, which has been under-funded for years.

Staff are working with constituencies to examine cost-effective measures. Presently, they are considering ventilation for patients with TBI to assess whether those guidelines are being utilized to the extent that they should be. Working with the ACS to use the National Trauma Bank, an extremely useful databank, to create national and regional estimates for Level One and Level Two will lead to great information on clinical care and outcome-based research. Dr. Sattin thanked all of the participants in the process and in the “rollout” in Denver as well as the supportive federal partners.

Discussion Points:

Dr. Jim Helmkamp expressed concern regarding collecting retrospective information for the Youth Violence Research Portfolio evaluation. Gathering 15-year old information could bias or the results of the evaluation. How can future reviews best capture this valuable historical information? **Dr. Hendricks Brown** acknowledged that retrieving this old information is challenging. Interviews with key persons in the field might be helpful, but much of the information may be lost. The ultimate goal is to collect this information prospectively by making it a requirement of grantees. This process is helping them to develop a model for future reviews.

Dr. Linda Dahlberg clarified that even though the early projects did not respond to the inventory, they are reflected in the report, including descriptions of their interventions and study designs, target populations, and major findings from publications.

Dr. Thomas Cole felt that the poor response rate might not be CDC’s responsibility and that the

ultimate responsibility for collecting and providing these numbers may rest with academic centers.

Dr. Wayne Meredith complimented the center on the magnitude and quality of the portfolio report. He added that the acute care research agenda is spectacular work that will lead the field for years.

Dr. Tricia Keller commented that the Injury Coalitions Meeting would take place the next week in Washington, DC, and non-federal partners have been invited to further discuss moving the acute care research agenda forward.

Ms. Lois Fingerhut noted that NCHS held a meeting last September on measuring injury severity in national, population-based data sets. The discussion paper that resulted from that meeting is on the NCHS website and can add to information regarding issues related to severity.

Dr. Carolyn Fowler emphasized that the next day of the ACIPC meeting would include discussions of impact measures. There has been discussion at STIPDA regarding how to get information to the practice community and how to get information from the practice community out to the rest of community. Many practitioners may not be comfortable with peer review publishing. She wondered whether ACIPC should, at a future meeting, consider the statements regarding impact that grantees will be required to provide in their final reports and what mechanism might be best for disseminating the lessons learned so that they can be an educational resource for the community. She asked whether this issue would be worthy of including on a future agenda. The committee indicated its support for this idea.

Dr. Fowler hoped that the committee would have time to discuss the format of the meetings and how to make them more useful, especially given that some members of ACIPC are not from the traditional injury community. She suggested that a group of interested persons could convene at lunch the next day to discuss informally the future of ACIPC.

Subcommittee on Intimate Partner Violence and Sexual Assault (SIPVSA) Report

***Ms. Anne Menard and Ms. Suzanne Brown-McBride, Co-Chairs
Subcommittee on Intimate Partner Violence and Sexual Assault (SIPVSA)***

Ms. Anne Menard began by reviewing the charge to SIPVSA, which was formed approximately 2 years ago. SIPVSA advises and makes recommendations to ACIPC and the NCIPC Director regarding feasible goals for the prevention and control of domestic and sexual violence. The subcommittee had a series of rich discussions with division staff, related federal agencies, and other interested colleagues in the field. They received staff briefings regarding specific grant programs and other initiatives. These conversations form the basis of their discussion and recommendations.

Ms. Suzanne Brown-McBride agreed that violence and public health are becoming more linked. She discussed the complications associated with this integration, as these challenges highlight why SIPVSA came into being. Intentional injury is a relatively new public health

issue. Violence against women is a more recent focus within violence and is often located tangentially in state and local infrastructures. Locating these issues within public health can add layers of administration between the state and federal levels. For instance, the Delta Programs conducted by CDC have a relatively direct connection to the structure of CDC. Those who work in violence against women at the state and local levels receive funding from different streams and are often layers removed from the Injury Center.

These issues represent a change in constituency as well. Groups of practitioners within advocacy and sexual assault work may not consider themselves public health practitioners, so it is important to know that many coalitions are still learning to be conversant in the language of public health. They have become conversant in the language of criminal justice since the passage of the Violence Against Women Act (VAWA) and they are now becoming adjusted to public health. Ms. Brown-McBride asked the group to be patient because these practitioners are learning new frameworks and to understand that differences in terms can lead to challenges. While the goals of the groups (to end violence and injury) are the same, the rationale and language used for interventions can differ. For instance, a term such as “surveillance” can have different meanings to different people in different contexts.

Ms. Brown-McBride further observed that constructs that have informed her work have tended to be politically informed. The organizations with which she works, which are grassroots, community-driven groups, are now working with a variety of federal agencies. They may have been informed by a political analysis that might not be taken into account in public health. They also consider domestic violence and sexual assault as public safety and crime issues, so they have had to work in different frameworks and perhaps had difficulty integrating into CDC’s perspectives and work.

Some of the applications of traditional public health models have been difficult to reconcile in the intimate partner violence (IPV) and sexual assault field. While offenders are compared to “disease” in public health parlance, they are viewed in domestic violence as independent actors who make decisions about how to interact in an environment. Some of the public health models that pertain to disease or contagion may have more difficult applications. Some other work in violence addresses these issues, but those who work in sexual assault intervention and prevention have had difficulty with the public health models. Continued dialogues have improved their ability to work with those models.

The role of NCIPC in responding to violence against women programs is different because so many issues fall under VAWA, including stalking. NCIPC can have conversations with domestic violence practitioners. There are more contractors and more layers of bureaucracy in the area of sexual assault, which might make priorities that come from the center level difficult to understand at the local level, which can perpetuate communication issues.

Especially in IPV and sexual assault, “one person’s intervention is another person’s prevention.” This work can be highly politicized. Most politicians seem to think that in sexual assault, locking offenders away forever is the best form of prevention. Reconciling these models and expectations can be challenging. The languages of public health and advocacy are not always well-matched. The two approaches do not measure their work in the same ways. They need to

develop outcome measures that are important and that reflect the ways that services are structured.

IPV and sexual assault services were funded and founded out of urgent needs and crisis responses. There was little political will to conduct evaluation when shelters and crisis lines were created. This evaluation work is integrated into other models. These services are not necessarily equipped with the infrastructure to create interventions that include evaluation pieces, so evidence-based practice is difficult because the political will and funding is not always available. Adding funds to current budgets for evaluation would likely be considered a waste of public funds. Crisis centers and other service providers desire to evaluate their work but lack the tools to communicate the need for evaluation so that they can be funded appropriately, as they rarely have the resources of an academic center behind them. Their intervention and prevention work is done with limited resources and extravagant need, like most work in public health.

There are tensions in the field regarding collecting data. These tensions are partially due to data complications around intentional actors and stigmas around sexual violence on a number of levels: the stigma of not wanting to talk about victimization, resistance of traditional surveillance mechanisms, and resistance of methods for tracking other phenomena. There is a political resistance as well. For example, universities do not want to collect sexual assault incidence data on their campuses because of political costs, as certain cities do not want to be known for having high rates of domestic violence, even if those high rates are associated with good interventions and reporting mechanisms. Data does not get collected as it should be for political reasons, but there are examples of good work. Collecting this data has also not been seen as a priority. In issues of IPV and sexual assault, these tensions are important to consider in making the transition to public health. SIPVSA's work is informed by these issues.

Ms. Menard added that changes at CDC will impact where this work is located within CDC and NCIPC. Similar reorganizations are taking place at the state level, where human services, health agencies, criminal justice agencies, and/or their funding streams are merging. These changes will affect how IPV and sexual assault are integrated into public health. She said that NCIPC is recognized as a key partner with the Department of Justice's (DOJ) Office on Violence Against Women and other departments within DOJ and HHS. NCIPC has a Congressionally-defined role in funding work in this area. The Rape Prevention and Education Program (RPE) is funded at \$42 million, and a \$6 million annual grant program was created under VAWA to fund demonstration initiatives on domestic violence. NCIPC has crafted this grant into the Delta Project, which is the first prevention money in IPV. Other monies are primarily for crisis-level intervention efforts such as shelters, hotlines, and advocacy services. NCIPC also receives funds to support other violence against women-related activities such as research and evaluation and development and dissemination of prevention resources and surveillance instruments. It is important to distinguish between earmarks, which often come from one legislator's intention to direct funds toward a particular constituent, from money targeted by Congress for research and programming in a given area. Currently, IPV and sexual assault funding represent over 50 percent of NCIPC's total budget. The Violence Against Women Act of 2005, which is largely advocate-driven and drafted, calls for additional funds for CDC to expand activities related to IPV and sexual assault.

SIPVSA recommended that:

- ❑ ACIPC should more fully understand NCIPC's work on IPV and sexual assault issues. This can occur through:
 - more visible reporting by Intentional Injury staff in the ACIPC meeting framework; and
 - briefing new ACIPC members on NCIPC's history and role in addressing IPV and sexual assault.

- ❑ ACIPC should systematically address IPV and sexual assault issues, drawing particular attention to how intentional injury, including IPV and sexual assault, impacts, cross-relates, and influences other issues. This can occur through:
 - presentations and discussion by NCIPC staff and other partners as part of ACIPC's agenda; and
 - considering frames, analysis, and links that underscore links to IPV and sexual assault.

