3

### **Section 3: Method**

This section presents the approach used to identify what works in reducing recidivism and preventing crime. It specifies the framework adopted to define effectiveness.

#### **Review Process**

This report is based on a comprehensive and systematic review of the criminology literature on what works to reduce recidivism or prevent the onset of delinquent and criminal behavior. Information was obtained by reviewing evaluation and other reports on correctional interventions and early, risk-focused prevention programs operating in the United States and Canada.

Source materials were identified using several methods. National Criminal Justice Reference Service and Internet World Wide Web searches were undertaken, and abstracts were reviewed from recent American Society of Criminology, American Evaluation Association and Academy of Criminal Justice Sciences conference programs. Relevant listings and registries of "evidence-based" programs, such as the Surgeon General's Report on Youth Violence, the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-Based Programs and Practices, and the University of Colorado's Blueprints for Violence Prevention project, were also reviewed. To identify additional leads, several national and state organizations were contacted, including many in Colorado. These efforts were supplemented with outreach to professionals in the criminal and juvenile justice, research, and evaluation communities. Reference pages from a variety of on-line and print documents also were reviewed.

This process produced a number of published and unpublished documents deemed relevant for this project. Those that could be obtained with a reasonable investment of resources were collected and reviewed. Very few documents were unavailable; most of these were published prior to 1990. All obtained source material was reviewed with a focus on what works in reducing recidivism and preventing

crime. Patterns and common themes that emerged across multiple studies and sources were synthesized into the summary of what works presented in the following sections.

#### What Was Considered? Review Protocol

To identify what works in preventing crime and reducing recidivism, both quality and consistency of the evidence was considered. Quality was addressed by basing the conclusions presented here on the latest and most rigorous scientific evidence available. Consistency was addressed by focusing primarily on research that synthesized the evaluation results from many studies and programs.

While individual program evaluations were reviewed and sometimes included (where relevant), none of the conclusions presented here are based on the results of any single study. Rather, the findings presented here are based first and foremost on systematic reviews and meta-analyses of highly rigorous evaluation research. This approach is consistent with the scientific principles and latest lessons learned concerning methods for discovering the efficacy of interventions.

As discussed in Section 2, systematic reviews and metaanalyses are techniques that place the results of any single study in the context of a larger body of research. This helps the analyst identify anomalies and better understand where the weight of the evidence lies. Meta-analysis takes the process one step further by calculating the average effect of the intervention. This statistic is a quantitative and thus highly objective metric that more accurately captures and summarizes program effectiveness.

#### Recency and saliency.

First, the most recent systematic reviews and meta-analyses were reviewed, particularly those conducted since 1995. Earlier reviews are cited, particularly those that are considered seminal research that established key principles of effective correctional intervention, but reviews conducted

1

## What Works

within the past 12 years, especially those incorporating meta-analysis, received the greatest consideration.

#### Consistency of findings.

When multiple reviews produced consistent findings that a program prevented crime or reduced recidivism, the program was considered to be effective. When multiple reviews produced inconsistent findings, the quality and weight of the evidence were assessed. Reviews that were based on RCTs and rigorous quasi-experiments, those that included a larger number of studies, and those that were more recent, were given the greatest weight. Conclusions are based on the preponderance of evidence.

Generally, when multiple rigorous and contemporary reviews produced findings that a program prevented crime or reduced recidivism, but one review did not, the program is considered effective, but the research that is at odds with this conclusion is also presented. When two or more rigorous and contemporary reviews failed to demonstrate a program's effectiveness, we felt that there was insufficient evidence to conclude that the program worked, regardless of the number of other reviews that produced positive results. Of course, when the preponderance failed to demonstrate that a program prevented crime or reduced recidivism, we could not conclude that the program worked.

#### Focus on crime and criminal behavior outcomes.

Since the primary goal here is to identify programs that prevent crime or reduce recidivism, the focus of this report is on reviews that examined program effectiveness using crime or criminal behavior outcomes. In most cases, we did not examine other possible program benefits, such as employment, reduced illegal drug use, reduction in foster care, or increases in communication among stakeholders.

