

THE ADOPTION AND SAFE FAMILIES ACT (ASFA) TRAINING SERIES

TIPS FOR USING DATA TO MEASURE SUCCESS

TRAINER'S GUIDE

January 2003

**Developed by
The Institute for Child and Family Policy
Edmund S. Muskie School of Public Service
University of Southern Maine
Portland, Maine**

**Funded by
The U.S. Department of Health and Human Services
Administration for Children and Families
Children's Bureau
Washington, D.C.**

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Introduction

The national vision for child welfare is that children will grow up in safe, nurturing and stable environments. To help achieve that vision, state and county child welfare agencies are striving to assure that their practice, systems and management approach ensure that clients needs are assessed quickly, that individualized services for children and families are available and delivered promptly, that the impact of the services is monitored and, if need be, that services are modified.

The emphasis on results and the use of data to measure progress toward the achievement of outcomes carry clear expectations for child welfare administrators, supervisors and managers. While agencies are making progress implementing Adoption and Safe Families Act (ASFA), more work needs to be done to assure that the managerial and supervisory day to day decisions are informed by data and reports, that agencies refine internal administrative systems to support practice and that training continues to enhance the skills needed to successfully implement the practice, managerial and legal implications of ASFA.

The document you are reading is one in a set of trainer's guides designed to communicate information on the Adoption and Safe Families Act (ASFA) that goes beyond introductory, compliance based topics. While this material is designed primarily for training purposes, it certainly is adaptable to other forums, such as internal or external workshops, presentations, newsletters or briefings on ASFA and could be successfully presented to child welfare administrators, supervisors, managers, foster parents, caseworkers, providers, teachers and other community stakeholders.

The Training Series

The trainer's guides in this series are:

The Adoption and Safe Families Act (ASFA) and the Child and Family Services Reviews (CFSR): Using Outcomes to Achieve Results

This trainer's guide highlights the major requirements of ASFA, presents federal outcomes and measures and systemic factors and provides an opportunity to discuss the philosophy, practice implications and results of the CFSR.

Action Planning: A Problem Solving Tool

This trainer's guide introduces and demonstrates how the use of Action Planning can assist child welfare managers and supervisors in planning, managing and evaluating practice, systems and programs toward the achievement of desired outcomes.

Collaboration with Native American Tribes: ICWA and ASFA

In the child welfare system Native American children have different service delivery systems as well as laws that apply to them. Therefore, individuals must ask different questions and make different assumptions in their efforts to identify and work with Native American children and families. Because of the importance of the interaction between the agency and tribes, this trainer's guide focuses on successful approaches to collaboration, the requirements of the Indian Child Welfare Act (ICWA) and ASFA and the practice considerations when working with Native American children and families.

Using Data to Measure Success

Child welfare managers and supervisors are increasingly expected to be able to use data, information and reports to guide decision making and to determine what is working and what isn't working in the organization, with practice and in the service delivery system. This trainer's guide gives participants practice in analyzing reports and in using basic data tools for reading and interpreting data.

Change is all Around Us: Tools to Build Commitment to Change

In most organizations change occurs constantly. In order to be effective in leading and modeling change management skills, supervisors and managers must understand the dynamics of avoiding resistance to change and how to build commitment to it. This trainer's guide includes a model for building commitment to change, provides an opportunity to build on these skills and includes use of a case study, *Family Net: An Automated Child Welfare Information System* which explores organizational and managerial issues when a major change in the workplace takes place.

Collaboration with the Courts (under development)

ASFA promotes the concept that the child protective system involves a network of interrelated agencies and services. The courts, of course, are an essential piece of this network. This trainer's guide explores what the courts and child protective agencies identify as their main opportunities, challenges and needs as they work together and independently to carry out their required activities in child welfare cases.

Notes on Using These Trainer's Guides

The Muskie project team expects that each agency will use the *Adoption and Safe Families Act (ASFA) Training Series* in a variety of ways, thus we designed the training guides to be easily modified to accommodate the differing needs of child welfare agencies. This approach enables each public child welfare agency to customize these training guides to meet its unique needs -- in effect to use the materials contained in this series to guide its own workshops, briefings and presentations. For example, some

agencies will select and use material from all of the trainer's guides, others will use only 1 or 2 of the guides, while others will use these guides as a springboard to create their own materials to better suit their needs. The material in these guides is proven to accommodate and support this type of adaptation by child welfare personnel. At minimum, an agency will need to adapt the material by adding their own agency's outcome measures, results of the Child and Family Services Review (CFSR), policies, regulations, data, reports and other state or county specific materials.

To increase usability, this trainer's guide and the others in the series have the same format. The pages are divided into two columns. One contains the text of the guide and the other sometimes contains notes on the text and also provides space for users to write their own notes.

Each guide begins with information on the length of time the session will take to complete, the rationale, the learning objectives, activities, sample materials, advance preparation, glossary of terms and an annotated bibliography. The Trainer's Instructions are guidelines for the way a presenter may want to organize the material and thus are an attempt to standardize content, not delivery style. The text (appearing in regular type) provides information on moving through the material, while the text in italic type is a suggestion for what the presenter might actually say as he/she presents the material. Of course, the material in the text can be modified or changed to suit the needs of the presenter and the group. Following the text of the guides are the handouts/overheads that accompany the text. These appear in the order that they are referenced in the text.

Additional Resources

The *Adoption and Safe Families Act (ASFA) Training Series* builds on training material previously produced by the Institute for Child and Family Policy, Edmund S. Muskie School of Public Service at the University of Southern Maine:

- **Using Information Management to Support the Goals of Safety, Permanency and Well Being**, developed as part of a project funded by the Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services under Section 426 of the Social Security Act, published September 27, 2000 (<http://www.muskie.usm.maine.edu/sacwis>) and
- **Bringing Together the Child Welfare Team**, developed as part of a project funded by the Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services under Section 426 of the Social Security Act, published September 27, 2002 (<http://www.muskie.usm.maine.edu/asfa>).

Several talented experts in child welfare, curriculum design and the adult education field tested and provided feedback on these documents, including the trainer's notes, exercises

and handouts, and helped polish the material to better convey the complex concept of outcomes based management.

The training guide(s) can be viewed/downloaded on the internet at <http://www.muskie.maine.edu/asfa>. Or, they can be ordered from Clearinghouse, National Child Welfare Resource Center for Organizational Improvement, University of Southern Maine, One Post Office Square, 400 Congress Street, P.O. Box 15010, Portland, ME 04112. Phone: (207) 780-5813; Fax: (207) 780-5817; e-mail: clearing@usm.maine.edu.

Tips for Using Data to Measure Success

Time: Approximately 2 hours and 30 minutes

Rationale: As a result of the passage of the Adoption and Safe Families Act of 1997 (ASFA), child welfare managers and supervisors are increasingly expected to be able to use data, information and reports to guide decision making and to determine what is working and what isn't working in the organization, with practice and in the service delivery system. Thus, child welfare supervisors and managers must know how to select, interpret and understand appropriate data to ensure accountability for achievement of assigned outcomes, allocate scarce resources and improve services for children and families.

Learning Objectives

When this module is complete, the participant should be able to:

- Identify reports that peers find helpful for supervisory and managerial decision making
- Know how to use some basic data tools for reading and interpreting data
- Be able to discuss the content of reports in terms of the usefulness of the data and relate the content to outcomes
- Understand how to use data from reports to monitor the implementation of ASFA and agency goals and outcomes, with a focus on the outcomes he/she and his/her unit is responsible

Activities

- Exercise: Share helpful reports and ways to use those reports in decision making (30 minutes)
- Mini-lecture: Ten Tips for Using Reports to Improve Decision Making (10 minutes)
- Exercise: Hawaii Case Study (45 minutes)
- Exercise: M&M County (45 minutes)
- Exercise: Abuse on the Rise in Cascadia County case study (45 minutes)
- Exercise: Take one or two reports and critique format and content. Ask if and why the data on the report is important, useful and used. Identify what the report is linked to -- safety indicators or finance or budget, for example (20 minutes)
- Exercise: Look at selected reports that focus on ASFA/agency/unit goals, outcomes and measures or the Child and Family Services Review (CFSR) or the Program Improvement Plan (PIP) and make some comparisons between regions, teams, or units, include reports that relate back to specific (possibly national) performance indicators and/or the state plan and are easily accessible by the users (45 minutes)

Sample Materials

- Reports Helpful to Decision Making (Overhead #1)
- Ten Tips for Using Reports to Improve Decision Making (Overhead #2)
- Participant's Version of the Hawaii Case Study, including the case study and attachments (Overhead #3)
- Trainer's Version of the Hawaii Case Study, including

Overheads/handouts are designed as "overheads", but they can be used as both overheads and/or handouts.

the case study with attachments and suggested answers to key questions (Overhead #4)

- Frequency/Percent (Overhead #5)
- Averages (Overhead #6)
- Pie Chart (Overhead #7)
- Bar Chart (Overhead #8)
- Participant's Version of the Case Study, Abuse on the Increase in Cascadia County, including the case study and attachments (Overhead #9)
- Trainer' version of the Case Study, Abuse on the Increase in Cascadia County, including the case study with attachments, calculations and suggested answers to key questions (Overhead #10)
- Tips, Formulas and Definitions of Terms (Handout #11)
- Table 1: Abuse Reports-Statewide (Overhead #12)
- Table 2: Abuse Reports Cascadia (Overhead #13)
- Tables 1 & 2: Abuse Reports Statewide and Cascadia (Overhead #14)
- Table 3: Abuse and Neglect Fatalities (Overhead #15)
- Tables 5, 6 and 7; Alleged Perpetrator of Substantiated Abuse (Overhad #16)
- Tables 8 and 9: Type of Maltreatment Statewide and Cascadia (Overhead #17)
- Table 9: Data Displayed in Three Ways (Overhead #18)
- Sample Report to the Commissioner (Overhead #19)
- Sample reports selected by the trainer to form the basis for a discussion of their usefulness and importance (to be handed out at the time of training)

Note the numbers following the name of a handout or overhead refer to the number of the handout or overhead, not to a page number. The handout/overhead number is found on the top right hand corner of the page; the page number is on the lower right corner of the page.

The trainer may want to display a flipchart with the words "Data is the question, not the answer," or "Data is not the end, only the beginning," as possible themes for this session.

- Sample reports that support agency outcomes and measures and allow some comparison between units or regions (to be handed out at the time of training)
- Interpreting data form (Overhead #20)

Advance Preparation

Some of the overheads (such as, the case study material and the sample report to the Commissioner in the Abuse on the Increase In Cascadia County exercise) are more likely to be used as handouts. Before the session, the trainer should select the overheads that will be used as handouts and make sure copies are made for each participant.

Make sure flipchart, markers, newsprint pad, overheads, calculators and overhead projector are in the room.

This module contains three data exercises: the Hawaii Case Study, M&M County and Abuse on the Increase in Cascadia County. The timing for the module includes the use of only one of these three exercises. The trainer will have to decide which one to use based on the needs of the group. Of course, if more time is available, more than one case can be used. Trainers are also encouraged to customize the case by using agency data, locations and names.

- The Hawaii Case focuses on interpreting data and linking practice to data and outcomes. It includes the participant's version of the case as well as a trainer's version, which includes the case study with attachments and suggested answers to key questions. Prior to the seminar, the trainer should review the material in this module to determine if he/she needs to create additional training aids to facilitate preparation for and presentation of the material.

The trainer might want to make up an overhead with the words, "The goal is to show how using, analyzing and understanding data correctly can help answer basic social work questions."

- The M&M County exercise is an opportunity to review some basic statistical concepts and ways to apply them when using data and reading reports. The presentation of this exercise should be as informal and humorous as possible. To use the M&M County exercise have a small bag of M&Ms for each group. Make sure each bag has M&Ms of assorted colors.
- The Abuse on the Increase in Cascadia County case study is a challenging productive training exercise for both participants and trainers. To assist the trainer in preparing to instruct on this case, the module includes a participant's version and a trainer's version of the case study, which includes the case study with attachments, calculations and suggested answers to questions.

Collect appropriate samples for the exercises which include a discussion of reports. To get reports, ask the child welfare agency for available data, or if information is not available, data from the Federal Adoption Foster Care Analysis and Reporting System (AFCARS) and the National Child Abuse and Neglect Data System (NCAANDS) is available on-line at:

Administration for Children and Families, Children's Bureau:

<http://www.acf.dhhs.gov/programs/cb>

National Clearinghouse on Child Abuse and Neglect Information:

<http://www.calib.com/nccanch>.

Glossary of Terms

Average: the total number of items divided by the number of items.

Bar Chart: a way of presenting numerical information as a series of bars or columns of different lengths.

Comparison: an examination of two or more items to establish similarities and dissimilarities.

Data: a recording of facts, concepts or instructions on a storage medium for communication, retrieval and process by automatic means.

Frequency: the number of times an event occurs.

Legend: An explanatory caption accompanying a map, chart, or illustration.

Mean: the arithmetic mean, or means, of a set of measurements is the sum of the measurements divided by the total number of measurements.

Median: the median of a set of numbers is defined to be the middle value when the numbers are arranged in order of magnitude.

Mode: the mode of a set of numbers is the value that occurs most often (with the highest frequency).

Percent: one part in a hundred; tells how many out of 100. For example, 5% = 5 out of 100.

Percent change: the portion of a change in quantity, amount or value.

Rate: frequency of occurrence.

Statistics: the science of assembling, organizing, and analyzing data, as well as drawing conclusions about what the data means.

Trend: a line of general direction.

Bibliography and Suggested Reading

Adoption and Safe Families act of 1997. (1997) Public Law 105-89.

Inmon, W.H., Zachman, J.A., and Geiger, G. (1997) *Data Stores, Data Warehousing and the Zachman Framework: Managing Enterprise Knowledge*. New York: McGraw-Hill.

Now that computer technologies are widely available, most organizations collect data. The more critical question is what do organizations do with it. In this book the authors describe the Zachman Framework and its use as a tool for improving understanding and for making better decisions about designing and managing change as well as its application in building and managing data warehouses. They also discuss the importance of converting the collected data into information and then into knowledge that can be used move an organization towards its goals

Milewski, Emil G. (1989) *The Essentials of Statistics I*. Piscataway, NJ: Research and Education Association.

This book is a review and study guide that provides a quick summary of the "essentials" of statistics." It covers basic statistical material such as frequency distributions, numerical methods of describing data, measures of variability, probability theory and distributions.

Smoothey, Marion. (1993) *Let's Investigate Statistics*. North Bellmore, NY: Marshall Cavendish Corporation.

This books shows how statistical data can be compiled and studied in tally charts, pie charts and other ways and used to compute averages and ranges.

Sperling, A.P. and Levinson, Samuel D. (1998) *Arithmetic Made Simple*. Revised edition. New York, NY: Doubleday.

A basic text for anyone who wants to review the basics of arithmetic. The material covered includes addition, subtraction, multiplication, division, percents, measurement and graphics.

U.S. Department of Health and Human Services, Administration for Children and Families. (November 2000) *Rethinking Child Welfare Practice Under the Adoption and Safe Families Act of 1997*. Washington, D.C.: U.S. Government Printing Office.

This monograph gives an overview of the requirements of the Adoption and Safe Families Act. It reports on the impact of ASFA on child welfare practice as viewed by an advisory group convened by the Children's Bureau. It addressed the implications of ASFA for outcome-based child welfare practice, the principles and key elements of "good" child welfare practice and rethinking casework functions under ASFA.

Using Information Management to Support the Goals of Safety, Permanency and Well Being (2000). Portland, ME: Edmund S. Muskie School of Public Service, Institute for Child and Family Policy.