- ❑ ACIPC should remain committed to a membership that includes a variety of individuals with IPV and sexual assault expertise drawn from all levels of public health practice.

In discussions of state-level public health initiatives, the response to IPV and sexual assault can be more actively and intentionally explored, especially given the challenges associated with the area and its relationship to public health. In utilizing a "life stages" approach in goal-setting, there should be an examination of how IPV and sexual assault issues fit into each of the life stages. This will raise the visibility of IPV and sexual assault in the planning and priority-setting process as well as provide opportunities to engage in primary prevention related to child sexual assault and children exposed to domestic violence and links to other health impacts at later life stages.

Regarding the question of whether SIPVSA should be a subcommittee or workgroup, it should be noted that IPV and sexual assault issues remain tangential within ACIPC and most public health departments, despite having significant and dedicated funding and vocal and engaged constituents at all levels. IPV and sexual assault are difficult issues to address within the public health framework, so ongoing and intentional work on these issues is important. The public health approach remains confusing to many IPV and sexual assault practitioners. There is a strong network of constituents in IPV and sexual assault, including cross-disciplinary and multi-level partners. Therefore, SIPVSA recommends that:

- ❑ A standing workgroup be established to provide direct guidance to NCIPC staff and ACIPC leadership on sexual assault IPV issues. This effort can take two directions:
 - ACIPC and its role in advising the Director of NCIPC, and
 - Providing support to Division staff as they develop IPV and sexual assault initiatives within the context of the challenges that those issues face in public health.

SIPVSA will refine these recommendations based on feedback from this presentation and then

identify structural supports such as timing meetings to maximize their benefit; to be informed by and to inform the work of ACIPC; to introduce new ACIPC members to the background of IPV and sexual assault issues within NCIPC; to conduct staff briefings at the ACIPC and workgroup level; and to provide input in setting the ACIPC agenda.

Discussion Points:

Dr. Leslie Beitsch agreed that IPV and sexual assault issues are marginalized in public health; however, he did not feel that these issues were less amenable to the public health model than the many other disparate issues that are approached by public health. The only issue that fits neatly into the public health model is communicable disease, which is a small fraction of the universe of public health work. Regarding the idea that sexual assault and IPV have been resistant to the concepts of best practices and translational research, he noted that the same could be said of other issues. The infrastructure for translational research is poor across public health. “Bad data” is not a shortcoming unique to IPV and sexual assault, he continued. For example, universities are also unwilling to report their incidences of drunk driving and sexually transmitted disease as well. While he agreed with SIPVSA’s conclusions, he was not supportive of the rationale that led to them.

Ms. Suzanne Brown-McBride responded that the advocacy community in sexual assault work does not resist best practices, as it would be unethical to do so. Funding within public health at large, however, is not comparable to funding in advocacy programs, as these programs are not related to any aspect of public health. Many areas find challenges in working on public health, but the rationale for the difficulties in IPV and sexual assault arise from the nature of their work and where and how that work is accomplished. All marginalized issues should have the opportunity to assess how to overcome their challenges.

Dr. Carolyn Fowler commented that many areas of public health feel marginalized. The issues of utilization-focused evaluation and empowerment evaluation have only recently come to the forefront to CDC, as the agency’s interest in participatory research is relatively new. This is an opportunity for the field of IPV and sexual assault rather than a barrier. ACIPC can look for ways to move forward with research and intervention methodologies which are viewed as rigorous, but usable in the real world. The concern that evaluation is not fundable at the local level is shared by many efforts. Dr. Fowler suggested that discussions continue regarding how to require non-negotiable, formative, process evaluation that is integrated into the life of programs. Once that evaluation is standard, then the information that it yields must be available so that its value is recognized and further funded.

Ms. Anne Menard added that every grant program included in the Violence Against Women Act Reauthorization Bill has a set-aside for evaluation. This move represents a change in the thinking of advocates regarding the importance of evaluation not only in getting programs re-funded, but also in understanding what works and what does not work about interventions. This stipulation was not part of the Bill in 1994 or 2000.

Ms. Brown-McBride clarified that she does not feel frustrated, but rather feels a need to explain the culture of IPV and sexual assault as it comes to public health. She has never perceived

resistance to the issues, but rather difficulty in bringing the importance of translation to the forefront. These programs exist in a variety of frameworks that place different priorities on evaluation. NCIPC could help make evaluation important, but areas such as local government and justice have to embrace evaluation as well. Promising practices are funded from different sources, and evidence bases are needed from them.

Ms. Lois Fingerhut appreciated the presentation and had not been aware that 50 percent of NCIPC's budget is devoted to violence against women issues. She wondered about the status of the Violence Against Women Survey.

Dr. Thomas Cole asked if there has been more progress in the prevention and treatment of child abuse than in sexual assault and IPV, and if so, why. **Ms. Brown-McBride** replied that there have been impressive strides in child abuse and that much is learned from those areas at the practitioner level via cross-collaborations. **Dr. Cole** added that since the public health system is not geared to sexual assault and IPV issues, then perhaps some systematic lessons can be learned from the experiences of child abuse, which may share some common elements with IPV and sexual assault. **Ms. Brown-McBride** agreed. Child abuse has made leaps in interventions, but she suspected that some of the same issues may have emerged in their prevention strategies.

Dr. Tricia Keller manages the violence and injury prevention program with the state health department in Utah. Their department has RPE funds within their program, which has been a strength for them and for the community. Having diverse streams of funding has been a struggle in integrating these issues into public health. It has taken major efforts to coordinate those funding streams at the state level so that funding and efforts are not duplicated. Until those streams are coordinated, the programs may not have as much impact as they could. Dr. Keller further noted that IPV is separate from sexual assault, which is separate from child abuse, but they are all within the violence community. These groups need to be unified so that they speak with one voice. SIPVSA can address these issues and ACIPC can work at the federal level to coordinate those funding streams. **Ms. Brown-McBride** agreed, noting that data collection at the practitioner level varies according to different funding sources.

Dr. Fowler raised the question of making SIPVSA a standing workgroup. Technically, workgroups do not stand for a long time. They exist for a defined time and are charged with a specific product. Another option is to phase workgroups, so she wondered what the first workgroup might look like, and what its product would be. **Ms. Brown-McBride** replied that this question was the core of SIPVSA discussions. It would be possible to create 5 deliverables for a 5-year work plan. This approach may not be most appropriate, though, since these issues will build on each other for some time. The immediate concerns and potential products are logistical concerns regarding inclusion in the ACIPC agenda and preparation and work to formalize notions regarding integrating IPV and sexual violence into public health as well as gathering observations from a range of public health practitioners.

Dr. Fowler asked whether it would be possible to work with people such as Ms. Fingerhut in the next month to specify a tangible goal for a specific time frame. They have a great deal of momentum, which should carry activities now. **Ms. Menard** agreed. She added that SIPVSA hoped for a new concept to address the issues described in the presentation, as the current

subcommittee structure does not work and the task- and product-oriented model of the workgroup also has limitations, since SIPVSA works as much with process as with specific activities. The current structure is not a continuum, but a choice between two options, and they suggest something in between.

Ms. Louise Galaska said that strictly, subcommittees have specific requirements to meet, and workgroups have specific expectations. Given what they want to accomplish, perhaps they do not have to be a subcommittee or a workgroup. People who are concerned about this issue do not have to fit into one category or the other in order to accomplish what they want to do. Since Ms. Menard and Ms. Brown-McBride are both ACIPC members, they can gather a group of interested people and discuss any issues that they would like to. There might be less importance in having a formal designation, especially since they have thought through the important issues that they want to address.

Ms. Menard recommended that they mull these ideas over and return with a refinement of the recommendations and clear next steps. **Dr. Fowler** agreed and asked Ms. Menard and Ms. Brown-McBride to join the next day's discussion regarding the functioning of ACIPC.

Update on SAVIR

Dr. Jim Helmkamp, Director

West Virginia Injury Control Research Center (WV ICRC)

Society for the Advancement of Violence and Injury Research (SAVIR)

Dr. Jim Helmkamp explained that at the Denver conference, the National Association of Injury Control Research Centers reformed itself into SAVIR, the Society for the Advancement of Violence and Injury Research. SAVIR was a major supporter and collaborator of the Injury Conference. This group elected to embrace a larger context for itself to include the full extent of injury research, both unintentional and intentional, and to attract new partners. The group includes 12 partners, which does not reflect injury research as it should, particularly given the expanded research agenda. They hope to include violence researchers and other researchers at academic institutions, individual researchers, and private organizations. The membership will include an application process and nominal fee structure. They hope to broaden their base, identify new funding streams through new partnerships, and to remain involved in the Injury Coalition.

Overview of Workgroup on Infrastructure

Dr. Carolyn Fowler, Chair

Advisory Committee for Injury Prevention and Control (ACIPC)

Dr. Carolyn Fowler explained that ACIPC created a working group on injury control and infrastructure definition. The draft of infrastructure definitions was submitted to ACIPC in November 2004 and was endorsed. ACIPC then recommended convening a modest-sized working meeting of invited leaders to move beyond the recommendations. There was concern expressed regarding whether ACIPC was ready to proceed with such a meeting. Non-

governmental members had not provided feedback, and infrastructure includes more than federal and state agencies. Further, NCIPC does not have the resources to support a major initiative of this kind. At the Denver conference, Dr. Fowler met with several interested parties and made the following conclusions:

- ❑ The fact that the resources do not exist to sustain the workgroup emphasizes the importance of having an infrastructure workgroup in the first place.
- ❑ The next step may be to take move on with infrastructure workgroup with a focus on collecting the valuable missing information from non-government, or non-public health government, partners. There are many groups doing this work and making recommendations.