There were two major exceptions to this practice. First, some programs are designed to address risk factors that are related to criminal offending, that is, those that are criminogenic in nature or known precursors of delinquency or criminal conduct later in life. When such risk factors are directly relevant to program success and program effectiveness was reported in risk factor reduction terms, the evidence was reviewed and findings are presented in this report.

Second, economic evaluations have attracted a great deal of interest and attention in recent years. It is becoming more and more commonplace to report on a program's monetary costs and benefits before concluding that a program works. For this reason, and to more fully demonstrate the value of effective programs, economic evaluations were examined

It is important to keep in mind that the focus of this What Works compendium is exclusively on the direct public safety benefits that a policy or program produces. Programs that work are defined as those that are effective at reducing recidivism or preventing criminal conduct later in life.

and this report includes the results from any relevant CBAs concerning a program's cost and return on investment.

It is important to keep in mind that the focus of this What Works compendium is exclusively on the direct public safety benefits that a policy or program produces. Programs that work are defined as those that are effective at reducing recidivism or preventing criminal conduct later in life. While a program's capacity to alter risk factors for criminal conduct and provide a sound return on investment are also concerns, there may be other benefits, or other dimensions of program performance, that stakeholders deem to have merit or value that are not addressed in this report. It is not the intention here to discount these benefits, or suggest that any one perspective on program performance is inherently superior to others. Rather, the goal here is to be responsive to the duties mandated to the Colorado Commission on Criminal and Juvenile Justice to investigate evidence-based recidivism reduction initiatives and cost-effective crime prevention programs.2

While more than 200 documents were reviewed for the development of this report, several key sources played a major role in identifying programs that work. These include:

- Systematic reviews made available through the Campbell Collaboration, an international network of researchers that prepares and disseminates systematic reviews of high-quality research on effective methods to reduce crime and delinquency.
- Meta-analyses conducted by Mark Lipsey and his colleagues on the effectiveness of rehabilitation and correctional interventions.
- Meta-analyses conducted by Doris MacKenzie and her colleagues on effective recidivism reduction programs.
- Systematic reviews on the effectiveness of early preven-



tion programs conducted by David Farrington and Brandon Welsh.

- Research and reviews on prevention programs conducted by Peter Greenwood and his colleagues.
- The Blueprints for Violence Prevention Project at the University of Colorado Center for the Study and Prevention of Violence.
- Meta-analyses and cost-benefit analyses on crime reduction and prevention programs conducted by the Washington State Institute for Public Policy.

A complete list of the source material used for this report is presented in the Bibliography.

#### **Colorado Program Evaluations**

The search strategy used to find source materials for this report also produced a number of documents dealing with programs operating in Colorado. Since Colorado-specific studies may be of particular interest, findings from several of these "local" evaluations are presented in the report.

Findings from several of these "local" evaluations are presented in the report.

Dozens of documents dealing with Colorado evaluations were acquired. Those that met the following criteria were reviewed:

- The study is based on an outcome evaluation of a program that currently or recently operated in Colorado;
- Program effects on crime or criminal behavior, including recidivism, were reported;
- Recidivism outcomes were identified using a pre-post, comparison or control group design, and
- The report was published between 1995 and the present.

Findings from evaluations that met these criteria are summarized in relevant sections of the report. Again, the primary goal of this review of local studies is to acquaint the audience with work that has been done in Colorado. The reader should keep in mind, however, that the Colorado evaluations may or may not be methodologically rigorous. No attempt was made to systematically critique any of the stud-

To acquaint the audience with work that has been done in Colorado, findings from local evaluations are presented throughout the report. The reader should keep in mind, however, that the Colorado evaluations may or may not be methodologically rigorous. No attempt was made to systematically critique any of the studies in terms of evaluation methodology. In fact, it is important to remember that the Colorado studies are not systematic reviews or meta-analyses, and they are quite unlike those used to demonstrate what works overall.

ies reported on here in terms of evaluation methodology. In fact, it is important to remember that the Colorado studies are not systematic reviews or meta-analyses, and they are quite unlike those used to demonstrate what works overall.