This competency based curriculum introduces child welfare supervisors to the concept of using data and information to improve child welfare practice. This trainers version includes eleven modules plus a section on Lessons Learned from states where the curriculum was piloted. The curriculum covers such topics as identifying and locating key data and how to use information management to support casework supervision, along with some data analysis tips and techniques and information on managing change. The curriculum can be found on the web at: <http://www.muskie.usm.maine.edu/SACWIS>

Weinbach, Robert W. and Grinnel, Richard M., Jr. (1991) *Statistics for Social Workers*. 2nd edition. White Plains, NY: Longman Publishing Group.

Written for the social worker who wants to deal with people not numbers, this text book is intended to be the first introduction to statistics for social work students. The emphasis is proper insight into statistical concepts with the goal of providing students with a way of relating the concepts to their practice. It

focuses on ways to summarize and describe data, fundamental concepts of statistical testing, and a presentation of three statistical tests.

Williams, Edward. (1989) *Arithmetic the Easy Way*. 2nd edition. Hauppauge, NY: Barron's Educational Series, Inc.

A basic text that is designed to help improve mathematical skills. It covers material from basic arithmetic - adding, subtracting, multiplying and dividing - through decimals and fractions. Designed for anyone who needs a review of the basics.

- **On-Line**

www.acf.dhhs.gov/programs/cb

The Children's Bureau website contains valuable information on the Child and Family Services Reviews. It also contains the final reports from the states that have completed the Federal Review. It contains the review outcomes and the data for each state displayed along with the national standards for each outcome.

<http://www.calib.com/nccanch>

The National Clearinghouse on Child Abuse and Neglect Information web site contains data from the National Child Abuse and Neglect Data System (NCANDS). The NCANDS reports include national and state findings on the number and sources of child abuse and neglect reports, investigative dispositions, types of maltreatment, characteristics of children victimized, relationship of perpetrators to victims and services provided for child maltreatment victims. These reports are available on the Clearinghouse website.

Data is also available from the Adoption and Foster Care Analysis and Reporting System (AFCARS). ASFA also required that states collect case specific data on all children in foster care. This data is available on the Clearinghouse website.

<http://www.childwelfarereview.com/>

This site provides information useful in managing the child and family services and Title IV-E foster care eligibility reviews.

<http://www.muskie.usm.maine.edu/asfa>

This website was developed by the Institute for Child and Family Policy, Edmund S. Muskie School of Public Service at the University of Southern Maine. It contains a curriculum titled 'Bringing Together the Child Welfare Team' that is designed to help child welfare supervisors, managers and senior administrators understand and implement the requirements of the Adoption and Safe Families Act (ASFA). The site also contains final reports and related state by state data from two phone polls, conducted in 2001 and 2002, that asked child welfare and court improvement project representatives to discuss how meeting ASFA requirements has changed the way that child welfare agencies do business and to identify what skills child welfare managers and supervisors need to implement the requirements of ASFA.

Trainer's Instructions

1. Begin the session by welcoming the group and introducing yourself and other presenters and presenting the agenda and materials. Then introduce the module by presenting the rationale and objectives.

2. Begin the module using the following as a guide:

Outcome-based, or results oriented management as it is sometimes called, is a management approach which relies on data, information and reports to determine if an outcome has been met or not. Even before ASFA, child welfare organizations collected data and used it to measure success. One of the major, fairly recent changes in child welfare is that now data can be collected by and stored in computers. On the national level ASFA requires that states report using data obtained from the big national systems -- AFCARS (Adoption and Foster Care Analysis and Reporting System) and NCAANDS (National Child Abuse and Neglect Data System). In addition, most states use a version of the SACWIS (State Automated Child

Notes in italics in the Trainer's Instructions section are talking points, comments that the trainer may make directly to the participants to use to form the basis of his/her presentation.

Welfare Information System), or some other statewide system to collect case data and other information. The data collected can be used to compare how states, or units or regions in a state are doing in meeting outcomes. The data can be used to identify successes and areas that might need improvement. The material that is produced for each measure comes from the individual pieces of data that are entered in the system.

There is no question that plenty of data is available. All data is not equally important, however. As W.H. Inmon said in the book, **Data Stores, Data Warehousing and the Zachman Framework**, "One of the keys to success for modern corporations is access to the right information at the right time at the right place in the right form". Individual pieces of data in a database mean nothing. People must decide what pieces of data are important to them, know how to retrieve them then analyze them to determine in what ways they can be useful. The computer can't do this procedure alone. It still requires human intervention. The challenge for child welfare managers and supervisors is not only to select the applicable data but to know how to use this data effectively.

For example, a child welfare supervisor is getting reports from her caseworkers that it is very difficult to find substance abuse treatment programs for the parents of children in care. Using reports from her computer system, she learns, that indeed there are several families affected by the lack of substance abuse facilities. She notices also that some of the children in these families have been in

foster care for close to six months. Clearly it is time to take action.

At a unit meeting, she discusses the situation with the caseworkers. They suggest that possibly the agency could approach the few substance abuse providers in the area and find out if by prioritizing the cases, some of those close to deadlines could be addressed first. The supervisor works on this and also suggests to her manager that a vigorous effort should be made to get more substance abuse facilities in the area. She uses the data she downloaded from her computer to show her unit's need. From her supervisor she learns that other supervisors have identified similar problems. They decided that aggregate data can be used to work on the regional or state level to address the problem.

This example is just an illustration of how data and reports can be used to improve services for children and families. I am sure many of you have found yourselves in a situation where the data you have can be organized to support your position and solve a problem.

3. Transition to the next exercise using the following as a guide:

Let's discuss for a moment the reports that each of you need to perform your own job. Look at Overhead #1. It asks you to describe two reports that you use in your job, or if you don't use any reports, two reports that you wish you had. On Overhead #1 fill in the blanks for each of these reports, list one way that you use each of these reports that you would be willing to share with the group.

4. Give the group five minutes, then ask for volunteers to share the name of the reports used most frequently and how they use the reports in decision making. During each presentation of a helpful report, probe to ensure that:

- the title/name of the report is mentioned
- why and how it works is discussed, and
- the benefits are mentioned.

Encourage participants to ask questions of their colleagues about each presented report to see if others can benefit from using the report. Determine if there reports mentioned by the managers are different or the same as those mentioned by the supervisors.

5. Sum up the exercise using the following as a guide:

In all these instances it's the data you have that allows you to form a basis for decision making and action. Using data, provides the support for outcome based management that is so critical to today's child welfare organization.

Supervisors and managers thus must constantly ensure that their day to day work effort is responsive to an outcomes approach both at the case and the agency level. This may involve learning or enhancing skills in planning, managing for results and evaluating performance. The traditional focus on compliance with procedures in assessing program performance is no longer the model. Instead, we must move to results oriented, outcome based management practices in the child welfare system that are aimed at increasing accountability and attention to service performance. This approach puts new emphasis on responsibility, accountability, effectiveness, and results, both for child welfare agencies and families.

6. Continue the discussion using the following as a guide:

Here, in no priority order, are some tips you might find helpful as you think about using data, information and reports to improve decision making. These tips are summarized on Overhead #2.

- ***Assure and constantly look to improve the quality of the data***

If you have inaccurate, incomplete, unreliable, untimely data in your system, you will have that same lousy data on your reports. Managers need to add to their list of things to check in on data quality issues...things like sponsoring data quality reviews, allowing time for data clean-up and building procedures that support user responsibility for entering accurate, timely data into the system.

- ***Develop priority performance areas, create reports that measure performance in the target areas and distribute the reports to all levels of the agency***

Don't attempt to meet every identified report need immediately. Identifying the management priorities, communicating the priorities and then phasing in the rollout of reports on those monitoring the achievement of the priorities will help assure that the reports are used.

- ***Create statewide, regional, area and team versions of key reports -- consider developing both summary and detail versions of reports based on user requirements***

All users do not need to see the same reports. To act on the info in the report, some users need all of the details

others only need summary info. Users need to see information that is most directly relevant to them and that they recognize.

- ***Use data on reports in day to day management, set policy and inform decision making; incorporate review of key reports in staff meetings***

*The message here is **USE** the reports; don't just create them. Pick one or two reports that identify priority data and discuss them at regularly scheduled staff meetings. Ask questions about why the data is showing what it shows, discuss progress, agree on next steps either to continue good progress or improve progress.*

- ***Avoid the 'gotcha' syndrome***

This is very much related to the use of reports. Don't have every discussion about data be negative...we missed the mark here, why did we fail to meet the goals? Why are we behind in our recruitment of foster homes? Why are you so far behind your colleagues in...whatever? Instead, use the reports to ask informed questions, focus management, supervisory and staff attention on a particular issue or series of issues, identify barriers to success as well as highlight where success has been achieved. You may want to think about something as simple as developing some reports that give both exceptions and positives. In other words, why can't you design reports that say 85% of our assessments were completed on time and also say, thus 15% of our initial assessments are overdue? This method highlights both the done on time as well as the overdue. Too often, reports just give the 'exceptions'...what did not meet the target.

- ***Ensure that reports are distributed to the appropriate people***

This goes with out saying but it's harder than it seems to develop a consistent, reliable, up to date report distribution list and system.

- ***Establish an open, user driven report requirement process that responds to user requests for information, manages expectations, prioritizes requests and takes frequency of reports into consideration***

States are finding that users will ask for the world but in reality can only focus on and effectively use so much data at a time. Setting up a process for prioritizing report requests, can help shape user expectations, keep a focus and assure that real (vs. perceived) data needs are met.

- ***Devote resources to meeting data clean up and report development, assurance and maintenance efforts***

The resource needs won't disappear once your system is live in fact, they probably will only increase as users get more and more comfortable analyzing data.

- ***Provide training to all staff on how to read and use reports***

Don't assume that report reading is intuitive, it's not. Some of the staff who, are now looking at reports haven't read a graph or chart for several years and may have not used data analysis skills for at least that long. Just as people needed to be taught why they needed to use the SACWIS system and how to read the screens and where to find key data in the system, they

will need that type of instruction on reports.

- ***Develop both on-line and hardcopy reports -- consider a data warehouse for user defined and canned ad hoc reports***

This is an interesting solution to the issue we just discussed about the need to devote resources to designing and using reports. Some states that are struggling to keep up with user access requests have set up a series of canned, pre-defined reports, let users fill in some specific query info, like dates or region etc. and then produce their own reports. Some professions, like finance, actually let users have access to the whole data base and train them on how to create and run their own reports independent of any support.

7. Introduce the Hawaii Case Study using the following as a guide:

As a child welfare supervisor or manager you are increasingly being asked to understand how to use data from reports to monitor the implementation of ASFA and agency goals and outcomes with a focus on the outcomes for which you are responsible. The Hawaii case provides us an opportunity to link data, practice and outcomes.

8. Pass out copies of the Participant's Version of the Hawaii Case Study (Overhead # 3). Ask the participants to go into their small groups, take a few minutes to read the case study and then begin to answer the questions. Ask that a recorder be named who will report back to the large group. Give the group 20 minutes to work on the answers.

The trainer's approach to presenting this case will depend on the trainer's assessment of the group's comfort level working with data. Some trainer's might find that this case study works best if the whole group stays together for the entire case.

9. After 20 minutes, bring all the participants back together and begin to gather the small group reports by asking one group to summarize the case situation. Then ask another group to report how it answered question 1. Process the response with the whole group and then continue on to questions 2 and 3.

10. Wrap-up the activity using the following as a guide:

In the case study, you just read through and interpreted data from several table and linked that data to outcomes and practice. Now let's look at some real reports and see what they tell us.

11. If you are going to use the M&M County exercise instead of the Hawaii Case Study begin with this introduction.

Even though you, as a child welfare supervisor or manager may not need to analyze data, you probably will encounter situations on the job when you will find it helpful to have some knowledge of basic data analysis and the way that data is used. In fact, many supervisors and managers may find that they need to use data analysis skills on a regular basis in their job.

What are statistics anyway? One definition is the science of assembling, organizing, and analyzing data, as well as drawing conclusions about what the data means. Sounds interesting doesn't it? However, people's ideas about statistics vary. For example, one author (Smoothey) reports, "People are sometimes suspicious about statistics". A British Prime Minister, Disraeli, is believed to have said to Queen Victoria, "There are three kinds of lies: lies, damned lies and statistics." Or, as someone else said,

"Statistics are like a bikini; shows a lot, but hides the interesting."

This exercise provides a look at some statistical terms and concepts. The data we will use comes from M&M County. You know that because we will use M&M's to illustrate the material, and when we are done, you can eat the M & M's.

12. Divide the group into small groups of 4-5 people. Show Overhead #5: Frequency/Percent. Ask each group to locate that handout in their packet, give each group a package of M&M's and have each group select one person to record the data on the appropriate tables. Note that each M&M represents a child with a permanency goal. The color indicates what kind of goal it is, i.e., reunification, placement with relative, adoption, etc. Continue:

In your jobs you probably will not spend much time counting M&M's so let's imagine that each M&M represents one child with a permanency goal and that each color represents what the goal is - reunification, placement with relative, adoption, etc. Counting the number of children with permanency goals and the kind of goals they have is something child welfare supervisors and managers are apt to do.

Now open the bag and count the total number of M&M's that you have. Record your total on the sheet in the designated place.

Then count the number of M&M's that you have by color. Record that data in Table 1 under the column headed Frequency. Frequency is the number of times an event

occurs. So, you can say that the number of red M&M's you have is the frequency of red M&M's. Remember that red = reunification so that the number of red M&M's represents the number (or frequency) of children with the permanency goal of reunification. Write on Table 1 the number of each color M&M's that you have in the appropriate place.

13. When the group has finished, continue:

The information you have collected so far is your data. After you collect your data you have to organize and summarize it and see what conclusions you can draw from it. Data can be organized in various ways. One way of organizing data is to put the data in tables as we have done here. The frequency of each color M&M lets us compare the number of the colors we have, or the number of children that have various kinds of permanency goals.

Another way to compare the number of M&M's that we have is by determining what percent of each color we have. You may remember percent from back in grade school. Percent answers the question 'how many out of 100?' So to find out what percent of the total that each color represents, you have to use the following formula.

$$\frac{\text{Total number of each color of M\&M's}}{\text{Total number of M\&M's}} * 100 =$$

So everyone go ahead and calculate the percent of each color of M&M's the group has and record it on Table 1 on the Frequency/Percent handout. When everyone is finished, ask the group if they think using percents make it easier or

harder to compare the number of M&M's they have, or the children on a caseload with different permanency goals.

14. Ask one group to give you their numbers and write them on a flipchart. What does that table tell you now? If this data represented the children on a caseworkers' caseload, what might the supervisor learn from the table? Can any conclusions be drawn from this data? What else would you like to know about this data?

15. Continue:

Another way of describing what you have done (create a frequency distribution) is by using what is commonly known as an "average." In statistics "averages" are called "measures of central tendency." By using them we can make a reasonable estimate of the total population.

Using the M&M's again, let's look at an example of an average.

16. Show Overhead #6: Averages. Ask the group to find the corresponding handout in their packets. Ask each group how many of each color M&M's they have and record their responses on Handout #6. Then ask someone to add the responses and divide that number by the number of groups you have. Explain that the answer you get is the average of the number of each color M&M's that we have.

17. Continue:

Using information from the same legend that we used before. Each M&M represents a child with a permanency goal. Each color represents how that goal will be achieved.

If you are looking at the status of children with permanency goals in your team's caseload, what would this table tell you? How could you use this information? Could you use this information to compare your unit, or office with another?

There are two other measures of central tendency that are sometimes used. One is the mode which is the value in a set of numbers that occurs most often (with the highest frequency). The mode is not used as frequently as the median and the mean because it is not as precise. The other measure of central tendency is the median. In a set of numbers it is defined as the middle value when the numbers are arranged in order of magnitude. The median is the most stable measure, meaning it is least affected by extreme values occurring in the distribution.