Dr. Fowler presented for ACIPC's comment the idea of continuing the workgroup with an eye on non-traditional partners so a more informed discussion of infrastructure can take place.

Discussion Points:

Mr. Chet Huber said that he was not sure how this effort would manifest itself.

Dr. Carolyn Fowler explained that the working group operates via telephone discussion to assess the infrastructure that is in place, what is missing, what is needed, and how to create an infrastructure that will help the field move forward to do high quality research and practice. ACIPC's concerns in November were that governmental resources in injury had been considered, but not non-governmental resources. Many issues such as tobacco cessation and immunizations are addressed in non-governmental settings, but best practices are determined by CDC.

Capt. Stephanie Bryn noted that the workgroup got a strong start, but realized that they had farther to go, as they had not considered non-traditional infrastructures. Therefore, they would like more time to discuss the issue. They also need a chair.

Dr. Fowler said that if the effort is to continue, then the workgroup needs a chair or co-chairs.

Dr. Wayne Meredith suggested that they continue the discussion at a later time. Perhaps a coalition of partners could assemble a workshop to define the need and how to meet it. Such a group could assess whether this work is appropriate for CDC, to conduct a gap analysis, and then make a recommendation regarding how to address the gaps.

Dr. Fowler replied that there was concern that they were not ready to have that meeting yet, as they did not know who should be at such a meeting. She proposed that they discuss this matter informally.

With that, the group adjourned for the day.



Thursday, June 9

General Session (Open to the Public)

Call to Order/Introductions

Dr. Carolyn Fowler, Chair

Advisory Committee for Injury Prevention and Control (ACIPC)

As time had not permitted the group to introduce themselves the day before, **Dr. Carolyn Fowler** suggested that they do so at the beginning of the day's proceedings. Each ACIPC member introduced themselves, their agency, and their area of interest pertaining to the committee.

Update on Goals Management and Trailblazing

Dr. Christine Branche, Director

Division of Unintentional Injury Prevention (DUIP)

National Center for Injury Prevention and Control (NCIPC)

Dr. Christine Branche explained that CDC is moving in the direction of goals management. Last fall, she worked on an initiative geared toward adolescent health in the Office of the Director of CDC. This spring, she acted in an advisory capacity as CDC took its interest in adolescent health to an agency-wide level. The adolescent health group identified major health outcomes for adolescents, choosing the broad focus of youth between the ages of 11 and 20 years. Injury is the leading cause of death for adolescents. The group identified behaviorally-oriented key risk factors for this age group, as well. They reviewed the Community Guide and other evidence-based interventions to assess the most appropriate interventions for this age group. Because so much effort has been put into Healthy People 2010, the Government Performance and Results Act (GPRA), and the Performance Assessment Rating Tool (PART), it was important to include these activities in making assessments of adolescent issues for the agency.

The leading causes of death for adolescents are motor vehicle crashes, homicide, and suicide. Seventy-five percent of teenagers in the United States die from motor vehicle crashes, and 13 percent of deaths in this age group are related to homicide. The group determined the leading risk factors in adolescent health using a battery criteria and data from the Youth Behavioral Risk Factor Survey (YRBS). According to YRBS, 11 million persons between the ages of 12 and 20 years drank alcohol in the previous month. Thirty-three percent of students between the ages of 15 and 19 years do not meet national recommendations for exercise, and 77 percent of students in that age bracket exceed the recommended fat intake in their diet. Fourteen percent of high school students had four or more sex partners during their lifetime. Nationwide, 58 percent of

students aged 15 to 19 years had ever tried a cigarette. Eighty-two percent of adult smokers tried their first cigarette before age 19 years.

As CDC moves toward goals management, funding decisions and activities across the agency will be related to goals. This spring, CDC began “blazing the trail” for how to pursue this shift in direction. Four “trailblazer” teams were created: Adolescent Health, Preparedness, Influenza, and Obesity. The work during the spring included examining the pilot work from the fall and examining adolescent health activities that are underway across the entire agency. The Trailblazer Team found critical gaps. CDC programs function in isolation and in categorical approaches, which are not the best way to operate. Information about effective interventions is sorely needed. Over 18 divisions from all four coordinating centers across the agency engaged in the trailblazer effort in some capacity.

The Trailblazer Team also concluded that adolescent health, safety, and well-being could be dramatically improved if CDC were to apply the existing, categorical, evidence-based interventions in a comprehensive and sustained fashion across the agency. Also, outcomes would be improved if the agency were to conduct research to broaden the range of evidence-based programs to include cross-cutting interventions. The goal is to build a comprehensive approach to adolescent health for the agency, and many activities that the team proposed are comprehensive. The Trailblazer Team has also suggested a staged method to begin this move toward a comprehensive approach. Motor vehicle injuries will be the first area for this comprehensive approach and thus the foundation, as the agency embarks on this effort. Motor vehicle injury was selected for three reasons: 1) motor vehicle crashes are the leading cause of preventable death among adolescents; 2) motor vehicle crashes are highest among Native Americans, which addresses disparity; and 3) motor vehicle crashes are the least-funded high-burden area at CDC. Risk factors for teen drivers include: 1) inexperience behind the wheel, lack of skill, or poor judgment; 2) speeding, an issue in which NHTSA is also interested; 3) distractions such as adjusting the radio, eating, or talking on a cell phone; and 4) running red lights.

Dr. Branche showed a distribution of driver death rates per 100 million miles traveled. Young drivers and older drivers have the highest death rates from motor vehicle crashes. When older drivers crash, they tend to injure themselves; young drivers involved in crashes tend to injure others. Young drivers have more crashes, and crashes decrease with added age. There is an erosion in seatbelt use, or appropriate occupant protection, during the teen years. Also, as the number of passengers increases, so too does the number of crashes for teen drivers. Interventions become important when goals are an aim, because impact of activities must be proven. The Trailblazer Team selected the following interventions: safety belt use and graduated driver licensing programs (GDL).

Teens who begin to drive have ten times the crash risk as adults, but with driving experience, crash rates can drop. GDL creates a protective time period for teenagers to learn driving skills without engaging in the riskier components of driving, such as night time driving. These programs reduce teen crashes by 12 to 15 percent, and driving with restrictions reduces overall exposure. The trailblazer effort in motor vehicle crashes and adolescent safety includes elements that will pertain to other injury prevention efforts. For instance, it is essential to engage parents.

In a graduated licensing program, parents' role in monitoring and enforcement is critical. When parents monitor their teens, the result is less risky driving by the teenager, fewer traffic tickets, and fewer crashes. Parents are not monitoring their teens as well as they could in this country. The Checkpoints Program is a specific intervention that has lead to increased parental limits. Engaging parents is important for any adolescent health issues. Engaged parents reduce HIV and other STD risks, for instance. In order to be successful, strategies for health issues have to be multi-faceted and sustained. They must address the teen, parents and/or caregivers, the school environment, peer groups, and the broader community. GDL programs intervene at the societal level. Increasing communication and collaboration across CDC will be critical as these initiatives move forward. The Trailblazer Team emphasized the importance of an infrastructure for collaboration in adolescent health across the agency and also encouraged increased research and surveillance.

The Dr. Arlene Greenspan, who is a member of the DUIP staff and on the Trailblazer Team, created draft impact measures also. These measures will assess impact in the long term, but short and intermediate impact measures are more difficult to create. The short-term impacts for GDL include: parental knowledge of driving risks and awareness of local laws and their provisions; an increase in the time parents spend supervising new teen drivers; restrictions imposed by parents on teens in their households; and the use of written contracts, which is a key component of the Checkpoints Program. Intermediate impacts include: an increase in self-reported compliance with the restrictions; increase in safety belt use; and reduction in moving violations. Long-term impact measures include: an overall reduction in crashes, including fewer night-time crashes and fewer crashed involving teen passengers; a reduction in overall injuries and fatalities for teen drivers; and improvements in GDL laws at the community level.

Dr. Greenspan generated estimates of lives saved at the proposed effectiveness levels for the GDL programs. These estimates came from a sensitivity analysis that assumes that teen driving interventions will decrease fatal injuries by between five and 15 percent, and that the interventions are aimed teens during the time of provisional licensure (ages 16 and 17). According to NHTSA data, 1056 16 and 17 year old drivers were killed in 2003. Assuming 5 to 15 percent effectiveness, then between 53 and 158 lives of 16 and 17 year old drivers could be saved. Teens often carry passengers, so estimates for teenaged passengers were generated as well. In 2003, almost 2,000 passengers between the ages of 15 and 19 were killed. If the GDL laws are effective, then between 99 and 296 passenger lives would be saved. More discussion is needed regarding which impact measures are important, whether the impact measures are correct and whether they need to be altered, the assumptions that must be made in order to calculate the effectiveness of the selected interventions.