#### **Framework**

Focus on results, not on intent. At this stage of the report, it is important to underscore that this review of what works relies on a scientific definition of effectiveness. Following the lead of Sherman and his colleagues in their 1997 "What

Following the lead of Sherman and his colleagues in their 1997 "What Works" report to Congress, an effective program is defined as one that reduces or prevents criminal conduct, based on scientific study. The empirically tested success or failure of an intervention in reducing or preventing crime is the primary concern in the current report. This report is not concerned with an intervention's intent to punish, deter, or rehabilitate.

# What Works

Works" report to Congress, an effective program is defined as one that reduces or prevents criminal conduct, based on scientific study. The empirically tested success or failure of an intervention in reducing or preventing crime is the primary concern in the current report. This report is not concerned with an intervention's intent to punish, deter, or rehabilitate. Nor is this report concerned with labels or perceptions that an intervention is hard or soft on crime. This definition of effectiveness, then, is firmly grounded in science and criminology, and it was eloquently articulated by Sherman and his colleagues in their 1997 report:

Crime prevention is widely misunderstood. The national debate over crime often treats "prevention" and "punishment" as mutually exclusive concepts, polar opposites on a continuum of "soft" versus "tough" responses to crime. .... The science of criminology, however, contains no such dichotomy. ...... Crime prevention is a result.

Crime prevention is therefore defined not by its intentions, but by its consequences. These consequences can be defined in at least two ways. One is by the number of criminal events; the other is by the number of criminal offenders (Hirschi, 1987). Some would also define it by the amount of harm prevented (Reiss and Roth, 1993: 59-61) or by the number of victims harmed or harmed repeatedly (Farrell, 1995). ...What all these definitions have in common is their focus on observed effects, and not the "hard" or "soft" content, of a program. <sup>3</sup>

#### A final caveat.

It is important to keep in mind that the list of effective programs provided here is by no means exhaustive. In each of the effective program areas discussed, representative examples of specific programs that work are presented. Interventions that others view as effective or promising may not be among those identified. There are several reasons why this may occur. As Greenwood (2006:42-44) points out,

recommendations on "what works" have been published by many organizations, often with what appears to be a lack of consistency regarding the specific programs that are considered to be effective. These differences are largely "explained and reconciled" by variations in purpose, focus and screening criteria that are found across different reviews. When two reviews focus on different outcomes, for example, they inevitably will use different studies to arrive at a conclusion about what works. Decisions about how much evidence is needed to make a generalizeable conclusion will also influence results.

Indeed, there were program models examined for this report for which there was evidence of effectiveness, but the level of certainty was not great enough to justify a clear and generalizeable conclusion regarding recidivism reduction of crime prevention effects. This typically was the case when the evidence was not based on a systematic review or an adequate number of rigorous studies or when criminal behavior outcomes were not directly addressed. Of course, there also may be effective programs that simply have not yet been evaluated.

#### Summary.

This report is intended to serve as resource for members of the Colorado Criminal and Juvenile Justice Commission, and other professionals as well. The aim is to provide Commission members with practical and trustworthy information about programs that work, serving as a basis for discussing, debating and eventually crafting safe and cost-effective strategies for addressing the Commission's legislative mandate. Each of the programs identified and described here has been rigorously evaluated and found to be effective. Most have been shown to produce a substantial return on investment. Many have been certified as "evidence-based" by a federal agency or well-respected research organization. Based on the latest and most rigorous research available, the programs identified in this report are viable, evidence-based options for reducing recidivism and preventing crime in Colorado.

- A single study will not typically provide a trustworthy indicator of the effectiveness of a particular treatment. See Wilson, D.B., and Lipsey, M.W. (2001). The role of method in treatment effectiveness research: Evidence from meta-analysis. *Psychological Methods*, 6: 413-429. Page 424.
- <sup>2</sup> Colorado Revised Statutes, 16-11.3-101.
- <sup>3</sup> Sherman, L.W., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, P., Bushway, S. (1997). *Preventing Crime: What Works, What Doesn't, What's Promising.* A Report To The United States Congress. Prepared for the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, Washington, DC. Pages 2.2-2.3.
- <sup>4</sup> Greenwood, P. (2006). *Changing lives: delinquency prevention as crime-control policy: Executive Summary.* University of Chicago Press, Chicago, IL.