Another way of presenting data is to use charts. Sometime this method is more effective than using a table.

18. Show Overhead #7: Pie Chart and ask the group to find the handout that shows this overhead in their packets. You can use the circle on Overhead #7 to make a Pie Chart. Using the percentage information they have calculated in Table 1, have each group draw in the approximate percentage for each way to achieve the permanency goal.

Ask the group if this chart would be a good way to compare permanency goals? Is it easier to understand than a table? What makes it an effective way to present data?

19. Then continue:

Or, you can present data in a bar chart. Look at Overhead #8. Using the graph form, draw in how each group's data would look displayed in this manner. Be sure to label your axis and draw a scale. Make sure the legend on the chart represents the ways to achieve the goal of permanency (not the colors of the M&M's).

Note that in the examples the frequencies are represented in the bar chart and the percentages in the pie chart. Does this arrangement work in displaying these two kinds of data?

20. When everyone is finished, ask if there are any questions; then finish the exercise.

We have reached the end of the M&M's exercise. I hope you have had some fun learning a little bit about statistics, data collection, and percent. Learning how to run numbers through formulas, while a useful skill to have, is not the main point of this exercise. Rather, the goal was to become familiar with these analytical tools, learn questions to ask about data and see if any of these tools can be applied in your day to day supervision or other operational activities. And, you can eat the M&M's if you like.

Does anyone have any questions before we move on to the next topic?

21. If you are going to use the Abuse on the Increase in Cascadia County exercise, transition into the case study by saying:

It's all very well to say that using data can be an effective

management tool. The problem is that using computer reports is often difficult for people who are used to basing management decisions on information from other sources - like face to face conversation or using the phone or fax. However, understanding basic data analysis techniques can improve your comfort with using and interpreting reports. The material in the case study, Abuse on the Increase in Cascadia County reviews some of these data analysis techniques.

22. Introduce the case, Abuse on the Increase in Cascadia County using the following as a guide:

Even though you as a child welfare supervisor or manager may not need to analyze the kind of data presented in this case study, you may find that the skills practiced in this case study can be applied in a variety of situations, perhaps with your unit or when collecting data for your supervisor or when you are reading reports. The point is to develop or increase your comfort in reading numbers, tables and charts, as well as enhance data analysis skills that can be applied in a variety of different situations. The goal is to show how using, analyzing and understanding data correctly can help answer basic social work questions.

23. Pass out copies of the Participant's Version of the Case Study, Abuse on the Increase in Cascadia County. Ask the group to take a few minutes to read the first two pages, stopping at the end of Question 1.

24. Put up Overhead # 11: Tips, Formulas and Definitions and ask

The trainer's approach to presenting this case will depend on the trainer's assessment of the group's comfort level working with data and calculations. After setting up the case, the trainer, may, for example, walk the whole group through the first question or two, then break into the small groups and have each group answer one question and report on it. Some trainers might find that the case study works best if the whole group stays together for the entire case. Others may want to use only a few of the questions and omit the rest.

participants to find the same handout. Walk through a summary of the case and the Question 1 tips and definitions using the following as a guide:

You've read the case and can see that Commissioner Smith is stunned by the newspaper's charge that Cascadia County had a 300% increase in the number of abuse and neglect cases last year. Commissioner Smith turns to you, the Program Administrator in Cascadia County, and the CPS supervisor in Cascadia County to help him look into this charge. He asks you to find answers to several questions. Lets stop and think for a moment how to approach this request. First, we need to find a source of data. In this case, we are fortunate that the State Office for Services to Children and Families (SCF) maintains data on a web page and had just released some statistics last week. The first tip in the case points out that locating the correct data and understanding the data is a critical first step in any data analysis.

*We have discovered that the 'correct data' to answer the Commissioner's first question is on Table 1: Abuse Reports Statewide and Table 2: Abuse Reports in Cascadia County. Can you all find those two tables in your case study? They are in Attachments 1 and 2. OK, lets look at Table 1 (Overhead #12) for a minute. You often see tables of data organized into rows and columns. This is a fairly complex table presenting a lot of data. Lets look at each column and row. Going across the top, we see the headings **Year, # of CPS Reports, Yearly % Change of CPS Reports, # of Substantiated Reports, Yearly % Change of Substantiated Reports and, finally, Rate of Substantiated Reports per 1000 Reports**. Below each of these headings are data. So*

we can see, for example that in 1998, there were 31,456 CPS reports statewide and in 1992 there were 7,265 Substantiated Reports. Does everyone see where I'm getting this data?

The Commissioner's first question asks 'How many Child Protective Service Reports (CPS) and substantiated reports did Cascadia have in each of the past 5 years?' Does Table 1 answer that for us? No, Table 1 gives us that information statewide. Has SCF provided us any data about Cascadia County? Sure they have...let's look at Table 2: Abuse Reports in Cascadia County.

25. Put up Overhead #13, Table 2 Abuse in Cascadia County and continue the presentation using the following as a guide:

Table 1 presented certain data statewide; Table 2 presents the same data for Cascadia County. Take a look at this table and locate the answers to the first set of the Commissioners questions about the number of CPS reports and the number of substantiated reports in Cascadia County over the past five years.

26. Ask participants to locate and identify the answers to the questions and then the trainer can circle the correct data on the overhead. Continue the discussion:

So we have now answered part of the first question, we need to move on to the second and third parts and look at what percent of Cascadia's CPS reports were substantiated in 1998 and how that compares with the state's percentage of substantiated reports. Do we have the data to answer those questions? Where is it? Tables 1 and 2 provide the data.

The analytic tool that is being used here is percent; we are being asked to calculate a percent and then compare percents for Cascadia and the state. Percent answers the question 'how many out of 100?' and is usually calculated by dividing the smaller number by the larger number. So lets calculate for 1998 the percent of CPS reports that were substantiated in Cascadia County.

27. Ask the group what table should be used and then to locate the data. Review the formula using Overhead #13 and ask someone in the group to calculate the percent. ($217/1105 * 100 = 19.6\%$)
Repeat the activity to calculate the statewide percent of substantiated reports in 1998. ($7461/31456 * 100 = 23.7\%$)

28. Ask the group how the figures compare. (In 1998, the % of Cascadia's substantiated reports was **lower** than the state's.) Ask participants to note the answers to Question 1 in Answer Box #1 and note the answers to Question 1 on a flipchart.

29. Begin a quick summary of the learning from Question 1 using the following as a guide:

We've answered the Commissioner's first question, talked about locating the correct source of data and calculated some percents as a comparative analytical tool.

30. Ask for and address any questions. Ask participants to read through Question 2 information in the case study.

31. Put up Overhead #14 and continue the discussion:

Question 2 asks us to think about two analytical tools -- percent change and rate. Lets start by looking at percent

change. Percent change may be used to show either an increase or decrease in a value and is calculated using the following formula:

*(Most recent # - Previous #)/ Previous # *100 = Percent Change*

Lets find out how we can apply this formula to answer Question 2, What is the percent change in the number of Child Protective Services (CPS) reports between 1997-1998 for Cascadia? How does that compare with the state's?

Ask the group how they would go about answering this question. Probe with questions such as: Do we have the data to answer this question? If so, where is the data located for Cascadia, for the state? Use Overhead #14 and ask the group to locate the correct data on Table 2. You notice the answers are given on the table, but how was the answer calculated? Calculate the percent change in Cascadia using the identified data on Table 2 and the formula:

*(1105 - 1158)/1158 * 100 = -4.58%*

Repeat the activity for the state, locating the data on Table 1 and calculating the percent change.

*(31,456 - 2800)/28,008*100 = 12.31%*

Ask the group how the percents of change compare.

(Cascadia's percent change has decreased by 4.5%, while the state's has increased by 12.31%. Record the answers to Question 2 on the flipchart and ask the participants to note the answers in Answer Box #2.

32. Move into a discussion on the importance of rate. Ask the group to look at the Rate of Substantiated Reports per 1000

Reports data on Table 1 (Overhead #14). Highlight:

As Tip 4 on Overhead # 11 notes, a critical issue in attempting to compare data is, knowing that the data is comparable. Rate is a helpful tool here. Rate helps us look at the number of events, which occurred, compared to the population for which that event could have occurred. So when we look at Table 1 we see that in 1998, the Rate of Substantiated Reports per 1000 Reports was 237. Looking at Table 2 we see that in Cascadia County, the Rate of Substantiated Reports per 1000 Reports in 1998 was 196.4.

33. Review with the group the answers to Questions 1 and 2 and then ask the participants to go to Answer Box #2a. Explain that the group has calculated data and now needs to begin synthesizing the data and thinking about any other information that would be useful to include in the Commissioner's report. Ask each person to take 2 minutes to record in Answer Box #2a any preliminary conclusions or thoughts that should be considered for the Commissioner's report.

34. After 2 minutes, reconvene the group and ask participants to share the information they wrote in Answer Box #2a. Look for the following:

- Based on the data we analyzed, the County has a better track record than the state.
- Between 1997-1998, Child Protective Services (CPS) reports in Cascadia went down 4.5% whereas the state saw an increase of 12.31% over the same period.
- In 1998, the % of substantiated reports in Cascadia was lower than the state's % of substantiated reports (19.6% and 23.7 % respectively)

35. Ask for and address any questions on the skills practiced in Questions 1 and 2.

36. Ask the group to break into their small groups and assign each small group a question (assigning questions 3-6) to read and respond to. After 15 minutes reconvene the group and ask each group to report on what their question was what the answer was and what the implications were.

37. To answer Question 3, the group must use the percent change calculation -- $\text{most recent \#} - \text{previous \#} / \text{previous \#} * 100 = \text{percent change}$. Make sure they mention the following:

- Point out that the data on Tables 1 and 2 present the same time period, but the data in the narrative mentions a different time span -- 1992-1998 for the state, 1993-1998 for Cascadia. Note that a key concept of entities is to use data from the same time period.
- Cascadia's percent change in substantiated reports has decreased by 3.13% , and the state's has increased by 2.7%.

38. To answer Question 4, the group must once again use the percent change calculation -- $\text{most recent \#} - \text{previous \#} / \text{previous \#} * 100 = \text{percent change}$. Make sure they mention the following.

- Statewide child abuse/neglect fatalities dropped by 50% this year after an increase of 100% the year before.
- In Cascadia, child abuse fatalities rose an incredible 300%! Does this mean that Cascadia is doing worse than the state in fatalities? Perhaps the newspaper was

If the group needs your help with Question 3, use Overhead # 14, Table 1: Abuse Reports - Statewide and Table 2: Abuse Reports - Cascadia

If the group needs your help

quoting the figure describing fatalities instead of the one describing the total reports.

39. Ask someone to define the impact of small numbers.

40. Ask for the group to report on Question 5. Can they find all the data to respond to Question 5? Discuss the tip for this question about adding percents. Note the data they would put in the Commissioner's report concerning perpetrators. Make sure they include the following types of comments:

- Just looking at the numbers, you see that statewide and in Cascadia, parents have been the two most prevalent perpetrators of child abuse; this appears to be a trend.
- Data for the boyfriend is not given.
- Statewide in 1998, mothers are the abusers in 42.0% of all substantiated reports, while fathers abused 25.5% of the time (a total of 67.5% together).
- In Cascadia in 1998, abuse percentages for parents were similar with mothers at 41.9% and fathers at 25.3% (a total of 67.2% together).
- Total relative abuse, statewide = 85.5%; in Cascadia it's about the same 85.12%.

41. Observe that the data indicates that mothers are much more likely to be perpetrators of child abuse and neglect than fathers are; this seems to be a trend. Is this finding surprising? Is it meaningful? Who provides most of the childcare? Who are usually the parents in single-parent households? What could this finding mean to you as you think about providing services to children and families?

with Question 4, use Overhead # 15, Table 3: Abuse and Neglect Fatalities and Answer Box #4.

If the group needs your help with Question 5, use Overhead # 16, Table 5: Alleged Perpetrator of Substantiated Abuse, State, Table 6: Alleged Perpetrator of Substantiated Abuse, Cascadia County, and Table 7: Alleged Perpetrator of Substantiated Abuse - 1998 and Answer Box #5, discuss the group's response to Question 5.

42. Ask for the small group's reports on question 6. Make sure they mention:

- Since you are only reporting to the Commissioner what are the top three in each year, you decide that, in this case, missing data is not a problem; you'll go with the raw numbers you have.
- Your analysis shows that in Cascadia, the top three types of abuse in 1994 and 1995 are, in order, physical abuse, neglect, and sexual abuse. Interestingly, statewide neglect and sexual abuse are reversed.
- Yet in both cases, once 'Threat of Harm' was added in 1996, it has remained the most common type of abuse in Cascadia and statewide.

Use Overhead #17 and Answer Box 6 to discuss the group's response to Question 6 if they need your help.

43. Note also that throughout this training they have been looking at data presented in the same kind of tables. However, there are other ways to present data that can be effective. For example, Overhead # 18 shows data Table 9 and two charts that have been made from the data. Ask participants which presentation of the data seems most clear and readable.

44. Ask the large group for their responses to Question 7. Make sure participants mention

- Data is statewide, not by county
- Could use data on drug/alcohol use instead
- Could get local information on drug use using some other method – reading cases, doing a survey, name others.

45. Continue the discussion of the report to the Commissioner:

So let's summarize the information we're going to put in the report to the Commissioner. He asked for this research and data analysis because the newspaper said that Cascadia County had a 300% increase in the number of abuse and neglect cases last year. Additionally, the Commissioner believes that child abuse is on the rise in Cascadia, a key factor in that increase was substance abuse and a frequent perpetrator was the mother's boyfriend. We've looked at a lot of individual data so let's start to create the introductory paragraph of the report. First of all, we know now that we can find nothing to substantiate the '300% increase in cases'. We did calculate a 300% increase in fatalities in Cascadia but we know that large % increase was caused by a large increase in a small number of fatalities (1 to 4 between 1997 and 1998) and that does not indicate a trend. We know from our research that between 1997 and 1998, Cascadia County had a 12.31% increase in abuse reports and a 2.74% increase in substantiated reports.

In answer to the Commissioner's 'belief' that substance abuse was a factor in the increase of child abuse cases in Cascadia cases; we need to report that we don't have specific data on substance abuse in Cascadia County, rather we have data on statewide substance abuse.

Finally, our research shows that both statewide and in Cascadia County, mothers, not boyfriends are the perpetrators 42% of the time, with fathers following at 26 and 25% of the time respectively. Data on the mother's boyfriend isn't collected.

46. Distribute copies of the Sample Report for the Commissioner (listed as Overhead #19 in the curriculum). Give folks a few minutes to read the report and then highlight the content of the report, drawing on comments provided by participants throughout the case discussion.

47. Begin to wrap-up the activity using the following as a guide:

In the case study, you just read through and selected data from several tables, as well as calculated percentages, and percent changes. We've reviewed rates, the effect of small numbers, what to do when a reporting category is added and how to respond when data is missing. Learning how to run numbers through formulas, while a useful skill to have, was not the main point of this exercise. Rather, the goals were to become familiar with these selected analytical tools, learn what questions to ask about data and see if any of these tools can be applied in your day to day supervision or other operational activities.

Now that you have learned a few data analysis skills, lets Look at some real reports and see what they tell us.

48. Distribute one or two sample reports. Ask the participants to look at the reports and launch a discussion by asking them if the data on the reports is important, useful, and used. If not used, what would be more useful?

49. Distribute the sample reports that focus on ASFA/agency/unit goals, outcomes and measures or the CFSR/PIP and make some comparisons between regions, teams, and units. Ask them to break into their smaller groups to discuss. Show Overhead #20 and ask

them to answer the questions which are also in their handout packet. Specifically, have the groups 'interpret' the data.