Discussion Points:

Dr. Ron Davis brought up the issue of primary enforcement of seatbelt legislation. Educating parents and children is beneficial, but making changes at the population level is difficult without funding for mass media education and school education. Policy interventions can reach entire populations. He suggested adding a focus on law enforcement to the strategy because law enforcement can play a role by issuing warnings or citations. In a majority of states, any driver cannot be pulled over for not wearing a safety belt unless another infraction is occurring. An

impact measure could also be the number of states that move to primary enforcement of seatbelt legislation. In February 2004, Senator John Warner introduced legislation to link federal highway funds to states adopting primary seatbelt laws or meeting 90 percent seatbelt usage rates. This bill failed by a vote of 56 to 42, but the issue should be reintroduced.

Dr. Christine Branche added that deliberate collaborations with partners, whether federal or non-federal, are not reflected in the presentation. While this adolescent trailblazer activity is specific to CDC now, there will be meetings with partners and opportunities to leverage partnerships in the future, because these partnerships and collaborations are essential. The issue that he mentioned is in the domain of their collaboration with NHTSA.

Ms. Marilena Amoni stated that she had heard of this initiative for the first time at the meeting the day before, which was problematic. While she said she respected the idea that the center is undergoing a strategic planning process and is seeking trailblazing opportunities, to have come this far without collaborating with NHTSA is a serious omission. Several of the countermeasures and interventions proposed in GDL law research are topics that NHTSA has already reached a second level of research on, such as night-time restrictions, passenger restrictions, and parental involvement. The research and surveillance skills of CDC are needed, but the lead federal agency for this activity should not be left out. Further, NHTSA is exploring the important countermeasure of vehicle technology. The full environment of options must be considered when interventions are being selected. Finally, research must be translated into action and advocacy, or else CDC will miss an important contribution to the research and to society.

Capt. Stephanie Bryn added that HRSA operates an Office of Adolescent Health and has worked with the Division of Adolescent and School Health (DASH). Involving youth in dissemination and action work is critical. The messages have to be heard by youth. The National Organization for Youth Safety (NOYS), which NHTSA has funded for ten years, has over 45 youth membership organizations that could be helpful. The social marketing piece of this effort will also be important.

Dr. Carolyn Fowler noted that the American Academy of Pediatrics would also be a valuable partner.

Dr. Wayne Meredith commented that the purpose of ACIPC is to bring different partners together to apprise them of CDC activities. He hoped that progress on this excellent project would not be impeded by complaints that all potential partners were not informed earlier.

Dr. Henry Falk clarified that a significant issue for the adolescent-related activities at CDC is that programs have operated independently at CDC over the years. A major effort, of which the trailblazer is an aspect, is to ensure that the programs which focus on adolescent health work together. Each program has specific elements, but their common core relates to risky behavior among adolescents. The initiative has moved quickly and they have only just settled on motor vehicles as the first focus. He understood the need to work together and hoped to meet with NHTSA representatives, but noted that the impetus for this effort was a lack of links between CDC programs.

Dr. Leslie Beitsch noted that the roads themselves should be included in this work.

Possible Impact Measures for Injury Prevention

Dr. Janet Saul

Division of Violence Prevention (DVP)

National Center for Injury Prevention and Control (NCIPC)

Dr. Janet Saul briefed ACIPC on their afternoon's work, which would concentrate on potential intermediate effects of NCIPC's efforts. She observed that many ACIPC members have expertise and experience in identifying program effects and evaluation research and hoped that they could work together in a common framework.

At CDC, there is an overall increase in accountability. The Performance Assessment Rating Tool (PART) will eventually be used to review all federal programs every five years. These reviews focus on program results. The adolescent activities at CDC have brought an increased focus on accountability within CDC and the measurement of their activities' impact on the health of the public. CDC instituted a new peer review policy in 2003. That policy requires that all research portfolios will undergo a peer review process. NCIPC is going through a peer review of their youth violence research portfolio. NCIPC has always used data to guide their decisions and engaged in continuous program improvement, assessing whether their work makes a difference.

Dr. Saul presented a graphic of the CDC evaluation framework. Intermediate impacts and effects fit into the overall planning and evaluation process of the center, so they approach these effects using a program evaluation framework. There are six steps in the CDC evaluation framework, and ACIPC members will be asked to focus on two aspects of Step Two: Describing the Program. The first aspect of describing a program is to describe expectations; that is, what is anticipated to occur because of the program. These expectations should be broad. A logic model is created during this step of the evaluation process.

She suggested that in their small group discussions, ACIPC members not dwell on language differences. Some fields, for instance, describe "impacts" as short-term effects and "outcomes" as long-term effects, and other fields take the opposite definition. She encouraged the group to focus on intermediate impacts or effects. The Futures Initiative, which is the broad CDC initiative that has led to reorganization and the goals management approach, encourages a stronger CDC focus on health impact. It focuses on early risk factors and supporting healthy behaviors rather than on long-term effects. At the basic level, the day's deliberations should address the effects of NCIPC's injury and violence prevention efforts on the lives of the public.

The logic model for the day is basic to focus on impacts, not process. Dr. Saul suggested ways that the group could fill in the logic model. NCIPC has a portfolio of research and programmatic activities. Parts of the impact portion of the logic model can be derived from the NCIPC Mission Statement, which is *to prevent premature death and disability and to reduce human suffering and medical costs caused by injuries*. These ideas are broad, long-term effects. Often, the middle of the logic model is missing: the potential short and mid-term effects. For the day's purposes, all short- and mid-term effects would be called "intermediate effects." Since the long-

term effects come from the mission statement, ACIPC should consider these intermediate effects and how to measure them. She acknowledged that the long-term effects need more specificity as well, but the current call is to define intermediate effects for the goals management system.

The center focuses on program improvement, which is another rationale for considering intermediate effects. It may take up to 20 years to get effects on the long-term outcomes that NCIPC has set, but they cannot wait that long to say that they are making a difference. Intermediate effects will allow the center to assess internally whether they are on the right course and to state externally that they are on their way to their long-term effects. Also, many intermediate effects are positive in and of themselves. Parental monitoring, for instance, is shown to decrease motor vehicle crashes, and it has other positive benefits as well. Parental monitoring and supervision of adolescents is connected to less high risk sexual behavior, less illegal substance use, and less tobacco use.

Dr. Saul presented general categories of intermediate effects: Changes in knowledge and awareness; changes in attitudes and beliefs,; skills; behaviors; norms; policies; and changing environments. CDC often bases logic models on theory and empirical evidence. Dr. Saul encouraged members to incorporate their knowledge about unintentional injury and violence research into their deliberations as they move toward including specific items in the intermediate effects within the above categories. For example, Dr. Branche had listed a number of intermediate effects of GDL laws such as increased safety belt use. The logic model does not include process indicators such as the number of teens who took a driver's education course or the number of parents who were exposed to a media campaign that encouraged monitoring their teens. The day's work was to concentrate on effects, not process. The center will eventually build a logic model that will evaluate at the entire program of research and programmatic activities, including process measures, but effects are the focus of the day. Intermediate effects should fall under more than one of the categories listed above as well. All of the effects are based on empirical evidence and pulled from the literature on what puts adolescents at risk for having motor vehicle crashes and from literature about programs and policies that are known to work.

After identifying the intermediate effects, the next step would be to create or identify measures and data sources through which those measures can be collected. Dr. Saul then introduced Dr. Ileana Arias, who would give the group its specific charge.

Charge

*Dr. Ileana Arias, Acting Director
National Center for Injury Prevention and Control (NCIPC)*

Dr. Ileana Arias complimented Drs. Branche and Saul on providing a framework for the afternoon's deliberations and for explaining the need and importance of the activity. The need comes not from pressure that NCIPC feels to demonstrate the effectiveness and importance of their programs, but from a need to evaluate their activities and to know that these activities are successful in furthering the prevention of injuries. Because of time restraints, the afternoon's discussions should have a specific focus. NCIPC is most interested in effects that focus on the

prevention of injury during the formative years. That time is defined as individuals between the ages of 1 and 24. CDC is placing significant emphasis and investment on adolescent health. Investment in this age group is likely to have great benefits in the future, because this age group is the future. This age group is a focus because work that examines linkages among various sources of injuries, connections are strong in this age group and points of intervention are more obvious. NCIPC is interested in learning more about this age group and then intervening with them again not only to prevent injuries in this life stage, but to bank on what can be accomplished in this life stage to prevent injuries at later ages.

In thinking about intermediate effects, Dr. Arias encouraged ACIPC members to consider multiple levels of the social ecology of these issues. Individual factors or population-based work might be initial areas of focus, but the entire spectrum should be included, such as family variables, community factors, and social network within a community that can indicate the impact of work. The day's conversations should be creative as well. Because of the pressures inherent in being researchers and federal agents, there might not always be time to think creatively about the possibilities of work. For today, though, the group should think through a range of effects and ideas.

NCIPC is looking for "coveted" impacts; that is, issues beyond the usual attitudes, and knowledge. Changes in attitudes and knowledge do not always translate into changes in behavior that lead to decreases in morbidity and mortality. Although assessing changes in attitudes and knowledge is feasible, Dr. Arias encouraged the group to focus on behavioral factors, skill changes, and effects that are closely related to the final outcomes of decreases in morbidity and mortality. Lastly, the groups should attempt to identify measures and data sources for the effects.

She explained that four workgroups had been assigned. Each group includes persons from a mixture of backgrounds, experience, and interests to ensure that all perspectives are included in the ultimate recommendations. The first two groups would concentrate first on unintentional injury health impact and focus on violence after a break. The other two groups would consider violence first and unintentional injury second. Each group had a moderator to help the group focus and to capture its ideas.

Discussion Points:

Ms. Lois Fingerhut asked about the large age span that they were asked to consider. **Dr. Ileana Arias** replied that staff had originally planned to focus on adolescents, but there was some question of how to define "adolescent" specifically. They also wanted to include children because of the continuity from childhood to adolescence. Significant emphasis is being placed not only on health issues in childhood, but on health issues of parents and adults who come into contact with children. The concept is to invest in long-term influence.

Ms. Louise Galaska noted that CDC staff members had been invited to participate in this process, contributing their knowledge and information on programs and tools that might be helpful in evaluating some of these activities.

Dr. Arias acknowledged that this task could be daunting, given the large age span and range of issues to consider. She encouraged the group to narrow the scope of their discussion, but to be clear about their reasoning for narrowing their scope. Variables that emerge as a result of a more specific discussion can be translated and applied to other age groups and issues.

Ms. Fingerhut commented that in considering a wide range of ages, it is possible that both children and their parents can be considered. **Dr. Arias** replied that the group should consider the entire ecology, including both individual and parental health impacts.

Dr. Carolyn Fowler informed the groups that they could use their time as they saw fit, breaking when they needed to. With that, ACIPC divided into their assigned groups and began their discussions.

Discussion of Workgroup Findings

*Dr. Rodney Hammond, Director
Division of Violence Prevention (DVP)
National Center for Injury Prevention and Control (NCIPC)*

*Dr. Christine Branche, Director
Division of Unintentional Injury Prevention (DUIP)
National Center for Injury Prevention and Control (NCIPC)*

Dr. Rodney Hammond explained how he and Dr. Branche took the raw information from the workgroups and fit them into the categories of intermediate outcomes. He said he hoped that the group would process the information and the day's experience so that NCIPC could understand how ACIPC members understand the impact of defining intermediate outcomes for the Center's work. He then reviewed the broad categories. A prominent theme in many of the groups was the idea that NCIPC programs and activities should result in improvements and increases in knowledge in the area of parenting skills. This impact can be an important index in determining the success of the programs in reducing violence. There is data to indicate that the role that parents have with their children has a risk and/or protective effect regarding violence.

One group discussed the need for improved knowledge and awareness across communities regarding death investigations and the standards by which those investigations should be carried out. This point falls under the "knowledge" category, and there is a need for improvement in death investigations. Parenting emerged as a theme in the skills category as well, including monitoring, nurturing, and discipline skills. The groups felt that showing results in this area would indicate progress in reducing violence. In the norms category, at least one group suggested the idea of increased connectedness to family, school, and community as an effect to measure, as science does indicate that this connectedness is protective against violence. Another example in this category is increased quality and standard of death investigations, as mentioned earlier. A suggestion for policy and environmental intermediate outcomes was for NCIPC to support after-school care and mentoring programs on a universal basis in communities. Further, an increase in the number of communities that have adopted comprehensive and validated programs can be an intermediate effect.

Dr. Hammond emphasized that these examples do not reflect all of the raw materials collected, all of which raise questions of possible measures. Some other suggestions included community surveys to assess how many people in a population have knowledge or awareness regarding these items, or that they engage in certain behaviors. NCIPC can also count the number of jurisdictions that meet a certain standard, for instance, in death reviews. Examining school records for information regarding disciplinary actions is a possibility, but disciplinary actions are often influenced by other issues such as race and economic status. Finally, the number and length of parenting behaviors such as parent-child discussions can help measure the parent monitoring effect.

Dr. Christine Branche described selected thoughts from the workgroups regarding unintentional injury. In the area of knowledge, attitudes, awareness, and beliefs, the groups discussed the knowledge and practice of what constitutes proper supervision. This group reviewed the concept in the context of drowning, but it applies to broader ages and contexts as well. What role do parents play in their children's lives?

Under skills and behaviors, the groups recommended increasing access to swimming lessons that include a component of survival skills. It was also noted that the early onset of exercise and conditioning during childhood will ultimately decrease sports- and recreation-related injuries. Regarding norms, groups discussed how to say "no" to children and teens to address or reorient social norms through parenting. This idea grew out of a recent *Newsweek* article describing a community of parents who decided as a group not to purchase high-end vehicles for their teenagers, thus setting a community norm. In policy and environmental issues, the groups suggested improving policies, including laws and ordinances, that promote environmental controls. This item was part of a discussion regarding drowning, but it also applies to road quality issues. The essence of the idea is to use best practices compendia as a guide. Another suggestion was to use a Community Guide approach to drowning.

The workgroups conceived a number of interesting intermediate measures, including:

- Increasing options for alternative transportation among teenagers, including cheap cab rides, expanding designated driving options, and better routes for buses.
- Increasing safer and age-appropriate choices for vehicles for teenagers. It is never appropriate for a teenager to drive an SUV.
- Improving data systems and analyze state-based child fatality reviews to help design prevention strategies.
- Use sales of personal flotation devices and other protective gear to monitor drowning prevention efforts.
- Monitor teen driving issues, including speeding, DUI, red-light-running, and seatbelt use.

Dr. Branche further acknowledged that the groups crafted three recommendations:

- CDC needs to increase partnerships with the business sector, the broader private sector, NGOs, and other government agencies as impact and goals management activities continue.
- CDC needs to increase its work with youth groups, including NOYS.
- CDC needs to improve data sources for fatal and non-fatal drowning.

Discussion Points:

Dr. Carolyn Fowler informed the group that they would receive typed copies of the verbatim flipcharts from all of the workgroups. She asked NCIPC staff to guide the discussion of the workgroup points.

Dr. Ileana Arias thanked ACIPC for their work. She said she hoped that they had a sense of the issues with which the center struggles in this process, and with which the grantees will have to struggle as well. Documenting the health impact of supported programs and research is no small task. NCIPC hoped that this exercise would spur discussions and ideas. Staff can take the results of the discussion and refine the health impacts. There are difficulties to this work, and she asked ACIPC to react to those obstacles. A major challenge is the extent to which CDC does not focus on process issues that are important to address as it focuses instead on effects. Processes and outcomes are both important, but the emphasis has been shifted to producing effects. She expressed her interest in using process variables as outcomes in and of themselves. What elements should be included when they document the impact of their programs?

Dr. Fowler asked members to reflect on the issues that arose in the small groups as part of their deliberations.

Mr. Gerald Reed commented that in suicide prevention, numbers are fairly constant in the long-term. It is important to show the community at large that while the programs may not be reducing suicide, because such a reduction takes a long time, certain effects are occurring that demonstrate progress toward that goal. He suggested examining injury categories and assessing, for instance, the number states that have implemented a state suicide prevention plan or the number of public awareness campaigns that are in a given state. These examples are interim measures, and the national strategy for suicide prevention has many of these intermediate measures that could apply to other injury categories.

Dr. Arias agreed, adding that such measures must link to outcomes. For instance, impacts can be divided into system impact and health impact. The system impact is important and relatively easy to document, but another issue is the health impact that those system changes has. Is it possible, for instance, to connect the number of suicide prevention programs to policy change, which is a desired outcome. Specific stories can be a good tool for this concept, which can lead to widespread implementation of programs that are proven to be successful. All of this information is important, but access to it is not guaranteed. It is key to connect these measures to issues that are important to different groups and constituencies.

Dr. Robert DeMartino pointed out the difference between being a “change producer” and a “change catalyst.” A change catalyst can take advantage of many opportunities, where if a change producer fails to generate a product, then he has failed. A change catalyst can affect change in many ways and therefore find success in many areas.

Dr. Fowler recounted a discussion her group had which focused on the fact that many components of CDC have spent time and resources to create a means to an end, and now the agency seeks ways to measure short-term and long-term ends. In injury, with some exceptions, no means to the end has been created. The hope is that the development of those means can be catalyzed and supported. Further, her group tried to make recommendations to NCIPC that would lead to time, energy, and resources invested being effective across multiple areas of the Center.

Dr. Arias noted that ACIPC members understand the pressures that affect NCIPC. She was interested in learning how they have dealt with those issues in their work.

Mr. Reed wondered whether past models might inform the future. For example, when warnings were first publicized that smoking is dangerous, it took a long time for that behavior to change. He suggested that this journey, or similar work in alcohol and substance abuse in youth, had steps that could inform present efforts. **Dr. Arias** thought that such models would be available. The center is in a different position now. The goal of “changing attitudes” is no longer sufficient, though. The effects have to be translated.

Mr. Chet Huber commented that CDC is trying to be an element of a solution across a broad range of issues in the area of injury. CDC is the core element in some of these strategies and is a part of complex, overlapping coalition that crosses jurisdictions and influences different groups. In his experience, it is best to assess CDC’s unique opportunity to have an influence in each case. Certain actions are appropriate for certain roles, whether that role is as the driving agent and influencer of public opinion or as an advisor or validation. CDC will not be accountable for the end result of every effort, but the agency still can have a significant effect on the work. Success can then be defined according to CDC’s role in each issue. Affecting public awareness is not an indirect measure of success, he added.