- What is the data on these reports saying or trying to say?
- Can you make any conclusions using these figures?
- Can you see any trends?
- Do these numbers surprise you? If so, how?
- What is the connection between your work responsibilities and the data on these reports?
- Do you think these figures could be misleading in any way? If so, how?

50. After 10 minutes have the group come back together and report on their discussions. Process the feedback from the small groups with the large group.

51. Wrap up the exercise by noting that:

More and more frequently, child welfare supervisors are expected to have basic analytical skills such as reading and interpreting data on reports. Having such skills is another tool that a child welfare supervisor can rely on to support the complex decision making that he/she is called on to perform everyday.

52. Ask for and address questions.

53. Briefly summarize module.

We have covered a lot of material in this module. We talked about how you as supervisors and managers use data; reviewed some basic data analysis tools; analyzed some reports that you use and shared some helpful

practices regarding data and reports with the rest of the group. This material won't make you a data expert, but we hope that it will make you feel more comfortable when you need to use data and reports on the job.

Reports Helpful to Decision Making

Two reports I use frequently in my job are:

- Report #1

Name of report: _____

Content of report: _____

- Report #2

Name of report: _____

Content of report: _____

A way I use these reports that is most helpful to me in making a decision is:

Ten Tips for Using Reports to Improve Decision Making

1. Assure and constantly look to improve the quality of the data.
2. Develop priority performance areas, create reports which measure performance in the target areas and distribute the reports to all levels of the agency.
3. Create statewide, regional, area and team versions of key reports -- consider developing both summary and detail versions of reports based on user requirements.
4. Use data on reports in day to day management, to set policy and inform decision making; incorporate review of key reports in staff meetings.
5. Avoid the 'gotcha' syndrome; develop both exception and positive reports.
6. Ensure that reports are distributed to the appropriate people.
7. Establish an open, user driven report requirement process that responds to user requests for information, manages expectations, prioritizes requests and takes frequency of reports into consideration.
8. Devote resources to meeting data clean-up and report development, assurance and maintenance efforts.
9. Provide training to all staff on how to read and use reports.
10. Develop on-line and hard copy reports -- consider a data warehouse for user defined and canned ad hoc reports.

PARTICIPANT'S VERSION

HAWAII CASE STUDY

The training version of this material was based on a case study, Abuse on the Increase in Cascadia County developed by members of the Data Users Group of the Oregon Department of Human Services. As part of their training for supervisors, the Hawaii Department of Human Services built on the Cascadia case to develop the Hawaii case. We thank both groups for allowing us to share their efforts.

You are a Child Welfare Services (CWS) Supervisor. In reviewing the Statewide CWS Outcomes Report, the Director has noticed that your section is excelling in certain areas, such as low rates of foster care re-entry and low rates of recurrence of child abuse and neglect. She wants to find out if there are lessons that can be learned from your section to improve outcomes in other areas of the state. Your Section Administrator has asked you to explain some of the trends in your unit for her report to the Director. Using the Quarterly Outcomes Report (QOR), she has asked you to address the following questions:

1. What was the section's rate of recurrence of child abuse and neglect in FY 01? In the first quarter of FY 02? What factors or practices in your unit could explain this decrease?
2. What was the section's rate of foster care re-entry in FY 01? In the first quarter of FY 02? What factors or practices in your unit could explain this decrease?

Furthermore, the Director has heard about the high rate of substance abuse in child welfare cases in your section's geographic area. The Governor has promised her \$1,000,000 for substance abuse treatment services for child welfare clients if she can demonstrate that there is a need. She is looking to the sections and units to help her present her case.

3. What role has substance abuse played in cases in your unit? What data can you provide to demonstrate this?

In considering responses to these questions, it is important to look at the data critically. The first step is to locate the data that relates to the question and examine it to make sure that it does indeed answer the question. The second step is to determine if there is additional information related to the topic of the question that should be included in the report.

Question 1: (a) What percentage of children in your section had a recurrence of child abuse and neglect in FY 01? In the first quarter of FY 02? (b) How does that figure compare with the national standard? (c) What factors or practices could explain this decrease?

You look at your section's Quarterly CWS Outcomes Report (QOR) and find data about the number of children with subsequent confirmed CA/N reports in the first table (See Attachment #1).

The numbers themselves, however, don't tell you much. You expect the total number of subsequent confirmed reports to be greater. You note that reports of threatened harm have been excluded. Nonetheless, you notice that the percentage of subsequent confirmed reports of actual maltreatment appears to be lower in FY 02 when compared to FY 01. What factors could explain this decrease? Record your answers in the box below.

Answers to Question 1

(a) What percentage of children in your section had a recurrence of child abuse and neglect in FY 01? In the first quarter of FY 02

(b) How does the FY 02 figure compare with the national standard?

(c) What factors or practices explain this decrease?

Question 2: (a) What percentage of children re-entered foster within twelve months in FY 01? In the first quarter of FY 02? (b) Does the percentage appear to be increasing or decreasing? (c) How do the percentages compare with the national standard? (d) What factors or practices could explain this decrease?

You look again at your section's QOR (see Attachment #2). You find data about the number of children re-entering foster care in the second table under Outcome 4.2.

Again, you notice that the percentage of children re-entering care appears to be lower in the first quarter of FY 02 when compared to FY 01. You see that your section has exceeded the national standard. What factors could explain this decrease? You notice that in Outcome 4.1, (Attachment 3) the percentage of children reunified within one year has also decreased. Could there be a relationship? Is there any other information that you think should be included in the report to the Director? If so, note the information in Answer Box #2 below.

Answers to Question 2

- (a) What percentage of children re-entered foster within twelve months in FY 01?
In the first quarter of FY 02?**
- (b) How do the percentages compare with the national standard?**
- (c) What factors or practices could explain this decrease?**
- (d) Other:**

**Question 3: Finally, what role has substance abuse played in your unit's cases?
What data can you provide to demonstrate this?**

You know that substance abuse is a problem. What types of information might you provide to make your case? Is there information that other systems (e.g. the judiciary, DOH) could provide to you?

Decide what answer you would give to the Director's questions on substance abuse and note your responses in the answer box below.

Answer to Question 3

- (a) What role has substance abuse played in cases in your unit? What data can you provide to demonstrate this?**

Attachment 1

Central CWS Section's Quarterly CWS Outcomes Report, 1st Quarter FY 02

This report presents the Central CWS Section's performance on the CWS Outcomes for the 1st quarter of FY 02, 7/1/01-9/30/01. National standards are provided for measures that will be used in the upcoming Child and Family Service Reviews. Section administrators and supervisors can use the data below for case review and supervision. **NOTE:** For CFR Outcomes 1 and 2, data contain only confirmed reports of actual maltreatment (no threatened harm).

Table 1

Outcome 1: Reduce the recurrence of child abuse and/or neglect			
Of all children who were victims of confirmed child maltreatment during the report period, what percentage had another confirmed report within six months?			
	CCWS	Standard	Note: 23 children were victims of confirmed child maltreatment during the report period. Of these 23 children, none had a subsequent confirmed report within 6 months from the initial report.
FY 01 7/00-6/01	3.0% (4)	6.1% or fewer	
FY 02 7/01-9/01	0% (0)	6.1% or fewer	
<u>For Information</u> CPSS SCREENS: IA14: Intake # IA/CA22: Client # CA/CU39: Report Disposition & Determination Date			

Attachment 2

Table 2

Outcome 4: Reduce time in foster care without increasing re-entry.

4.2 Of all children who entered foster care during the period under review, what percentage of those children re-enter foster care within 12 months of a prior foster care episode?			
	CCWS	Standard	Note: 90 children entered foster care during the report period. Of these 90 children ♦ 82 (91%) entered care for the first time ♦ 5 (6%) re-entered care within 12 months of a previous placement and ♦ 3 (3%) re-entered care after 12 months from a previous placement
FY 01 7/00-6/01	9.9% (42)	8.6% or fewer	
FY 02 7/01-9/01	5.5% (5)	8.6% or fewer	
<p><u>For Information</u> CPSS SCREENS: CA/CU28: Start & End Dates, Termination Reason RU10: Counts Removal Episodes Listed</p> <p><u>For Action</u> Five children re-entered care within 12 months of a previous placement. See attached printouts for case, child, and worker details.</p>			

Attachment 3

Table 3

Outcome 4: Reduce time in foster care to reunification without increasing re-entry.

Outcome 4: Reduce time in foster care to reunification without increasing re-entry.			
4.1 Of all children who were reunified with their parents or caretakers at the time of discharge from foster care, what percentage were reunified within twelve months from the time of the latest removal from home?			
	CCWS	Standard	50 children were reunified with their parents or caregivers during the report period. Of these children ♦ 31 (62%) were reunified within 12 months from the time they entered care ♦ 17 (34%) were reunified from 12 to 23 months after the time they entered care ♦ 1 (2%) were reunified from 24 to 35 months after the time they entered care ♦ 0 (0%) were reunified from 36 to 47 months after the time they entered care ♦ 1 (2%) were reunified after 48 months from the time they entered care
FY 01 7/00-6/01	79.9% (163)	76.2% or more	
FY 02 7/01-9/01	62.0% (31)	76.2% or more	

TRAINER'S VERSION

HAWAII CASE STUDY

The training version of this material was based on a case study, Abuse on the Increase in Cascadia County developed by members of the Data Users Group of the Oregon Department of Human Services. As part of their training for supervisors, the Hawaii Department of Human Services built on the Cascadia case to develop the Hawaii case. We thank both groups for allowing us to share their efforts.

You are a Child Welfare Services (CWS) Supervisor. In reviewing the Statewide CWS Outcomes Report, the Director has noticed that your section is excelling in certain areas, such as low rates of foster care re-entry and low rates of recurrence of child abuse and neglect. She wants to find out if there are lessons that can be learned from your section to improve outcomes in other areas of the state. Your Section Administrator has asked you to explain some of the trends in your unit for her report to the Director. Using the Quarterly Outcomes Report (QOR), she has asked you to address the following questions:

1. What was the section's rate of recurrence of child abuse and neglect in FY 01? In the first quarter of FY 02? What factors or practices in your unit could explain this decrease?
2. What was the section's rate of foster care re-entry in FY 01? In the first quarter of FY 02? What factors or practices in your unit could explain this decrease?

Furthermore, the Director has heard about the high rate of substance abuse in child welfare cases in your section's geographic area. The Governor has promised her \$1,000,000 for substance abuse treatment services for child welfare clients if she can demonstrate that there is a need. She is looking to the sections and units to help her present her case.

3. What role has substance abuse played in cases in your unit? What data can you provide to demonstrate this?

In considering responses to these questions, it is important to look at the data critically. The first step is to locate the data that relates to the question and examine it to make sure that it does indeed answer the question. The second step is to determine if there is additional information related to the topic of the question that should be included in the report.

Question 1: (a) What percentage of children in your section had a recurrence of child abuse and neglect in FY 01? In the first quarter of FY 02? (b) How does that figure compare with the national standard? (c) What factors or practices could explain this decrease?

You look at your section's Quarterly CWS Outcomes Report (QOR) and find data about the number of children with subsequent confirmed CA/N reports in the first table (See Attachment #1).

The numbers themselves, however, don't tell you much. You expect the total number of subsequent confirmed reports to be greater. You note that reports of threatened harm have been excluded. Nonetheless, you notice that the percentage of subsequent confirmed reports of actual maltreatment appears to be lower in FY 02 when compared to FY 01. What factors could explain this decrease? Record your answers in the answer box below.

Answers to Question 1:

(a) What percentage of children in your section had a recurrence of child abuse and neglect in FY 01? In the first quarter of FY 02

3%; 0%

(b) How does the FY 02 figure compare with the national standard?

Lower. The national standard is 6.1% or fewer.

(c) What factors or practices explain this decrease?

Responses could include information such as:

- Quality of services provided
- Family Conferencing
- Ability to access safe out-of-home placements

Question 2: (a) What percentage of children re-entered foster within twelve months in FY 01? In the first quarter of FY 02? (b) Does the percentage appear to be increasing or decreasing? (c) How do the percentages compare with the national standard? (d) What factors or practices could explain this decrease?

You look again at your section's QOR (see Attachment #2). You find data about the number of children re-entering foster care in the second table under Outcome 4.2.

Again, you notice that the percentage of children re-entering care appears to be lower in the first quarter of FY 02 when compared to FY 01. You see that your section has exceeded the national standard. What factors could explain this decrease? You notice that in Outcome 4.1, (Attachment 3) the percentage of children reunified within one year has also decreased. Could there be a relationship? Is there any other information that you think should be included in the report to the Director? If so, note the information in the answer box below.

Answers to Question 2:

**(e) What percentage of children re-entered foster within twelve months in FY 01?
In the first quarter of FY 02?**

9.9%; 5.5%

(f) How do the percentages compare with the national standard?

The national standard is 8.6%. The section has surpassed requirements in FY 02.

(g) What factors or practices could explain this decrease?

Responses could include information such as:

- Quality of/access to services
- Family Conferencing
- Families have sufficient time to address family issues

(h) Other:

Case reviews may also reveal problems with the data, e.g. if co-permanent custody is assumed by DHS to start services, it may appear as if a child re-entered care.

**Question 3: Finally, what role has substance abuse played in your unit's cases?
What data can you provide to demonstrate this?**

You know that substance abuse is a problem. What types of information might you provide to make your case? Is there information that other systems (e.g. the judiciary, DOH) could provide to you?

Decide what answer you would give to the Director's questions on substance abuse and note your responses in the answer box below.

Answer to Question 3:

(a) What role has substance abuse played in cases in your unit? What data can you provide to demonstrate this?

From conversations with your staff and other supervisors, you find out that everyone believes that there has been an increase in substance abuse in the cases served by the agency. You decide to look for more information such as:

- Data from CPSS
- Case information
- Examination of wait lists
- Count of referrals made
- Information from drug court/judiciary

NOTE: END OF TRAINER'S VERSION OF HAWAII CASE STUDY

Attachment 1

Central CWS Section’s Quarterly CWS Outcomes Report, 1st Quarter FY 02

This report presents the Central CWS Section’s performance on the CWS Outcomes for the 1st quarter of FY 02, 7/1/01-9/30/01. National standards are provided for measures that will be used in the upcoming Child and Family Service Reviews. Section administrators and supervisors can use the data below for case review and supervision. **NOTE:** For CFR Outcomes 1 and 2, data contain only confirmed reports of actual maltreatment (no threatened harm).

Table 1

Outcome 1: Reduce the recurrence of child abuse and/or neglect			
Of all children who were victims of confirmed child maltreatment during the report period, what percentage had another confirmed report within six months?			
	CCWS	Standard	Note: 23 children were victims of confirmed child maltreatment during the report period. Of these 23 children, none had a subsequent confirmed report within 6 months from the initial report.
FY 01 7/00-6/01	3.0% (4)	6.1% or fewer	
FY 02 7/01-9/01	0% (0)	6.1% or fewer	
<u>For Information</u> CPSS SCREENS: IA14: Intake # IA/CA22: Client # CA/CU39: Report Disposition & Determination Date			

Attachment 2

Table 2

Outcome 4: Reduce time in foster care without increasing re-entry.

4.2 Of all children who entered foster care during the period under review, what percentage of those children re-enter foster care within 12 months of a prior foster care episode?			
	CCWS	Standard	Note: 90 children entered foster care during the report period. Of these 90 children <ul style="list-style-type: none"> • 82 (91%) entered care for the first time • 5 (6%) re-entered care within 12 months of a previous placement and • 3 (3%) re-entered care after 12 months from a previous placement
FY 01 7/00-6/01	9.9% (42)	8.6% or fewer	
FY 02 7/01-9/01	5.5% (5)	8.6% or fewer	
<p><u>For Information</u> CPSS SCREENS: CA/CU28: Start & End Dates, Termination Reason RU10: Counts Removal Episodes Listed</p> <p><u>For Action</u> Five children re-entered care within 12 months of a previous placement. See attached printouts for case, child, and worker details.</p>			

Attachment 3

Table 3

Outcome 4: Reduce time in foster care to reunification without increasing re-entry.

Outcome 4: Reduce time in foster care to reunification without increasing re-entry.			
4.1 Of all children who were reunified with their parents or caretakers at the time of discharge from foster care, what percentage were reunified within twelve months from the time of the latest removal from home?			
	CCWS	Standard	50 children were reunified with their parents or caregivers during the report period. Of these children <ul style="list-style-type: none"> • 31 (62%) were reunified within 12 months from the time they entered care • 17 (34%) were reunified from 12 to 23 months after the time they entered care • 1 (2%) were reunified from 24 to 35 months after the time they entered care • 0 (0%) were reunified from 36 to 47 months after the time they entered care • 1 (2%) were reunified after 48 months from the time they entered care
FY 01 7/00-6/01	79.9% (163)	76.2% or more	
FY 02 7/01-9/01	62.0% (31)	76.2% or more	

M&M County

Frequency/Percent

The total number of M&M's in our package =

Table 1

Color	Frequency	%
Red		
Blue		
Brown		
Orange		
Yellow		
Turquoise/Green		

Percent = frequency divided by total number of M & M's I have in my package

Permanency Goal Legend

Red = reunification

Blue = placed with fit and willing relative

Brown = adoption

Orange = permanency guardianship

Yellow = planned permanent living arrangement

Turquoise/green = none

M&M County

Averages

Table 2

Color	Group Frequency					Total # of Color	Average
	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5		
Red							
Blue							
Brown							
Orange							
Yellow							
Green/ Turquoise							

Total number of each color divided by the number of groups = the average number of each color, or the average number of children with that permanency goal.

Permanency Goal Legend

Red = reunification

Blue = placed with fit and willing relative

Brown = adoption

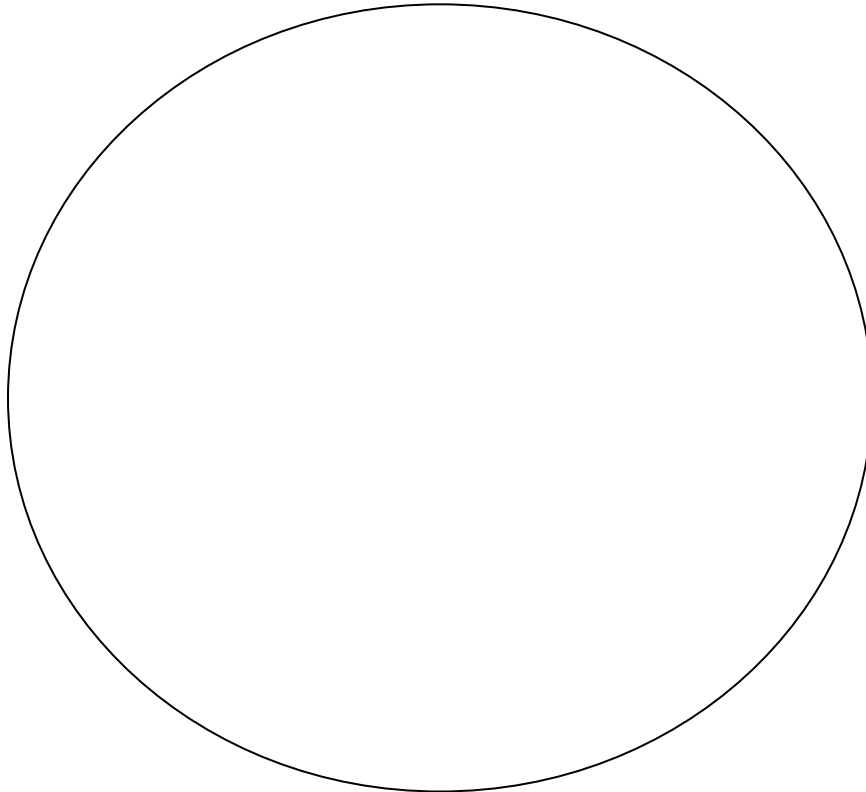
Orange = permanency guardianship

Yellow = planned permanent living arrangement

Turquoise/green = none

Pie Chart

Ways to Achieve Permanency (%)



Permanency Goal Legend

Red = reunification

Blue = placed with fit and willing relative

Brown = adoption

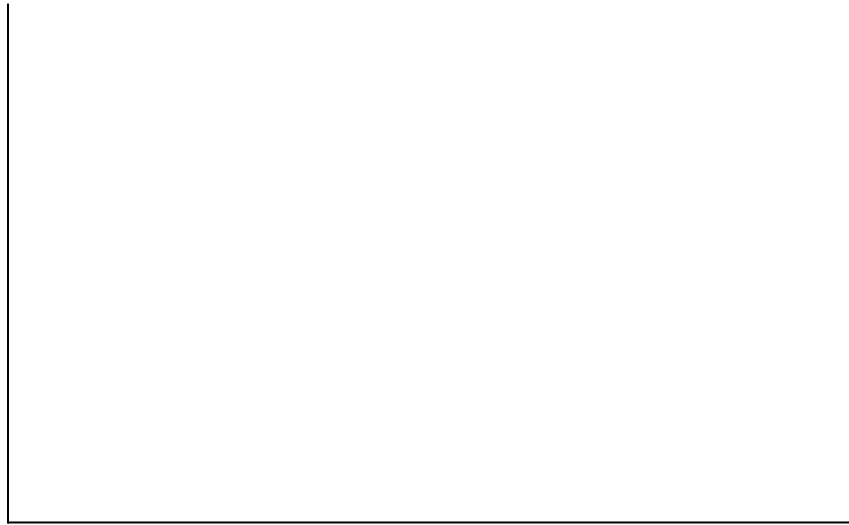
Orange = permanency guardianship

Yellow = planned permanent living arrangement

Turquoise/green = none

Bar Chart

Ways to Achieve Permanency



PARTICIPANT'S VERSION

CASE STUDY:

ABUSE ON THE INCREASE IN CASCADIA COUNTY

This training version of the case study, Abuse on the Increase in Cascadia County, is based on a case study developed by the Data Users Group of the Oregon Department of Human Services. The lead developers of this scenario were Jim White, Services to Children and Families and Kati Neville, Senior and Disabled Services Division. We thank them and the other members of the Oregon Department of Human Services Data Users for allowing us to use this case study in the SACWIS Supervisory Seminar: Using Information Management to Support the Goals of Safety, Permanency and Well Being Curriculum for Child Welfare supervisors.

Edited by Twin Prime Editorial, Arlington, MA 02474

ABUSE ON THE INCREASE IN CASCADIA COUNTY

You are the program administrator in Cascadia County. Newly appointed Commissioner Smith has asked you to investigate child abuse in Cascadia County. There have been several recent, well-publicized child fatalities. The Capital Courier just published a story about the Child Protective Service program and in that article stated that Cascadia County had a 300% increase in the number of abuse and neglect cases last year.

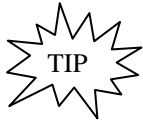
The Commissioner believes that the CPS program in Cascadia is in a state of crisis. The information he has received regarding the fatalities indicates that these children had previous reports made on them, but the social workers had done nothing. Furthermore, he believes that child abuse is on the rise in Cascadia because of substance abuse and that boyfriends are the most common offenders. He believes that there are serious problems with the CPS program in Cascadia County and that the workers there are not substantiating enough of the cases they are investigating. This lack of substantiation is creating a situation where children are being left unprotected. He has asked you and the CPS supervisor to visit the State Office for Services to Children and Families (SCF) web pages and track down the answers to the following questions:

1. (a) How many Child Protective Service reports (CPS) has Cascadia had in each of the past 5 years? (b) How many of these reports were substantiated? (c) In 1998, what percent of CPS reports in Cascadia County were substantiated? (d) How does that figure compare with the state?
2. (a) What is the percent change in the number of Child Protective Service (CPS) reports between 1997 and 1998 for Cascadia? (b) How does that compare with the state.
3. During the period 1992-1998, how does the change in the percent of reports that are substantiated in Cascadia compare to the state's substantiated report percent change?
4. (a) Statewide and in Cascadia County, how many fatalities related to abuse and neglect occurred in 1996, 1997 and 1998? (b) What was the yearly percentage change?
5. (a) Who is the most common perpetrator of substantiated abuse? (b) How often is it the boyfriend?
6. (a) What have been the top 3 types of abuse over the past 5 years statewide and in Cascadia County? (b) Has there been any notable change?
7. Finally, has substance use played a frequent role in the Cascadia cases?

In considering responses to these questions, it is important to look at the data critically. The first step is to locate the data that relates to the question and examine it to make sure that it does indeed answer the question. The second step is to determine if there is

additional information related to the topic of the question that should be in the report to the Commissioner.

Question 1: (a) How many Child Protective Service reports (CPS) has Cascadia had in each of the past 5 years? (b) How many of these reports were substantiated? (c) In 1998 what percent of CPS reports in Cascadia County were substantiated? (d) How does that figure compare with the state?



As you get started, it is important to stop and ask what might be the most basic – and most important - questions in the use of data: 'have we found the correct number?'; 'what event or events are most appropriate to answer the question posed?' For example, we will examine data concerning abuse reports and 'substantiated' abuse reports. Which of these is the most appropriate data to look at and report on? It depends on the question that is being asked and requires a good working knowledge of the data, the intent of the question and the definition of the data. The issue of what data to use to respond to a question will resurface again and again.

You and the CPS supervisor look at statistics released by the State Office for Services to Children and Families (SCF) last week. You find data about the number of abuse reports in two tables, Table 1: Abuse Reports - Statewide and Table 2: Abuse Reports - Cascadia. (You can find these tables in Attachments #1 and #2 located at the end of this case study.)

In Table 2: Abuse Reports - Cascadia, you find the answers to Question 1a and 1b. Looking at the column entitled '# of CPS Reports', you see the number of CPS reports for the past five years and in the column entitled '# of Substantiated Reports' you find the number of substantiated reports. With a pen highlight the answers on Table 2.

The numbers themselves, however, don't tell you much. You would expect that the total number of abuse reports would be greater than the number of substantiated abuse reports and that the state would have more reports than the County. You decide to look at the third part of the question to determine what percent of Cascadia's total reports are substantiated and then compare Cascadia's percent of substantiated reports to the state's percent of substantiated reports.

Recalling your basic math, you remember that a percent tells you how many out of 100. The way to calculate percent is to write a fraction whose denominator (the number on the bottom) is the number after the word of and whose numerator (the one on the top) is the other number and then multiply by 100. Frequently you are dividing the smaller number by the larger number. In this case, the formula is:

$$\frac{\text{Number of Substantiated reports}}{\text{Number of CPS Reports}} * 100$$

Total Number of CPS Reports

Using data from Tables 1 and 2 and the formula above, calculate the percent of substantiated reports for both Cascadia County and statewide in 1998 and compare the results. Note your answers in Answer Box #1 below:

Answer Box #1

Percent of substantiated reports in 1998, Statewide = ____

Percent of substantiated reports 1998, Cascadia County = ____

How do the percents compare?

Question 2: (a) What is the percent change in the number of Child Protective Service (CPS) reports between 1997 and 1998 for Cascadia? (b) How does that compare with the state.

Tables 1 and 2 give you another way to compare the number of abuse reports and the number of substantiated abuse reports for the state and Cascadia. You notice that in both tables there are columns titled Yearly % Change of CPS Reports and Yearly % Change of Substantiated Reports. Using the formula below, you can see how to calculate the percent change in total number of CPS reports and in substantiated reports.



Percents may be used to show a change -- either an increase or decrease-- in an amount, quantity or value. To calculate **PERCENT CHANGE**, use the following formula:

$$\frac{(\text{Most Recent Number} - \text{Previous Number}) * 100}{\text{Previous Number}} = \text{Percent Change}$$

Calculate the percent change in Cascadia using the identified data on Table 2 and the formula:

$$(1105 - 1158)/1158 * 100 = -4.5\%$$

Repeat the activity for the state, locating the data on Table 1 and calculating the percent change.

$$(31,456 - 28,008)/28,008*100 = 12.31\%$$

Record your answers in Answer Box #2 below.

Answer Box #2

Percent change in Child Protective Service (CPS) reports in the state 1997-1998 =

Percent change in Child Protective Service (CPS) reports in Cascadia 1997-1998 =

How do the percents compare?

Using percent change data is one way of comparing child abuse reports and substantiated reports in the state and in Cascadia. Note that Tables 1 and 2 also use a rate per 1000.



Definition of Rate and Importance of Rate.

A critical issue in attempting to compare data is knowing that the data is really comparable. In many instances, simply knowing the number of events, in this case, the number of abuse reports, is not sufficient. For example, we know that there will be more abuse in the State as a whole than in Cascadia -- one of its Counties. In order to make this raw data comparable statisticians calculate rates. This means that the number of events that occurred is compared to the population for which that event could have occurred. The figure is then standardized to some number (such as 100, 1,000 or 10,000.) In fact, when you calculated the percentage of CPS reports in Cascadia County that were substantiated, you standardized to the number 100. (Remember that percent tells how many out of 100. You could also have standardized to some other number, for example, the number of abused children in the county compared to the number in the state.)

You and the CPS supervisor have now found or calculated the data that answers the Commissioner's first two questions. Look over the data you have been analyzing, is there any other information that you think would be useful to the Commissioner that should be included in the report? If so, note the information in Answer Box #2a below.

Answer Box #2a

Question 3: During the period 1992-1998, how does the change in the percent of reports that are substantiated in Cascadia compare to the state's substantiated report percent change?

Some reports that you are using state that even though Cascadia reports were down last year, over the past 6 years (1993-1998) the number of reports has grown. Since 1993, abuse reports in Cascadia have increased 18.18%. Notice how the time period displaying the percent change over many years is for a different time period from the one you need. In these reports the time period discussed is 1993-1998. You need to use data for the period 1992-1998 for both Cascadia and the state to answer the question, but also for the reason stated in the tip below.



When comparing percentage change across entities, it is important to use the same time period.

Now that you have analyzed the number of CPS reports, you need to calculate the percent change in the number of **substantiated** reports in the state and in Cascadia during the same period so you can answer the Commissioner's question.

Using information from Tables 1 and 2 and the **Percent Change** formula, calculate the percent change for substantiated reports for the state and Cascadia County for the period 1992- 1998. Compare the results. Put your answers to Question 3 in Answer Box #3 below:

Answer Box #3

Percent change in Substantiated reports in the state 1992-1998 = _____

Percent change in Substantiated reports in Cascadia 1992-1998 = _____

How does Cascadia's percent change in substantiated reports compare with the state's?

Question 4 (a) Statewide and in Cascadia County, how many fatalities related to abuse and neglect occurred in 1996, 1997 and 1998? (b) What was the yearly percentage change?

So far, the abuse profile of Cascadia looks better than the state profile. The statistics you have calculated do not even come close to those reported by the Capital Courier. You have double-checked the calculations you have made as well as those you received from SCF and cannot find how the newspaper calculated last year's growth in the number of abuse and neglect reports as 300%.

You decide to move on to answer the child abuse and neglect fatalities question. Complete Table 3 below by calculating percent change in abuse and neglect fatalities for both the State and Cascadia County for the years 1996,1997 and 1998.

Table 3: Abuse and Neglect Fatalities

Year	State		Cascadia	
	Fatalities	% change	Fatalities	% change
1998	17		4	
1997	34		1	
1996	17		1	

Do the results look strange to you? Why? (See the Tip below.)