Ms. Louise Galaska noted that CDC’s cancer program faced a similar issue at one time. This program was implementing a cancer detection program to under-served women. There was pressure to measure success via national decreases in breast cancer mortality. The program could not claim sole responsibility for a reduction in breast cancer, however. The program screened one million women, and the majority of them did not have cancer. To measure success, the program assessed the effects of their piece of the overall picture of reducing breast cancer mortality. They were able to document that among the women in their program, they reduced the proportion of women who were screened for the first time who have late-stage cancer. This measure showed that more women were being reached, and the ratio of cancers detected began to lean toward more early-stage cancers, which are more curable. CDC is not the only player in injury, but there is a way that CDC can measure its own success in more tangible ways than in building partnerships or in other process-oriented areas. They do not have the infrastructure and resources to have the impact that they would like to have and that they are being held

accountable for having, but will not receive more resources until they can show how resources to this point have been used.

Ms. Lois Fingerhut recalled that when the Futures Initiative was conducting training sessions, website hits were given particular focus. If someone can go to the CDC homepage and get information about reducing risks for their children, then this access should show an impact in the future.

Dr. Fowler suggested that CDC might have trouble being accepted as a “change catalyst” because there are no measurable, acceptable outcomes, for being a catalyst. She asked the group to suggest measurable outcomes or products that could be associated with being a change catalyst. For instance, there have been discussions regarding the impact of the Surgeon General’s Report on Suicide. The report triggered media reporting, advocacy for funding, and discussion. She wondered whether it would be possible to create other, similar reports for other priority issues.

Ms. Marilena Amoni offered that grant criteria could reflect these outcomes. If the center creates an intervention that is proven, it could become an eligible area for funding so that implementation and change becomes part of the grant criteria.

Dr. DeMartino commented that it is virtually impossible to tie a public awareness program to an outcome; however, it is clear that such programs have meaning. For instance, decades of educating the public about the dangers of smoking have finally resulted in reductions in smoking. Long-term behavioral changes cannot happen in a funding cycle, but these changes are part of CDC’s roles. People must understand that change will happen, but not necessarily in the ways that are being encouraged now.

Capt. Stephanie Bryn added that HRSA’s Maternal and Child Health Bureau is assessing their performance measures, which state maternal and child health programs must address. They would be interested in guidance and help in this area.

Dr. Ralph Frankowski re-visited the issue of early detection of breast cancer. When mammograms were developed, a great deal of research had to be done to prove that they were an effective way to screen for cancer. Sometimes, basic science can be key to building an intervention. Information has been gained in many areas, such as IPV, which can serve as a tool or pathway to the desired effects.

Mr. Reed noted that interventions can have outcomes in unintended areas. For instance, work in suicide prevention can have an effect on domestic violence and other areas. The American people may not care who does the work, as long as it gets done. As CDC is the agency charged with the public’s health, it must find ways to reach out with all partners, which could be an effective and convincing intermediate effect.

Dr. Fowler referred to comments made by Dr. Ron Davis in the small group session. He reinforced that as leaders in the field, CDC has a responsibility to do the best possible interventions. In many cases, policy and enforcement of policy are crucial elements of successful interventions. CDC is not in a primary advocacy role, but CDC can work to build a social environment in which such policies can be born and implemented. CDC must work with other partners to generate the kind of environment in which these interventions can flourish. **Mr. Reed** agreed, recalling Mr. Huber's comment regarding areas in which CDC can lead and areas in which they take supportive roles. The task, then, is to assess where CDC should lead and where other federal partners and NGO's should lead.

Dr. Branche recalled Dr. Davis's comments. She added that the agency has been able to examine small pieces of research, assess them for the value of the intervention, implement the intervention and make it a policy of the grantees, and then watch how a small measure, which might be in the domain of another partner, can have a great deal of impact. If CDC only looks at broad categories when seeking to have an impact on health, they might miss the small, but important, opportunities that they have been able to embellish. CDC's expertise covers a wider range than interventions that become policy. For example, the combination of CDC and its fire service partners, policies regarding smoke alarms and fire prevention have been adopted as a result of research.

Dr. Fowler raised a topic from a discussion the day before. As CDC considers accountability and performance, SPRS exists for the purpose of examining where grants for research are awarded. There has been an effort to assess the grant funds and demand for them. She recalled a question from the November meeting, which was: Is there greater demand for grants, and are we able to fund more than we were before? NCIPC has taken steps to improve grantee's ability to apply for funds. In light of accountability, it would be interested to review grant recipients from the past five years and to compare the priority scores of applications that were funded then, to applications that are funded now. Have we raised the bar, she wondered? And are we, therefore, unable to fund many excellent projects that might have been fundable years ago? Another point would be to examine the priority scores of earmark-funded projects and to assess whether these projects are held to the same quality standard as the competitive projects. Evaluating accountability and responsibility in funding activities would be a useful exercise.

Dr. Thomas Cole invited Dr. Fowler to join a SPRS meeting. He felt that the overall quality of the applications was not good. SPRS does not have access to all of the information, as the primary reviewers do, but SPRS does review summaries of the reviewers' comments and is aware of the topics of research.

Dr. Fowler asked whether Dr. Cole had noticed a gap between the competitive grant applications and the earmarked projects. **Dr. Cole** replied that his personal impression was that the quality of the earmarks was lower than the quality of the competitive applications.

Dr. Fowler said that if applications have specific weaknesses that come from a lack of baseline data, a lack of understanding of what needs to be done, or a lack of knowledge about best practices, then these observations are relevant.

Dr. Frankowski observed that the RFAs have short time frames, are not consistent over time, and are generally under-funded; therefore, the best investigators may look elsewhere for funding opportunities. He emphasized that he was sharing a personal impression. He added that NCIPC has often not been able to define its own research agenda, partly due to earmarks and partly due to the need to respond to acute injury needs. In looking at applications over the years, though, he believed that the quality of applications has been improving.

Dr. Fuzhong Li, a new member of SPRS, also serves on an NIH study section. He agreed that the last round of reviews did not reflect a high quality of applications, compared to his experience with NIH. He noted that many applications come from community health organizations, not research organizations, which may contribute to the relatively low quality of the applications.

Ms. Lisa Dawson asked about follow-up from grantees regarding their end products. **Dr. Arias** replied that required reports are becoming more formal as the center ensures that the mid-term and final reports for both research and surveillance include information regarding whether the project is meeting desired health outcomes. Grantees state their progress toward outcome goals. There is question as to whether NCIPC identifies the impacts or whether grantees propose impacts, which NCIPC accepts.

Ms. Dawson noted that applications have included criteria for utilizing CDC's investment, especially in continuing applications.

Dr. Arias wondered whether the RFAs could include language indicating that the proposed project is expected to have a health impact and that the health impact will be tracked as part of the reporting process.

Ms. Joanne Grunbaum noted that the Division of Adolescent and School Health (DASH) operates a number of surveillance systems that yield useful data. The Youth Risk Behavior Surveillance System collects data on risk behaviors. National data from 30 – 35 states and 20 – 22 school districts indicate that risk behaviors are not changing. The data from these sources are generalizable. Unintentional injury and violence are important categories in the YRBS. DASH also collects data on schools. The School Health Policies and Programs Study is fielded about every six years, and it includes such issues as environment, violence prevention, and safe schools. The questionnaires are being finalized. This study provides information regarding activities across the country. Every other year at the state and local level, DASH fields the School Health Profile Study, which also examines policies and programs in schools. Some of this data could be useful for intermediate effects, as it is easier to change policies and programs than it is to change risk behaviors. The School Health Index is a tool for schools to use to assess their programs. It began in tobacco control, physical activity, and nutrition, and now includes injury and violence prevention in schools.

Ms. Fingerhut noted that not everyone realizes the value of publishing a paper on surveillance data. The field must help others understand that having good data is crucial to proving health impacts. Often, good baseline data are not available, so measures are difficult to assess.

Dr. DeMartino felt that CDC should publicize its work in funding projects that can set the needed foundation on which change can occur. Getting the word out about CDC's funding and catalyzation efforts can be an indicator of the organization's success.

Dr. Fowler asked the committee if they felt that a rigorous look at change, and how it happens, would be beneficial. Areas such as tobacco, lead, and motor vehicle safety are good examples to consider for documenting how to make change happen. NCIPC can then perhaps apply those lessons in their weaker areas. The committee agreed with this idea. Further, stories of impact can be powerful. At her state level, they have to document new partnerships that were established to do the work or during the work itself and skills or resources that were developed through the course of the work. Their work can have the capacity to have other effects and to create opportunities for future work. There could be a way to capture this information as part of the grantees' reporting process.

Dr. Jim Helmkamp described a series of his projects that revolved around all-terrain vehicles. After seven years, laws in this area were enacted. There are several methods of dissemination, including scientific papers, but scientific papers are not effective when advocating with legislators. In West Virginia, they worked through the media to get their message out. More importantly, they created a video to show decision-makers. This video featured the sister of a victim of an all-terrain vehicle accident in which she implored the audience to pass a helmet law for these vehicles. The video is also used in schools and in the required state training that resulted from the law. The message must be crafted in the right way in order to have an impact. There is now a state-level data collection system for non-fatal injuries, which will make gathering and sharing information easier.

Ms. Anne Menard emphasized that in this political process, NCIPC must help emphasize the value of the work that they do, which is not necessarily tied to outcomes. Development of best practices, surveillance, and raising awareness contribute to the desired outcomes in real ways, and decision-makers may need help to understand this. NCIPC and CDC should not allow its work to be devalued or underestimated.