Small numbers, as seen in Table 3, can cause large fluctuations in statistics that can render them virtually meaningless. When confronted with a situation like this, report actual numbers.

Look over the data on Abuse and Neglect Fatalities you have been analyzing. Is there any other information that would be useful to the Commissioner that should be included in the report? If yes, record the information in Answer Box #4 below.

Answer Box #4

Question 5. (a) Who is the most common perpetrator of substantiated abuse? (b) How often is it the boyfriend?



While anecdotes and personal experience often help provide richness and depth to supplement data, too often they can be misleading and do not actually represent the true nature of the phenomenon being studied.

Tables 5 and 6 (appearing as Attachment #3 at the end of the case study) display the numbers of alleged substantiated abuse perpetrators over the past five years for the State and Cascadia. Unfortunately, the tables you received from SCF do not report any additional categories, such as significant other, boyfriend, or girlfriend.

You and the CPS supervisor plan to make a note of this data gap in your report to Commissioner Smith. Looking at Tables 5 and 6, what data do you think would be important for the Commissioner to know? Consider who are the most likely perpetrators of child abuse in the State and in Cascadia? Is it important to determine what percent of perpetrators are mothers or fathers or what percent of perpetrators are family members?

Look at the table below. To determine abuse by parents, you can add the entries for mother and father. Note that statewide the percent of alleged perpetrators who are mothers or fathers is 67.5%; for Cascadia the percent is 67.2%. Likewise, if you want a single statistic for the percent of abuse perpetrated by family members, you can add the percentages for mother, father, sibling, and other relatives.



Since all numbers with a % sign represent a rate per 100, the % numbers in the same data set can be added, subtracted, multiplied or divided as you would other numbers. For example, $2 + 5 = 7$ and $2\% + 5\% = 7\%$.

Calculate the percent of abuse perpetrated by family members in Table 7 below. (Remember that you can add the raw numbers or percents of several categories to come up with new categories. Keep in mind that you can do this only if the categories don't overlap. For example, if, as in the data reported below, there is only a single alleged perpetrator for each case.)

Table 7: Alleged Perpetrator of Substantiated Abuse – 1998

Perpetrator	State (%)	Cascadia (%)
Mother	42.0	41.9
Father	25.5	25.3
Sibling	1.0	.92
Other Relative	17.0	17.0
Total		

Look over the data you have been analyzing on alleged perpetrators, is there any other information that would be useful to the Commissioner that should be included in the report? If so, note in Answer Box #5 below.

Answer Box #5

Question 6 (a) What have been the top 3 types of abuse over the past 5 years statewide and in Cascadia County? (b) Has there been any notable change?

Looking at the data in Tables 8 and 9 (appearing as Attachment #4 at the end of the case study), you and the CSP supervisor review the data to determine the top 3 types of abuse

in each of the past 5 years. You notice you are missing data both statewide and for Cascadia in the 1994 and 1995 columns for 'Threat of Harm'. You contact the SCF analyst you had been working with to get the missing pieces and he tells you that the data do not exist; the Division only began reporting 'Threat of Harm' data in 1996.



The major question which needs to be asked in a situation where there are new categories for a variable -- in this case, 'threat of harm' added as a 'type of maltreatment' -- is it impacting the other categories. Is it a subset? Is it pulling numbers from one or more of the other categories?

In examining the data in Tables 8 and 9, the addition of 'threat of harm' in 1996 seems to have a definite impact on the other categories of maltreatment. It appears to be 'pulling' from the other categories. The totals in the other categories are basically on a downward trend as the 'new' category is increasing.

Decide what answer you would give to the Commissioner's questions on types of abuse and note your responses in Answer Box #6 below.

Answer Box #6

Question 7: Finally, has substance abuse played a frequent role in the Cascadia cases?

Your interview with the SCF analyst revealed that the Commissioner's last question cannot be answered with SCF's computerized data. The data SCF has on substance abuse are from a statewide study that cannot be reported by county.

Decide what answer you would give to the Commissioner's questions on substance abuse and note your responses in Answer Box #7 below.

Answer Box #7

You and the CPS supervisor have now gathered and analyzed the data needed to address the Commissioner's questions. Quickly go back through the answers you have recorded in each answer box to make sure that the data you looked at indeed answer the questions asked and, where you think appropriate, that you have provided additional data, information and explanations in response to the question. Note any changes in the corresponding answer box.

Attachment 1

Table 1: Abuse Reports - Statewide

Year	# of CPS Reports	Yearly % Change of CPS Reports	# of Substantiated Reports	Yearly % Change of Substantiated Reports	Rate: Substantiated Reports Per 1000 Reports
1998	31,456	12.31%	7,461	2.74%	237
1997	28,008	1.25%	7,262	12.80%	259
1996	24,515	-8.41%	6,438	5.44%	263
1995	26,765	1.24%	6,106	-2.76%	228
1994	26,436	4.79%	6,279	-10.49%	238
1993	25,227	15.60%	7,015	-3.44%	267
1992	21,822		7,265		333

Attachment #2

Table 2: Abuse Reports - Cascadia

Year	# of CPS Reports	Yearly % Change of CPS Reports	# of Substantiated Reports	Yearly % Change of Substantiated Reports	Rate: Substantiated Reports Per 1000 Reports
1998	1105	-4.58%	217	-5.65%	196.4
1997	1158	-3.42%	230	-5.74%	198.6
1996	1199	-2.04%	244	3.83%	203.5
1995	1224	-6.49%	235	-8.56%	192.0
1994	1309	40.00%	257	47.70%	196.3
1993	935	-6.69%	174	-22.32%	186.1
1992	1002		224		223.6

Attachment #3

Table 5: Alleged Perpetrator of Substantiated Abuse, State

Alleged Perpetrator	1994	1995	1996	1997	1998
Mother	2637	2626	2704	3086	3134
Father	1884	1710	1738	1906	1903
Sibling	63	61	64	73	75
Other Relative	1067	916	1030	1180	1268
Friend	188	244	451	363	522
Neighbor	63	183	129	73	75
Caregiver	251	214	129	218	149
Other	126	153	193	363	336
Total	6279	6106	6438	7262	7461

Table 6: Alleged Perpetrator of Substantiated Abuse, Cascadia County

Alleged Perpetrator	1994	1995	1996	1997	1998
Mother	108	101	102	98	91
Father	77	66	66	60	55
Sibling	3	2	2	2	2
Other Relative	44	35	39	37	37
Friend	8	9	17	12	15
Neighbor	3	7	5	2	2
Caregiver	10	8	5	7	4
Other	5	6	7	12	10
Total	257	235	244	230	217

Attachment #4

Table 8: Type of Maltreatment, Statewide

Type of Maltreatment	1994	1995	1996	1997	1998
Physical Abuse	1964	1727	1893	1788	1620
Neglect	3184	3178	2940	2842	2525
Mental Injury	674	816	1003	617	758
Fatality	19	15	17	34	17
Abandonment	44	104	52	58	60
Sexual Abuse & Exploitation	1791	1587	1396	1476	1434
Subtotal	7676	7427	8301	6815	6414
Threat of Harm	--	--	4022	5405	6344
Total	7676	7427	12323	12220	12758

Table 9: Type of Maltreatment, Cascadia County

Type of Maltreatment	1994	1995	1996	1997	1998
Physical Abuse	82	74	74	68	60
Neglect	72	63	60	57	54
Mental Injury	26	20	9	9	8
Fatality	5	3	1	1	4
Abandonment	2	4	2	2	2
Sexual Abuse & Exploitation	77	75	50	47	44
Subtotal	264	239	196	184	173
Threat of Harm	--	--	113	106	100
Total	264	239	309	290	273

TRAINER'S VERSION

CASE STUDY:

ABUSE ON THE INCREASE IN CASCADIA COUNTY

This training version of the case study, Abuse on the Increase in Cascadia County, is based on a case study developed by the Data Users Group of the Oregon Department of Human Services. The lead developers of this scenario were Jim White, Services to Children and Families and Kati Neville, Senior and Disabled Services Division. We thank them and the other members of the Oregon Department of Human Services Data Users for allowing us to use this case study in the SACWIS Supervisory Seminar: Using Information Management to Support the Goals of Safety, Permanency and Well Being Curriculum for Child Welfare supervisors.

Edited by Twin Prime Editorial, Arlington, MA 02474

ABUSE ON THE INCREASE IN CASCADIA COUNTY

You are the program administrator in Cascadia County. Newly appointed Commissioner Smith has asked you to investigate child abuse in Cascadia County. There have been several recent, well-publicized child fatalities. The Capital Courier just published a story about the Child Protective Service (CPS) program and in that article stated that Cascadia County had a 300% increase in the number of abuse and neglect cases last year.

The Commissioner believes that the CPS program in Cascadia is in a state of crisis. The information he has received regarding the fatalities indicates that these children had previous reports made on them, but the social workers had done nothing. Furthermore, he believes that child abuse is on the rise in Cascadia because of substance abuse and that boyfriends are the most common offenders. He believes that there are serious problems with the CPS program in Cascadia County and that the workers there are not substantiating enough of the cases they are investigating. This lack of substantiation is creating a situation where children are being left unprotected. He has asked you and the CPS supervisor to visit the State Office for Services to Children and Families (SCF) web pages and track down the answers to the following questions:

1. How many Child Protective Service reports (CPS) has Cascadia had in each of the past 5 years? (b) How many of these reports were substantiated? (c) In 1998, what percent of CPS reports in Cascadia County were substantiated? (d) How does that figure compare with the state?
2. (a) What is the percent change in the number of Child Protective Service (CPS) reports between 1997 and 1998 for Cascadia? (b) How does that compare with the state?
3. During the period 1992-1998, how does the change in the percent of reports that are substantiated in Cascadia compare to the state's substantiated report percent change?
4. Statewide and in Cascadia County, how many fatalities related to abuse and neglect occurred in 1996, 1997 and 1998? (b) What was the yearly percentage change?
5. Who is the most common perpetrator of substantiated abuse? (b) How often is it the boyfriend?
6. What have been the top 3 types of abuse over the past 5 years statewide and in Cascadia County? (b) Has there been any notable change?
7. Finally, has substance abuse played a frequent role in the Cascadia cases?

In considering responses to these questions, it is important to look at the data critically. The first step is to locate the data that relates to the question and examine it to make sure that it does indeed answer the question. The second step is to determine if

there is additional information related to the topic of the question that should be in the report to the Commissioner.

Question 1: (a) How many Child Protective Service reports (CPS) has Cascadia had in each of the past 5 years? (b) How many of these reports were substantiated? (c) In 1998 what percent of CPS reports in Cascadia County were substantiated? (d) How does that figure compare with the state?



As you get started, it is important to stop and ask what might be the most basic – and most important - questions in the use of data: 'have we found the correct number?'; 'what event or events are most appropriate to answer the question posed?' For example, we will examine data concerning abuse reports and 'substantiated' abuse reports. Which of these is the most appropriate data to look at and report on? It depends on the question that is being asked and requires a good working knowledge of the data, the intent of the question and the definition of the data. The issue of what data to use to respond to a question will resurface again and again.

You and the CPS supervisor look at statistics released by the State Office for Services to Children and Families (SCF) last week. You find data about the number of abuse reports in two tables, Table 1: Abuse Reports – Statewide and Table 2: Abuse Reports –Cascadia. (You can find these tables in Attachments #1 and #2 located at the end of this case study.)

In Table 2: Abuse Reports -- Cascadia, you find the answers to Question 1a and 1b. Looking at the column entitled '# of CPS Reports', you see the number of CPS reports for the past five years and in the column entitled '# of Substantiated Reports' you find the number of substantiated reports. With a pen highlight the answers on Table 2.

The numbers themselves, however, don't tell you much. You would expect that the total number of abuse reports would be greater than the number of substantiated abuse reports and that the state would have more reports than the County. You decide to look at the third part of the question to determine what percent of Cascadia's total reports are substantiated and then compare Cascadia's percent of substantiated reports to the state's percent of substantiated reports.

Recalling your basic math, you remember that a *percent tells you how many out of 100*. The way to calculate percent is to write a fraction whose denominator (the number on the bottom) is the number after the word *of* and whose numerator (the one on the top) is the other number and then multiply by 100. Frequently you are dividing the smaller number by the larger number. In this case, the formula is:

$$\frac{\text{Number of Substantiated reports}}{\text{Total Number of CPS Reports}} * 100$$

Using data from Tables 1 and 2 and the formula above, calculate the percent of substantiated reports for both Cascadia County and statewide in 1998 and compare the results. Note your answers in Answer Box #1 below:

Answers to Question 1:

(a) How many Child Protective Service reports (CPS) has Cascadia had in each of the past 5 years?

1998 ----1105

1997-----1158

1996-----1199

1995-----1224

1994-----1309

Location: Table 2: Abuse Reports – Cascadia, Column titled '# of CPS Reports'

(b) How many of these reports were substantiated?

1998 ----217

1997-----230

1996-----244

1995-----235

1994-----257

Location: Table 2: Abuse Reports – Cascadia, '# of Substantiated Reports'

(c) In 1998 what percent of CPS reports in Cascadia County were substantiated?

Percent of substantiated reports in 1998 – Cascadia County = 19.6%

$$217/1105*100 = 19.6\%$$

Percent of substantiated reports in 1998 – Statewide = 23.7%

$$7461/31,456*100 = 23.7\%$$

(d) How does that figure compare with the state?

In 1998, the % of Cascadia's substantiated reports was lower than the state's % of substantiated reports (19.6% vs. 23.7% respectively)

Question 2: (a) What is the percent change in the number of Child Protective Service (CPS) reports between 1997 and 1998 for Cascadia? (b) How does that compare with the state.

Tables 1 and 2 give you another way to compare the number of abuse reports and the number of substantiated abuse reports for the state and Cascadia. You notice that in both tables there are columns titled Yearly % Change of CPS Reports and Yearly % Change of Substantiated Reports. Using the formula below, you can see how to calculate the percent change in total number of CPS reports and in substantiated reports.



Percents may be used to show a change -- either an increase or decrease-- in an amount, quantity or value. To calculate **PERCENT CHANGE**, use the following formula:

$$\frac{(\text{Most Recent Number} - \text{Previous Number}) * 100}{\text{Previous Number}} = \text{Percent Change}$$

Calculate the percent change in Cascadia using the identified data on Table 2 and the formula:

$$(1105 - 1158)/1158 * 100 = -4.5\%$$

Repeat the activity for the state, locating the data on Table 1 and calculating the percent change.

$$(31,456 - 28,008)/28,008 * 100 = 12.31\%$$

Answers to Question 2

Percent change in Child Protective Service (CPS) reports in the state

$$1997-1998 = 12.31\%$$

$$(31,456 - 28,008)/28,008 * 100 = 12.31\%$$

Percent change in Child Protective Service (CPS) reports in Cascadia

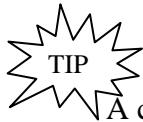
$$1997-1998 = -4.5\%$$

$$(1105 - 1158)/1158 * 100 = -4.5\%$$

How do the percents compare?

From 1997 to 1998 Cascadia's percent change in number of child abuse reports decreased by 4.5%, while the states number of child abuse reports increased by 12.31%.

Using percent change data is one way of comparing child abuse reports and substantiated reports in the state and in Cascadia. Note that Tables 1 and 2 also use a rate per 1000.



Definition of Rate and Importance of Rate.

A critical issue in attempting to compare data is knowing that the data are really comparable. In many instances, simply knowing the number of events, in this case, the number of abuse reports, is not sufficient. For example, we know that there will be more abuse in the state as a whole than in Cascadia – one of its counties. In order to make these raw data comparable, statisticians calculate rates. This means that the number of events that occurred is compared to the population for which that event could have occurred. The figure is then standardized to some number (such as 100, 1,000 or 10,000.) In fact, when you calculated the percentage of CPS reports in Cascadia County that were substantiated, you standardized to the number 100. (Remember that percent tells how many out of 100. You could also have standardized to some other number, for example, the number of abused children in the county compared to the number in the state.)

You and the CPS supervisor have now found or calculated the data that answers the Commissioner's first two questions. Look over the data you have been analyzing, is there any other information that you think would be useful to the Commissioner that should be included in the report? If so, note the information in Answer Box #2a below.

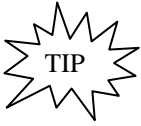
Answer Box #2a

- Based on the data we analyzed, the county has a better track record than the state.
- In 1998, the percent of Cascadia's substantiated reports was lower than the state's percent of substantiated reports (19.6% and 23.7% respectively).
- Between 1997-1998, child abuse reports in Cascadia decreased 4.5%; while the state saw an increase of 12.31% during the same period.
- The rate of substantiated reports per 1000 reports also has been consistently lower in Cascadia than the state rate over the period.

Question 3: During the period 1992 - 1998, how does Cascadia's substantiated report percent change compare to the state's substantiated report percent change?

Some reports that you are using state that even though Cascadia reports were down last year, over the past 6 years (1993-1998) the number of reports has grown. Since 1993, abuse reports in Cascadia have increased 18.18%. Notice how the time period displaying the percent change over many years is for a different time period from the one you need.

In these reports the time period discussed is 1993-1998. You need to use data for the period 1992-1998 for both Cascadia and the state to answer the question, but also for the reason stated in the tip below.



When comparing percentage change across entities, it is important to use the same time period.

Now that you have analyzed the number of CPS reports, you need to calculate the percent change in the number of **substantiated** reports in the state and in Cascadia during the same period so you can answer the Commissioner's question.

Using information from Tables 1 and 2 and the **Percent Change** formula, calculate the percent change for substantiated reports for the state and Cascadia County for the period 1992- 1998. Compare the results. Put your answers to Question 3 in Answer Box #3 below:

Answers to Question 3: During the period 1992 - 1998, how does Cascadia's substantiated report percent change compare to the state's substantiated report percent change?

Percent change in Substantiated reports in Cascadia 1992-1998 = -3.13%

$$\frac{(217-224)}{224} * 100 = -3.13\%$$

224

Percent change in Substantiated reports in the state 1992-1998 = 2.70%

$$\frac{(7461-7265)}{7265} * 100 = 2.70\%$$

7265

How does Cascadia's percent change in substantiated reports compare with the state's?

During the period 1992-1998, Cascadia's number of substantiated reports decreased by 3.1%; the state's substantiated reports have increased by 2.7% during the same period.

Location: Tables 1 and 2

Look over the data you have been analyzing, is there any other information that you think would be useful to the Commissioner that should be included in the report?

Responses should include information such as:

- So far the data shows that the County compares favorably with the state.
- The County is doing better in substantiated reports. From 1992-1998 substantiated Cascadia reports went down 3.13% whereas the state saw an increase of 2.70% over the same period.

Question 4 (a) Statewide and in Cascadia County, how many fatalities related to abuse and neglect occurred in 1996, 1997 and 1998? (b) What was the yearly percentage change?

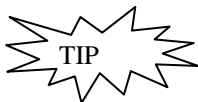
So far, the abuse profile of Cascadia looks better than the state profile. The statistics you have calculated do not even come close to those reported by the Capital Courier. You have double-checked the calculations you have made as well as those you received from SCF and cannot find how the newspaper calculated last year's growth in the number of abuse and neglect cases as 300%.

You decide to move on to answer the child abuse and neglect fatalities question. Complete Table 3 below by calculating percent change in abuse and neglect fatalities for both the State and Cascadia County for the years 1996, 1997 and 1998.

Table 3: Abuse and Neglect Fatalities

Year	State		Cascadia	
	Fatalities	% change	Fatalities	% change
1998	17		4	
1997	34		1	
1996	17		1	

Do the results look strange to you? Why? (See the Tip below.)



Small numbers, as seen in Table 3, can cause large fluctuations in statistics that can render them virtually meaningless. When confronted with a situation like this, report actual numbers.

Look over the data on Abuse and Neglect Fatalities you have been analyzing. Is there any other information that would be useful to the Commissioner that should be included in the report? If yes, record the information in Answer Box #4 below.

Answers to Question 4

(a) Statewide and in Cascadia County, how many fatalities related to abuse and neglect occurred in 1996, 1997 and 1998?

Statewide:

1998-----17

1997-----34

1996-----17

Cascadia:

1998-----4

1997-----1

1996-----1

(b) What was the yearly percentage change?

Statewide:

1998-----50%

1997-----100%

1996-----

Cascadia:

1998-----300%

1997-----0%

1996-----

Location Table 3

Calculations: State change 1996 to 1997: $(34 - 17) / 17 * 100 = 100\%$

Statewide change 1997 to 1998 $(17 - 34) / 34 * 100 = -50\%$

Cascadia change 1996 to 1997 $(1-1)/1 * 100=0\%$

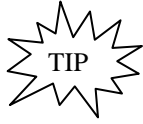
Cascadia change 1997 to 1998 $(4-1)/1 * 100 = 300\%$

Look over the data on Abuse and Neglect Fatalities you have been analyzing. Is there any other information that would be useful to the Commissioner that should be included in the report?

Responses could include information such as:

- You find that statewide child abuse/neglect fatalities dropped by 50% this year after an increase of 100% the year before.
- In Cascadia, child abuse fatalities rose an incredible 300%! Does this mean that Cascadia is doing worse than the state in fatalities? Perhaps the newspaper was quoting this figure describing fatalities instead of the one describing total cases.
- Remember that small numbers cause large fluctuations in statistics.

Question 5. (a) Who is the most common perpetrator of substantiated abuse? (b) How often is it the boyfriend?

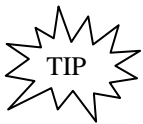


While anecdotes and personal experience often help provide richness and depth to supplement data, too often they can be misleading and do not actually represent the true nature of the phenomenon being studied.

Tables 5 and 6 (appearing as Attachment #3 at the end of the case study) display the numbers of alleged substantiated abuse perpetrators over the past five years for the State and Cascadia. Unfortunately, the tables you received from SCF do not report any additional categories, such as significant other, boyfriend, or girlfriend.

You and the CPS supervisor plan to make a note of this data gap in your report to Commissioner Smith. Looking at Tables 5 and 6, what data do you think would be important for the Commissioner to know? Consider who are the most likely perpetrators of child abuse in the State and in Cascadia? Is it important to determine what percent of perpetrators are mothers or fathers or what percent of perpetrators are family members?

Look at the table below. To determine abuse by parents, you can add the entries for mother and father. Note that statewide the percent of alleged perpetrators who are mothers or fathers is 67.5%; for Cascadia the percent is 67.2%. Likewise, if you want a single statistic for the percent of abuse perpetrated by family members, you can add the percentages for mother, father, sibling, and other relatives



Since all numbers with a % sign represent a rate per 100, the % numbers in the same data set can be added, subtracted, multiplied or divided as you would other numbers. For example, $2 + 5 = 7$ and $2\% + 5\% = 7\%$.

Calculate the percent of abuse perpetrated by family members in Table 7 below. (Remember that you can add the raw numbers or percents of several categories to come up with new categories. Keep in mind that you can do this only if the categories don't overlap. For example if, as in the data reported below, there is only a single alleged perpetrator reported for each case.)

Table 7: Alleged Perpetrator of Substantiated Abuse – 1998

Perpetrator	State (%)	Cascadia (%)
Mother	42.0	41.9
Father	25.5	25.3
Sibling	1.0	.92
Other Relative	17.0	17.0
Total		

Look over the data you have been analyzing on alleged perpetrators, is there any other information that would be useful to the Commissioner that should be included in the report? If so, note in Answer Box #5 below.

Answers to Question 5.

(a) Who is the most common perpetrator of substantiated abuse?

Statewide:

The mother

Location: Table 5 answers this question for the state

Cascadia:

The mother

Location Table 6 answers this question for Cascadia

(b) How often is it the boyfriend?

The information to answer that question is unavailable.

Calculate the percent of abuse perpetrated by family members

Statewide:

85.5%

Cascadia:

85.12%

Location: Table 7

Calculation: To arrive at the percent of perpetrators, who are family members, you add the raw numbers or percents to come up with new categories.

Look over the data you have been analyzing on alleged perpetrators, is there any other information that would be useful to the Commissioner that should be included in the report?

Responses should include information such as:

- Just looking at the numbers, you see that statewide and in Cascadia, parents have been the two most prevalent perpetrators of child abuse.
- Data for the boyfriend is not given.
- You report to Commissioner Smith that statewide in 1998 mothers are the abusers in 42.0% percent of all substantiated reports, while fathers abused 25.5% of the time (a total of 67.5% together).
- In Cascadia in 1998, abuse percentages for parents were similar with mothers at 41.9% and fathers at 25.3% (a total of 67.2% together).
- Total relative abuse, statewide = 85.5%; in Cascadia it's about the same 85.12%.

Question 6 (a) What have been the top 3 types of abuse over the past 5 years statewide and in Cascadia County? (b) Has there been any notable change?

Looking at the data in Tables 8 and 9 (appearing as Attachment #4 at the end of the case study), you and the CPS supervisor review the data to determine the top 3 types of abuse in each of the past 5 years. You notice you are missing data both statewide and for Cascadia in the 1994 and 1995 columns for 'Threat of Harm'. You contact the SCF analyst you had been working with to get the missing pieces and he tells you that the data do not exist; the Division only began reporting 'Threat of Harm' data in 1996.



The major question which needs to be asked in a situation where there are new categories for a variable – in this case, 'threat of harm' added as a 'type of maltreatment' - is it impacting the other categories. Is it a subset? Is it pulling numbers from one or more of the other categories?

In examining the data in Tables 8 and 9, the addition of 'threat of harm' in 1996 seems to have a definite impact on the other categories of maltreatment. It appears to be 'pulling' from the other categories. The totals in the other categories are basically on a downward trend as the 'new' category is increasing.

Decide what answer you would give to the Commissioner's questions on types of abuse and note your responses in Answer Box #6 below.

Answers to Question 6

(a) What have been the top 3 types of abuse over the past 5 years statewide and in Cascadia County?

Statewide:

1998---Threat of Harm (1), Neglect (2), Physical Abuse (3)

1997---Threat of Harm (1), Neglect (2), Physical Abuse (3)

1996---Threat of Harm (1), Neglect (2), Physical Abuse (3)

1995---Neglect (1), Physical Abuse (2), Sexual abuse and Exploitation (3)

1994---Neglect (1), Physical Abuse (2), Sexual abuse and Exploitation (3)

Location: Table 8

Cascadia County:

1998---Threat of Harm (1), Neglect (2), Physical Abuse (3)

1997---Threat of Harm (1), Neglect (2), Physical Abuse (3)

1996---Threat of Harm (1), Neglect (2), Physical Abuse (3)

1995---Sexual abuse and Exploitation (1), Physical Abuse (2), Neglect (3)

1994---Physical Abuse (1), Sexual abuse and Exploitation (2), Neglect (3)

Location: Table 9

b) Has there been any notable change?

Your analysis shows that in Cascadia, the top three types of abuse in 1994 and 1995 are, in order, physical abuse, neglect, and sexual abuse. Interestingly, statewide neglect and sexual abuse are reversed. Yet, in both cases, once 'Threat of Harm' was added in 1996, it has remained the most common type of abuse in Cascadia and statewide. Looking at the data in Tables 8 and 9, it appears that the addition of the category 'Threat of Harm' in 1996, is pulling from the other categories, causing them to decrease as the 'Threat of Harm' category increases.

Question 7: Finally, has substance abuse played a frequent role in the Cascadia cases?

Your interview with the SCF analyst revealed that the Commissioner's last question regarding the role of substance abuse cannot be answered with SCF's computerized data.

The data SCF has on substance abuse are from a statewide study that cannot be reported by county.

Decide what answer you would give to the Commissioner's questions on substance abuse and note your responses in Answer Box #7 below.

Answer to Question 7: Has substance abuse played a frequent role in the Cascadia cases?
There is no way to answer this question with SCF's computerized data since the data SCF has on substance abuse are from a statewide study that cannot be reported by county.

You and the CPS supervisor have now gathered and analyzed the data needed to address the Commissioner's questions. Quickly go back through the answers you have recorded in each answer box to make sure that the data you looked at indeed answer the questions asked and, where you think appropriate, that you have provided additional data, information and explanations in response to the question. Note any changes in the corresponding answer box.

Attachment 1

Table 1: Abuse Reports - Statewide

Year	# of CPS Reports	Yearly % Change of CPS Reports	# of Substantiated Reports	Yearly % Change of Substantiated Reports	Rate: Substantiated Reports Per 1000 Reports
1998	31,456	12.31%	7,461	2.74%	237
1997	28,008	14.25%	7,262	12.80%	259
1996	24,515	-8.41%	6,438	5.44%	263
1995	26,765	1.24%	6,106	-2.76%	228
1994	26,436	4.79%	6,279	-10.49%	238
1993	25,227	15.60%	7,015	-3.44%	267
1992	21,822		7,265		333

Attachment 2

Table 2: Abuse Reports - Cascadia

Year	# of CPS Reports	Yearly % Change of CPS Reports	# of Substantiated Reports	Yearly % Change of Substantiated Reports	Rate: Substantiated Reports Per 1000 Reports
1998	1105	-4.58%	217	-5.65%	196.4
1997	1158	-3.42%	230	-5.74%	198.6
1996	1199	-2.04%	244	3.83%	203.5
1995	1224	-6.49%	235	-8.56%	192.0
1994	1309	40.00%	257	47.70%	196.3
1993	935	-6.69%	174	-22.32%	186.1
1992	1002		224		223.6

Attachment 3

Table 5: Alleged Perpetrator of Substantiated Abuse, State

Alleged Perpetrator	1994	1995	1996	1997	1998
Mother	2637	2626	2704	3086	3134
Father	1884	1710	1738	1906	1903
Sibling	63	61	64	73	75
Other Relative	1067	916	1030	1180	1268
Friend	188	244	451	363	522
Neighbor	63	183	129	73	75
Caregiver	251	214	129	218	149
Other	126	153	193	363	336
Total	6279	6106	6438	7262	7461

Table 6: Alleged Perpetrator of Substantiated Abuse, Cascadia County

Alleged Perpetrator	1994	1995	1996	1997	1998
Mother	108	101	102	98	91
Father	77	66	66	60	55
Sibling	3	2	2	2	2
Other Relative	44	35	39	37	37
Friend	8	9	17	12	15
Neighbor	3	7	5	2	2
Caregiver	10	8	5	7	4
Other	5	6	7	12	10
Total	257	235	244	230	217

Attachment 4

Table 8: Type of Maltreatment, Statewide

Type of Maltreatment	1994	1995	1996	1997	1998
Physical Abuse	1964	1727	1893	1788	1620
Neglect	3184	3178	2940	2842	2525
Mental Injury	674	816	1003	617	758
Fatality	19	15	17	34	17
Abandonment	44	104	52	58	60
Sexual Abuse & Exploitation	1791	1587	1396	1476	1434
Subtotal	7676	7427	8301	6815	6414
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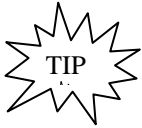
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Total	264	239	309	290	273

NOTE: END OF TRAINER'S VERSION OF CASE STUDY: ABUSE ON THE INCREASE IN CASCADIA COUNTY

Tips, Formulas and Definitions of Terms

Question 1



As you get started, it is important to stop and ask what might be the most basic - and most important - questions in the use of data: 'have we found the correct number?' and 'what event or events are most appropriate to answer the question posed?' For example, we will examine data concerning abuse reports and 'founded' abuse reports. Which of these is the most appropriate data to look at and report on? It depends on the question that is being asked and requires a good working knowledge of the data, the intent of the question and the definition of the data. The issue of what data to use to respond to a question will resurface again and again.