Ms. Amoni commented that the Community Preventive Guides from the center have helped shape policy. They have been useful tools in the field, and there is direct correlation between the release of the guides and shaping public policy. Capturing this connection between good science and a good outcome would be helpful to the center. Information must be packaged for the intended audience, and the guides were written and framed in a useful and meaningful way.

Dr. DeMartino suggested that in this process, NCIPC consider how slowly change happens in the "real world." They can also hold up the example of smoking to show that public awareness campaigns have meaning and effect and contribute to social and behavior change, even if it is over many years.

Ms. Amoni clarified that public awareness campaigns are comprehensive strategies that include laws and regulations. The long-term, behavioral impact of public awareness is limited without policy changes.

Dr. DeMartino replied that public awareness takes time and is part of a larger system. CDC is not responsible for every element of the complex system, but CDC can take on some tasks within the larger picture. **Dr. Fowler** added that in this example, social norms drive the political process. Motor vehicle safety is a great example in the field.

Mr. Huber agreed that motor vehicle safety has grown tremendously, adding that NHTSA has a very heavily-traveled website and has been conducting crash testing for a long time. In this area, they did not get legislative support, so they took their message to the public. As a result, manufacturers have made safety a priority. Some of the public awareness efforts consist of conditioning the public policy environment so that it is more receptive to change. Much of the work in seatbelts and passive restraints was based on education and science that was packaged in a consumer-friendly way to engage the public so that policy change became possible. If great information is available, then it can be shared through a professional journal or through the media, depending on where effects are desired.

Dr. Frankowski returned to the question of grantee responsibilities. In the research world, there are researchers how can conduct basic science well. This group may not be the best to disseminate the information gathered or to raise public awareness. It is important to create the continuum of basic science, intervention, then dissemination. All of these efforts require different talents and it might not be appropriate to ask one grantee to do all of them, because none of them will be done well. **Dr. Fowler** agreed, adding that even if grantees do not have the skills for all elements of the continuum, can there be a mechanism by which, perhaps NCIPC or other grantees act as a translator of knowledge.

Mr. Reed noted that in suicide prevention, one piece of information gets the most attention: more people die by suicide than homicide. This piece of information is translatable, understandable, and attention-getting. There is great value in this kind of information when trying to encourage a public policy agenda.

Ms. Fingerhut commented that in CDC's reorganization, there will be a new center called the National Center for Health Marketing (NCHM). She wondered who the staff of this center would be and whether this center could play a role in public awareness campaigns.

Dr. Leslie Beitsch is participating in recruitment for the Coordinating Center. He observed that "marketing" efforts to this point have been fairly passive, and changing norms will require a more active approach. Aggressive marketing, including using spokespeople, can be effective.

Dr. Fowler said that CDC could capitalize on social shifts. For instance, Americans are shopping for cars based on their safety ratings and researching safer car seats. Once people are thinking about safety, it is possible to shift their thinking to other aspects of safety, such as high chairs. CDC could both initiate and use momentum.

From Response to Research

Dr. Mick Ballesteros

Division of Unintentional Injury Prevention(DUIP)

National Center for Injury Prevention and Control (NCIPC)

Dr. Mick Ballesteros is an epidemiologist in the Division of Unintentional Injury Prevention at NCIPC. He briefed the group on response and capacity-building related to injury activities in Thailand. Injury is a substantial problem in Southeast Asia. Injury is the leading cause of death in children aged one to seventeen. As many Southeast Asian countries see decreases in their rates of preventable diseases and deaths, injury will become more of a public health problem for these children. The World Health Organization (WHO) and the World Bank predict that road traffic fatalities will increase globally, and particularly in eastern and southern Asian countries. Thailand is expected to see an 80 percent increase in road traffic fatalities from 1990 to 2020. This increase can be attributed to growing economies that allow more individuals to own motor vehicles: in Thailand, the number of registered vehicles has increased from 5 million in 1987 to 18 million in 1997.

The Ministry of Public Health in Thailand runs an injury surveillance system to address these concerns. This system started ten years ago and is based on inpatient hospital records. It originally included outpatient data as well, but hospitals did not have the resources to continue collecting those data. Hospitals report on 19 causes of injury death based on ICD-10 codes. The system started with 40 hospitals, but now includes all government hospitals, which number more than 76 across the country. The hospitals report monthly data and the Ministry compiles an annual report. The report does not include nationally representative data, however, and no action is taken from the release of the report.

Thailand has instituted some injury prevention programs. Health Promoting Hospitals provides injury prevention education to patients and parents. Other programs include a drunk driving prevention campaign, a child helmet use project, and the development of a national report on violence. The child helmet program involves distributing free helmets to children and is based on a similar program that was conducted in Vietnam in the late 1990s, which NCIPC helped to launch. These programs are separate from the injury surveillance group in Thailand, not only physically, but organizationally within the Ministry. The programs are now pilot programs. The hope is to demonstrate feasibility and regional impact before they are expanded.

CDC responded to a request from the Ministry of Public Health for assistance after the tsunami that occurred after an earthquake on December 26, 2004. The tsunami killed over 5,000 people, injured approximately 8,000, and left 3,000 missing. Forty-eight percent of the dead were Thai, and most of the others were tourists. The Ministry asked CDC to help develop and conduct assessments of injuries and risk factors, and help build local capacity to conduct assessments of injuries and risk factors. NCIPC and CDC staff who were stationed in Thailand saw this assistance as an opportunity to build local capacity in injury. Dr. Ballesteros and Dr. Carlos Sanchez, an epidemiologist from the Disasters Branch in NCEH, were deployed to Thailand from February 21 to April 2, 2005.

Drs. Ballesteros and Sanchez worked primarily with the Field Epidemiology Training Program, or FETP staff, who are located within the Ministry of Health. FETP is a 2-year local training program for physicians who are interested in public health. The Thailand is one of the most respected programs in the world. In Thailand, FETP fellows and staff do the majority of the public health field work. These fellows were already participating in several projects related to the tsunami. CDC has an office in Bangkok, and Drs. Ballesteros and Sanchez met with those staff members and used the office for logistical support. This office works closely with the Ministry staff on such issues as HIV, STDs, and emerging infectious diseases and helped the newcomers establish their legitimacy and helped them to communicate in a culturally appropriate way. It was key that CDC's relationship with the Ministry not be jeopardized.

At first, the FETP office was working on the tsunami alone. After a series of meetings, CDC enlisted the collaborative efforts of the College of Public Health at Chulalongkorn University. The university staff were interested in the tsunami as well as the importance of injury in a broad sense. Many staff at the Ministry and the University knew each other, but did not seem to work together regularly. It was decided that FETP would lead the project while the university would contribute scientific input and logistical support. Another stakeholder was the Ranong Provincial Health Office. CDC conducted its study in Ranong Province for many reasons. It was the northernmost province hit by the tsunami and is not a tourist area, so it received less media attention and fewer studies than other areas on the country. The team met with the Provincial Health Director in Ranong and received approval to proceed.

The main objective of the study was to identify modifiable risk factors, both environmental- and host-related, for different types of injuries and deaths that occurred as a result of the tsunami. The CDC team worked with FETP and Chulalongkorn University to develop a protocol and data collection instruments for a case-controlled study to address this objective. The protocol is currently being reviewed by the Ministry's Ethical Review Committee. The project is designed to be research, not a response to the tsunami. When approval is secured from the Ministry, FETP and Chulalongkorn University will commence data collection in Ranong. Drs. Ballesteros and Sanchez will contribute technical assistance via e-mail and conference calls. Their assistance will likely be most valuable when analysis of the data that is collected begins.

A commuter boat capsized the second weekend of their deployment. Police surmised that the accident was due to poor weather conditions, too much cargo, and too many people on the boat, which was registered for 25 passengers, but was carrying 72 people and cargo. The Chief of the Bureau of Epidemiology in the Ministry of Health in Thailand asked Drs. Sanchez and Ballesteros to work with FETP to conduct a field investigation of the accident, including why 26 passengers were injured and 10 were killed, while others were unhurt. They worked with FETP to create an interview form to capture pertinent variables such as the person's location on the boat, the types of injuries sustained, whether a personal flotation device was used, and whether the person could swim. With the assistance of nurses from the local hospital where the passengers had been treated, the team located and interviewed 52 of 62 possible interviews in one day. FETP is quite experienced in infectious disease investigations, but injury projects are new to them. This tragic event became a positive opportunity for them to work in a different area.

Before leaving Thailand, Drs. Sanchez and Ballesteros met with the Ministry's injury staff, CDC Thailand staff, and the Deputy Director General of the Ministry. They presented their work and had a general discussion about the future of injury public health work in Thailand. The local injury staff decided to form a smaller injury workgroup which will meet regularly to discuss specific details regarding expanding injury work in Thailand. They plan to develop more injury-projects with FETP fellows. The FETP fellows primarily work in infectious disease projects such as HIV or avian flu, but training them in injury is important, as these fellows may become staff epidemiologists for the Ministry. It was suggested that they create a Regional Traffic Training Course, which will be a workshop for Southeast Asian countries, given the expected increase in traffic accidents as a cause of injury, morbidity, and mortality. Since many of these countries have the same issues, they will benefit from working together. Potential contributors to this workshop include local experts as well as representatives from United States universities, CDC, and NHTSA. Finally, there needs to be more exchange of scientists between CDC and other local organizations and the Ministry, thus exposing the Thai people to CDC's approach to injury programs and research. This April, an international FETP fellow from Laos spent several weeks with the Motor Vehicle Team at NCIPC.

The time in Thailand was productive on many levels. The deployed staff were able to initiate two injury projects that will yield useful data for developing prevention activities or policies. Their presence led to direct training of many FETP fellows through lectures and direct contact in the field, including exposure to epidemiological techniques. Their time in Thailand developed and strengthened several working relationships and linkages to injury prevention partners in the country, such as the Ministry of Health and Chulalongkorn University, the Ministry and the CDC Thailand office, and the relationship here in the states between NCIPC and NCEH. Since NCIPC and NCEH are now within the same Coordinating Center at CDC, future collaborations may be possible.

Finally, the work in Thailand raised awareness of injury as a public health problem and brought it to the forefront as a future priority. Dr. Ballesteros hoped that the dialogue within the Ministry and the CDC Thailand office regarding expanding injury activities would develop and continue. This deployment was initiated as a humanitarian response to a tragic disaster, but became an opportunity to build longer-term injury awareness capacity in Thailand.

Discussion Points:

Ms. Louise Galaska thanked Dr. Ballesteros for his presentation. She noted that he had deployed to Thailand on very short notice. She recalled ACIPC's discussion regarding the difficulty of measuring processes toward achieving health outcomes and added that Dr. Ballesteros's presentation included unintended consequences that came from the original, narrow definition of the project. This deployment was not initially part of a strategic plan to improve capacity in Thailand, but it became an opportunity. The consequences that Dr. Ballesteros listed were important, and she wondered how to help policymakers understand these consequences and benefits that result from activities that build capacity and infrastructure. The examples in the presentation could be intermediate measures: two projects, training, and new and sustained relationships. It will be possible to document outcomes from the relationship-building that occurred. **Dr. Mick Ballesteros** commented that the Ministry took the lead in the

project because university staff felt that the government agency would have the power to implement policies or enact activities based on the results of the project.

Dr. Christine Branche commented that the Deputy Minister of Health's participation in the closing meeting was important. The CDC Thailand office has focused on infectious disease, specifically HIV and AIDS. The tsunami was the first environmental disaster that led to discussions regarding the injury aspects of the catastrophe more than the need for infectious disease prevention activities. The meeting with the Deputy Minister of Health further cemented the acknowledgement of the importance of injury and a potential move toward non-infectious-disease work in Thailand. This small response had a large impact. Non-government entities can also play a role in building the role of injury in this region of the world. NHTSA is expanding its global response and has identified Thailand as the first location for their activities. **Mr. Gerald Reed** concurred that this work in Thailand is a perfect example of potential intermediate measures. He added that the global aspect of the work is important as well as NCIPC evaluates its role outside the United States.

Ms. Lois Fingerhut recalled a recent International Collaborative Effort meeting in Mexico, which included a presentation from a representative from the Thailand Ministry of Health. **Dr. Ballesteros** knew the woman who had made that presentation—she had begun the surveillance system in Thailand.

Ms. Galaska said that this work is also an example of CDC acting as a “catalyst” more than a “producer.” There are definable health impacts that resulted from this work, and it is also important to maintain contact with their Thai contacts regarding this, and other, research. They must document the consequences of these partnerships.

Dr. Carolyn Fowler shared a well-known phrase in advocacy: “Chance favors the prepared mind.” The work in Thailand is an example of a sudden event that was able to have larger consequences because of experience and preparation. NCIPC and the injury field can consider how to be prepared to leverage such opportunities that arise. **Dr. Ballesteros** agreed, stating that the CDC offices in Thailand began out of a request for assistance and ballooned into a large presence. Dr. Branche added that this office is the largest post of CDC staff outside the United States.

Dr. Fowler thanked Dr. Ballesteros for his presentation and for acting as an ambassador for CDC.

Public Comment, Wrap-Up and Adjourn

Dr. Carolyn Fowler, Chair
Advisory Committee for Injury Prevention and Control (ACIPC)

Dr. Carolyn Fowler opened the meeting for public comment. There were no comments from the public, but **Ms. Anne Menard** offered a comment regarding the small number of ACIPC members who were remaining. She suggested that the meeting end at 1 p.m., or use time differently on the first day of the meeting. This change would create pressure to end on time, but

it might make a difference in the flights that people take and therefore allow more people to stay to the end of the meeting. The attrition is problematic.

Dr. Fowler agreed. She then wrapped up the meeting by thanking the presenters, staff who made the meeting possible, and NCIPC staff. She thanked attendees for their commitment to ACIPC and wished them safe passage home.

Ms. Louise Galaska thanked Dr. Fowler and congratulated her on her first ACIPC meeting as Chair.

With no further business posed, the meeting was officially adjourned.

Committee Members Present:

Leslie M. Beisch, M.D., J.D.
C. Hendricks Brown, Ph.D.
Suzanne Brown-McBride
Thomas B. Cole, M.D., M.P.H.
John D. Corrigan, Ph.D.
Carolyn J. Fowler, Ph.D., M.P.H.
Ralph F. Frankowski, Ph.D., M.P.H.
Sheryl L. Heron, M.D., M.P.H., F.A.C.E.P.
Chester Huber
Fuhzong Li, Ph.D.
Ivan J. Juzang
Anne E. Menard
J. Wayne Meredith, M.D.
Mark Redfern, Ph.D.
Jerry Reed,
Flaura K. Winston, M.D., Ph.D.

Federal Agency Experts Present:

Marilena Amoni, NHTSA
Cheryl A. Boyce, Ph.D., National Institute of Mental Health/NIH/DHHS
CAPT Stephanie Bryn, HRSA
Richard Compton, NHTSA
CDR Robert DeMartino, Substance Abuse & Mental Health Services Administration
Lois A. Fingerhut, M.A., National Center for Health Statistics
CAPT Scott D. Flinn, M.C., USN, NTC Branch Medical Clinic
Lynne Haverkos, M.D., M.P.H., National Institutes of Health

Liaison Representatives Present:

Beth-Ellen Cody, National SAFE KIDS Campaign
Ronald M. Davis, M.D., American Medical Association
Lisa Dawson, Georgia Department of Human Resources (alt. for Dr. Kathleen Toomey)

Jim Helmkamp, Ph.D., M.S., SAVIR
Trisha Keller, M.D., Utah Department of Health

Committee Members Absent:

None

Federal Agency Experts Absent:

Bernard V. Auchter, National Institute of Justice (NIJ)
Nancy Bill, M.P.H., Indian Health Service (HIS)
John Howard, National Institute for Occupational Safety and Health (NIOSH)
Carol E. Nicholson, M.S., M.D., FAAP
Elizabeth A. Edgerton, M.D., M.P.H., Agency for Health Research and Quality (AHRQ)
Hal Stratton, Consumer Product Safety Council (CPSC)

Liaison Representatives Absent:

Steve Hargarten, M.D., M.P.H., SAVIR

CDC Personnel:

Lee Annest, Ph.D.
Ileana Arias, Ph.D.
Bob Bailey, M.A.
Mick Ballesteros, Ph.D.
Patrick Barrett, _____
Jeannette Bloomfield, _____
Sandra E. Bonzo, M.L.I.S.
Angela Booker, M.P.H.
Christine Branche, Ph.D.
Gwen Cattledge, Ph.D., M.S.E.H.,
Pamela Chin
Dianne Clapp
Cindy Clark, M.A.
Linda Dahlberg, Ph.D.
Lynda Doll, Ph.D.
James Enders, M.P.H., C.T.R.
Henry Falk, M.D., M.P.H.
Corrine Ferdon, Ph.D.
Robin Forbes, B.A.
Louise Galaska, M.P.A.
Corrine Graffunder, M.P.H.
Arlene Greenspan, Dr.PH, M.S., M.P.H.
Sam Groseclose, D.V.M., M.P.H.
Elizabeth Haas
Rodney Hammond, Ph.D.
Darlene Harris
Gail Hayes, M.S.
Steve Herrin, M.D., M.P.H.
Michele Huitric, M.P.H.
Rick Hunt, M.D., FACEP
Karin Mack, Ph.D.
Angela Marr, M.P.H.
Ruth Martin, M.S.
Cindi Melanson, M.P.H.
James Mercy, Ph.D.
Brandi Meriwether, M.P.H.
Cathy Ramadei

Reneé Ross
Richard Sattin, M.D., FACP
Janet Saul, Ph.D.
Traci Simpson
David Sleet, Ph.D.
Paul Smutz, Ph.D.
Ellen Sogolow, Ph.D.
Robert Spengler, Sc.D.
Tom Voglesonger, B.S.
Robin Wagner, Ph.D., M.S.
Daniel Whitaker, Ph.D.
Rick Waxweiler, Ph.D.
Cindy Whitt, M.B.A.

Others Present and Affiliations:

Michael Anthony, Sound on Site (Sound Technician)
Chris Brummer, Sound on Site (Sound Technician)
Mollie Ergle, Maximum Technology Corporation
Jim Evans, Sound on Site (Sound Technician)
Andrea Hachat, Maximum Technology Corporation
Kendra Myers, Cambridge Communications (Recorder)

Certification

I certify that, to the best of my knowledge, the foregoing summary is accurate and complete:

Dr. Carolyn Fowler, ACIPC Chair

Date