A percent tells you how many out of 100. The way to calculate percent is to write a fraction whose denominator (the number on the bottom) is the number after the word *of* and whose numerator (the one on the top) is the other number and then multiply by 100. Frequently you are dividing the smaller number by the larger number.

A comparison examines two or more items to establish similarities and dissimilarities.

Question 2



Percents may be used to show a change -- either an increase or decrease -- in an amount, quantity or value. To calculate **PERCENT CHANGE**, use the following formula:

$$\frac{(\text{Most Recent Number} - \text{Previous Number})}{\text{Previous Number}} * 100 = \text{Percent Change}$$

Previous Number



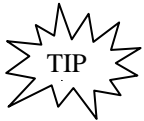
Rate tells you frequency of occurrence. A critical issue in attempting to compare data is knowing that the data is really comparable. In many instances, simply knowing the number of events is not sufficient. For example, we know that there will be more abuse in the State as a whole than in Cascadia -- one of its Counties. In order to make the raw data comparable, statisticians calculate rates. *Rate means that the number of events that occurred is compared to the population for which that event could have occurred.* The figure is then standardized to some number (such as 100, 1,000 or 10,000.) In fact, when you calculate the percentage, you standardize to the number 100. (Remember that percent tells how

many out of 100. You also could have standardized to some other number, for example, the number of abused children in the county compared to the number in the state.)

To calculate **RATE PER 1000**, use the following formula:

$$\% * 10 = \text{Rate per 1000}$$

Question 3



When comparing percentage change across entities, it is important to use the same time period.

Question 4



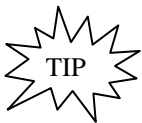
Small numbers can cause large fluctuations in statistics that can render them virtually meaningless. When confronted with a situation like this, report actual numbers.

Question 5



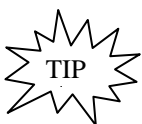
While anecdotes and personal experience often help provide richness and depth to supplement data, too often they can be misleading and do not actually represent the true nature of the phenomenon being studied.

A trend is a general line of direction.



Since all numbers with a % sign represent a rate per 100, the % numbers within a single data set can be added, subtracted, multiplied or divided as you would other numbers. For example, 2 people + 5 people = 7 people and 2% of people + 5% of people = 7% of people.

Question 6



The major questions which need to be asked in a situation where there are new categories for a variable are... 'what is the impact on other categories?' Is it a subset? Is it pulling numbers from one or more of the other categories?

Table 1: Abuse Reports - Statewide

Year	# of CPS Reports	Yearly % Change of CPS Reports	# of Substantiated Reports	Yearly % Change of Substantiated Reports	Rate of Substantiated Reports Per 1000
1998	31,456	12.31%	7,461	2.74%	237
1997	28,008	14.25%	7,262	12.80%	259
1996	24,515	-8.41%	6,438	5.44%	263
1995	26,765	1.24%	6,106	-2.76%	228
1994	26,436	4.79%	6,279	-10.49%	238
1993	25,227	15.60%	7,015	-3.44%	267
1992	21,822		7,265		333

Table 2: Abuse Reports - Cascadia

Year	# of CPS Reports	Yearly % Change of CPS Reports	# of Substantiated Reports	Yearly % Change of Substantiated Reports	Rate: Substantiated Reports Per 1000 Reports
1998	1105	-4.58%	217	-5.65%	196.4
1997	1158	-3.42%	230	-5.74%	198.6
1996	1199	-2.04%	244	3.83%	203.5
1995	1224	-6.49%	235	-8.56%	192.0
1994	1309	40.00%	257	47.70%	196.3
1993	935	-6.69%	174	-22.32%	186.1
1992	1002		224		223.6

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1992	1002		224		223.6

Formula:
$$\frac{(\text{Most Recent Number} - \text{Previous Number}) * 100}{\text{Previous Number}}$$

Table 3: Abuse and Neglect Fatalities

Year	State		Cascadia	
	Fatalities	% change	Fatalities	% change
1998	17	-50.00%	4	300.00%
1997	34	100.00%	1	0.00%
1996	17		1	

Formula: $\frac{(\text{Most recent number} - \text{previous number})}{\text{Previous number}} * 100$

Calculations: State change 1996 to 1997: $(34 - 17) / 17 * 100 = 100\%$
 Statewide change 1997 to 1998 $(17 - 34) / 34 * 100 = -50\%$

Cascadia change 1996 to 1997 $(1-1)/1 * 100=0\%$
 Cascadia change 1997 to 1998 $(4-1)/1 * 100 = 300\%$

Table 5: Alleged Perpetrator of Substantiated Abuse, State

Alleged Perpetrator	1994	1995	1996	1997	1998
Mother	2637	2626	2704	3086	3134
Father	1884	1710	1738	1906	1903
Sibling	63	61	64	73	75
Other Relative	1067	916	1030	1180	1268
Friend	188	244	451	363	522
Neighbor	63	183	129	73	75
Caregiver	251	214	129	218	149
Other	126	153	193	363	336
Total	6279	6106	6438	7262	7461

Table 6: Alleged Perpetrator of Substantiated Abuse, Cascadia County

Alleged Perpetrator	1994	1995	1996	1997	1998
Mother	108	101	102	98	91
Father	77	66	66	60	55
Sibling	3	2	2	2	2
Other Relative	44	35	39	37	37
Friend	8	9	17	12	15
Neighbor	3	7	5	2	2
Caregiver	10	8	5	7	4
Other	5	6	7	12	10
Total	257	235	244	230	217

Table 7: Alleged Perpetrator of Substantiated Abuse – 1998

Perpetrator	State (%)	Cascadia (%)
Mother	42.0	41.9
Father	25.5	25.3
Sibling	1.0	.92
Other Relative	17.0	17.0
Total	85.5	85.12

Table 8: Type of Maltreatment, Statewide

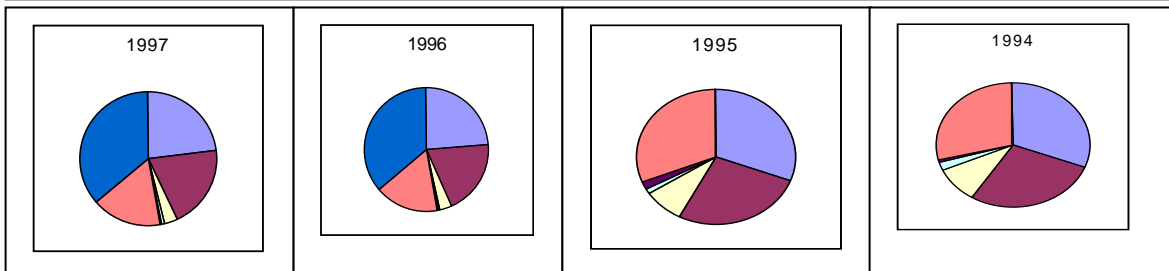
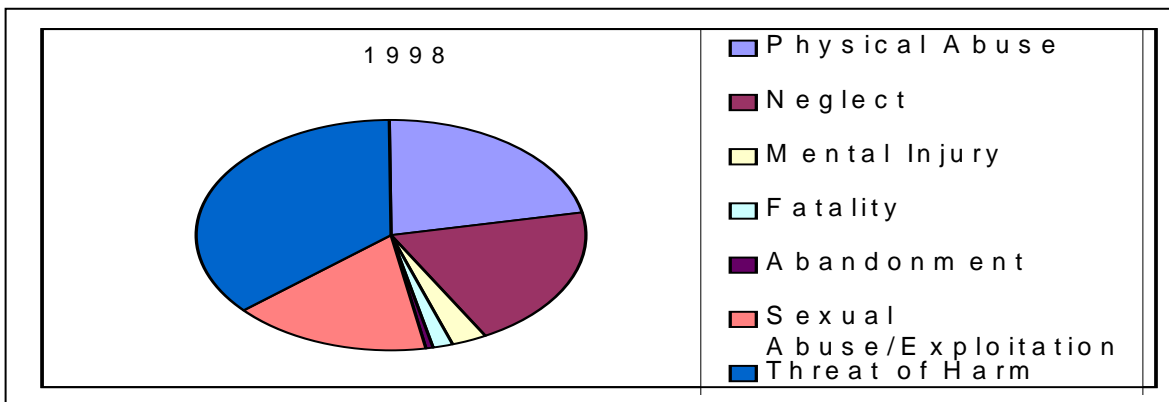
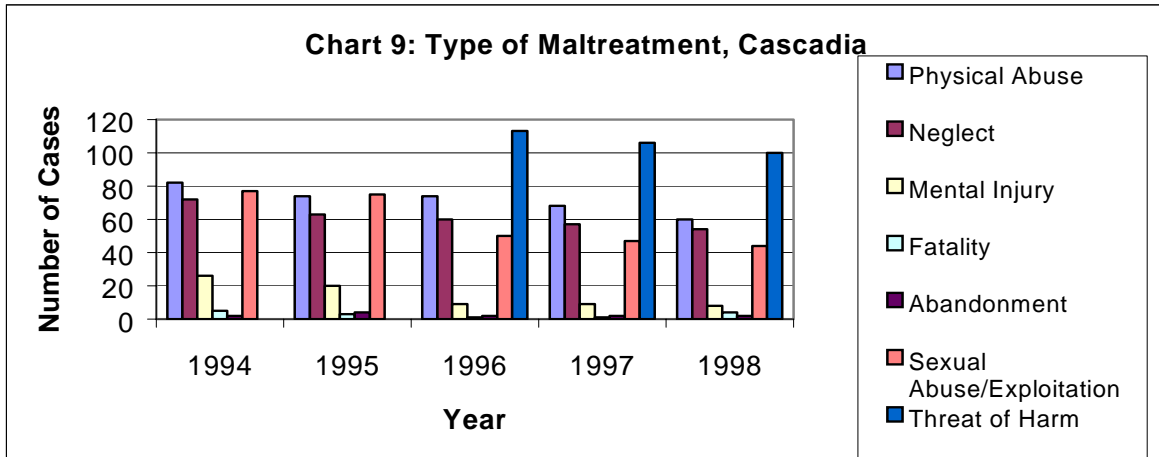
Type of Maltreatment	1994	1995	1996	1997	1998
Physical Abuse	1964(2)	1727(2)	1893(3)	1788(3)	1620(3)
Neglect	3184(1)	3178(1)	2940(2)	2842(2)	2525(2)
Mental Injury	674	816	1003	617	758
Fatality	19	15	17	34	17
Abandonment	44	104	52	58	60
Sexual Abuse & Exploitation	1791(3)	1587(3)	1396	1476	1434
Subtotal	7676	7427	8301	6815	6414
Threat of Harm	--	--	4022(1)	5405(1)	6344(1)
Total	7676	7427	12323	12220	12758

Table 9: Type of Maltreatment, Cascadia County

Type of Maltreatment	1994	1995	1996	1997	1998
Physical Abuse	82(1)	74(2)	74(2)	68(2)	60(2)
Neglect	72(3)	63(3)	60(3)	57(3)	54(3)
Mental Injury	26	20	9	9	8
Fatality	5	3	1	1	4
Abandonment	2	4	2	2	2
Sexual Abuse & Exploitation	77(2)	75(1)	50	47	44
Subtotal	264	239	196	184	173
Threat of Harm	--	--	113(1)	106(1)	100(1)
Total	264	239	309	290	273

Table 9: Type of Maltreatment, Cascadia County

Type of Maltreatment	1994	1995	1996	1997	1998
Physical Abuse	82	74	74	68	60
Neglect	72	63	60	57	54
Mental Injury	26	20	9	9	8
Fatality	5	3	1	1	4
Abandonment	2	4	2	2	2
Sexual Abuse & Exploitation	77	75	50	47	44
Subtotal	264	239	196	184	173
Threat of Harm	--	--	113	106	100
Total	264	239	309	290	273



TO: Commissioner Smith
FROM: Jane Jones, Program Administrator, Cascadia
Stan Leon, CPS Supervisor, Cascadia

This memo responds to your questions concerning a perceived rise in child abuse in Cascadia County, especially in cases where the mother's boyfriend is the perpetrator and where substance abuse is a factor. It also addresses the comment that Cascadia County had a 300% increase in the number of abuse and neglect cases last year.

We found no data to substantiate a 300% increase in abuse and neglect cases. There was a 300% increase in fatalities in Cascadia, but that large percent increase was caused by an large increase in a small number of fatalities (from 1 to 4 between 1997 and 1998) which, in our opinion, does not indicate a trend.

There is no data to support the statement that substance abuse is a factor in child abuse cases in Cascadia. The only data available is statewide, not county specific.

Finally the research shows that both statewide and in Cascadia County mothers, not boyfriends, are the perpetrators listed most often in substantiated child abuse reports. Data on abuse by the mother's boyfriend isn't collected.

More specifically, the research shows the following.

- Overall Cascadia has had a steady decrease in child abuse since 1992, and the County consistently has a better track record than the state.

Cascadia has had a steady decrease in the number of CPS reports during the past five years from 1309 reports in 1994 to 1105 in 1998. The actual figures are: 1994=1309 reports, 1995=1224; 1996=1199; 1997=1158 and 1998=1105.

The number of substantiated reports decreased in each of the past five years except in 1996. The figures are: 1994=257; 1995=235; 1996=244; 1997=230 and 1998=217.

Growth in CPS reports since 1992 has been slower in Cascadia than in the state, at 10.28% and 4.15%, respectively.

When compared with the state, Cascadia County had a lower percent of substantiated reports in 1998 (19.6%) compared with the state's 23.7%.

Between 1997-1998 the percent change in Child Protective Service (CPS) reports decreased 4.5% compared to an increase of 12.31% for the state.

- From 1992-1998 substantiated reports in Cascadia went down 3.13% whereas the state saw an increase of 2.70% over the same period.
- The fatalities in the state were 17 in 1996, 34 in 1997 and 17 in 1998. In Cascadia in 1996 there was one fatality; in 1997 there was one and in 1998 there were four. The yearly percentage change in the state was 100% between 1996 and 1997 and between 1997 and 1998 the percent change was -50%. In Cascadia between 1996 and 1997 the percent change was 0% and between 1997 and 1998 it was 300%. Since the number of fatalities is so small, it causes large fluctuations in the percent change figures.
- Statewide and in Cascadia, parents are the two most likely to be perpetrators in child abuse cases.

Statewide in 1998 mothers are the abusers in 42.0% of all substantiated reports, while fathers abused in 25.5% of substantiated cases (A total of 67.5% together).

In Cascadia in 1998 , abuse percentages for parents were similar with mothers abusing in 41.9% of cases and fathers in 23.3% (a total of 67.2% together).

Total relative abuse, statewide = 86%; in Cascadia it's about the same at 85%.

The top three type of abuse in Cascadia and the state in 1994 and 1995 are physical abuse, neglect, and sexual abuse and exploitation. In 1996 Threat of Harm was added as a category and in both the state and Cascadia it became the number one type of abuse, followed by physical abuse and neglect .

In summary, the data available shows that child abuse in Cascadia is **decreasing** and **compares** favorably with the state, based on measures that include total number of CPS reports and substantiated reports. The most common perpetrator of abuse is most likely to be the mother or father or at least a relative of the victim.

To locate the missing data that has been requested (how often boyfriends are the perpetrators and how often substance abuse plays a role in abuse cases in Cascadia), the Commissioner would have to collect additional data, perhaps by reading cases or doing a survey.

The information in this report was obtained from the State Office for Services to Children and Families (SCF) web pages.

If we can be of any further assistance, please let us know.

