MONTANA

POLICY REVIEW

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An Introduction to Montana's Public Health System

A biannual analysis of public policy issues confronting Montana's communities and those who serve them.

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Introduction

This issue of Montana Policy Review is a primer on Montana's public health system. The core functions of a public health system - assessment, policy development and assurance - sound like bland and bureaucratic functions, but by performing these functions, our public health system has achieved enormous accomplishments. An Institute of Medicine study states that, "Control of epidemic diseases, safe food and water, and maternal and child health services are only a few of the public health achievements that have prevented countless deaths and improved the quality of American life. But the public has come to take the success of public health for granted. Health officials have difficulty communicating a sense of urgency about the need to maintain current preventive efforts and to sustain the capacity to meet future threats to the public's health."[1]

The Institute of Medicine report was completed in 1988, and did not contemplate the urgency resulting from the events of September 11, 2001. The importance of our public health system has suddenly become a top national priority. The federal government has recently provided significant funding to all states to build and improve the infrastructure of our public health systems nationwide, with the objective of protecting our nation from potential bioterrorist threats. The Institute of Medicine study defines the mission of public health as fulfilling society's interest in assuring conditions in which people can be healthy. Yet, a January 2002 national survey of county public health directors found that only 9.7 percent of all responding counties stated that they were prepared to respond effectively to a bioterrorism crisis in their community. In response to the question on preparedness, 21 percent of all responding counties say that they do not consider themselves prepared to respond to a bioterrorism crisis. The highest level of no preparedness, nearly 56 percent, was in those counties with populations below 10,000. Fewer than 5 percent of counties report being prepared to respond to a chemical warfare crisis. Forty four percent of counties with populations below 25,000 report that there are no policies and procedures in place to enforce a quarantine and nearly 52 percent of counties with populations below 10,000 report no policies and procedures are in place.[2]

The state of Montana is blessed with hundreds of public health personnel who have quietly and efficiently been working to assure the health of Montana's citizens ever since statehood. In fact, the state and local health officials have been working on a strategic plan for improvement of the public health system as well as an action plan for implementing those improvements since the Public Health Improvement Task Force began its work in 1995.

[1] The Future of Public Health. Committee for the Study of the Future of Public Health, Division of Health Care Services, Institute of Medicine. National Academy Press, Washington, D.C. 1988.

[2] Counties Secure America: A Survey of County Public Health Needs and Preparedness, National Association of Counties, Washington, D.C. January 2002.

The groundwork has been laid to continue to refine the infrastructure of the state's public health system so that our citizens will be protected from internal and external health threats. Whether or not we will suffer a bioterrorist threat, other issues require an effective public health system; antibiotic resistant diseases, accessibility to health care, environmental problems and many other issues will continue to challenge the system.

The purpose of this issue of Montana Policy Review is to provide to citizens and policymakers basic information about the Montana public health system, its achievements, and its future challenges. The articles describe the roles and functions of each level of our health system from different perspectives. They illustrate how federal, state and local public health personnel work together to protect public health. Ultimately, as always, the actual implementation of health system services will be provided by local governments.

We acknowledge a major omission from this "primer" on Montana's public health system. There are no articles specific to Indian Health Services nor Tribal Health Departments. Because of time and space limitations, we were not able to include major pieces on these important facets of our health system, but they will be covered in a subsequent issue of Montana Policy Review next spring.

Jane Jelinski

Jane Jelinski, Director
Local Government Center

This publication was funded by the Office of Public Health System Improvement, Montana Department of Public Health and Human Services.

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Core Functions*	10 Essential Public Health Services**
Assessment – Assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities	Monitor health status to identify community health problems
	Diagnose and investigate health problems and health hazards in the community
Policy Development - Formulating public policies, in collaboration with community and government leaders, designed to solve identified health problems and priorities	Inform, educate, and empower people about health issues
	Mobilize community partnerships to identify and solve health problems
	Develop policies and plans that support individual and community health efforts
Assurance - Assuring that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services, and evaluation of the effectiveness of that care	Enforce laws and regulations that protect health and ensure safety
	Link people to needed personal health services and assure the provision of health care when otherwise unavailable
	Assure a competent public health and personal health care workforce
	Evaluate effectiveness, accessibility, and quality of personal and population-based health services
	Research for new insights and innovative solutions to health problems
	Monitor health status to identify community health problems

**The Future of Public Health.* Institute of Medicine, Washington, DC: National Academy Press, 1988.
** *Public Health in America.* Public Health Functions Steering Committee. Adopted Fall 1994.

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A Day in the Life of Public Health

By Julie Burk, MPA
Lewis and Clark County Health Educator

Ever since September 11, we've heard a lot about the public health system. But, to many people, it still remains a vague term. What is the public health system, and why is it important? Following is a story that illustrates how it affects people's daily lives – even if they've never set foot inside a local health department.

After taking a shower in the morning, you turn on the tap to brush your teeth, not giving a thought as to whether the water is safe to drink. You just assume it is. But did you know that in the early 1900s raw sewage mixed with drinking water, causing waterborne diseases?

You hear your five-year-old son laughing in the other room as your wife gets him ready to go to daycare. Public health activities ensured that he was a healthy baby: your wife had access to prenatal care, one of the most important factors in preventing low birth weight. Then, after your son was born, he received a series of essential immunizations to ward off diseases that might have killed him in previous generations.

As you make breakfast for your son, you remember the conversation you had with the nutritionist at the local WIC office recently about the importance of a healthy diet. You pour a glass of milk, confident that it is safe because public health sanitarians check dairies regularly, test lab samples, and monitor refrigeration levels of dairy products.

It's time to leave for work and take your son to daycare. Once you get in the car, you make sure that you and your son are wearing seatbelts. Thanks to public health educational messages that have greatly reduced automobile-related deaths, wearing a seatbelt is now a habit.

The daycare director welcomes your son and takes him into a room full of children. She and her staff have been trained in the public health measures necessary to run a safe, healthy program. Because children are particularly susceptible to infectious diseases, it is important for her to make sure proper hygiene techniques are used. If there is an outbreak,

Daycare staff have been trained in the public health measures necessary to run a safe, healthy program.

the local health department works closely with the state health department, local hospitals, and health care providers to contain the outbreak. But unless an outbreak is large and public notification is necessary, the public isn't even aware of it.

Most of the time restaurant food is safe because local health department sanitarians inspect restaurants regularly, making sure they adhere to proper food handling techniques and food storage temperatures.

Heading to work, you stop by a restaurant and get a sandwich for lunch. You don't worry about whether you'll get sick from eating it. You assume it's OK. But do you know why? Most of the time, restaurant food is safe because local health department sanitarians inspect restaurants regularly, making sure they adhere to proper food handling techniques and food storage temperatures.

During the lunch hour, you stop by your mom's house and pay her a visit. Ever since your dad died, her health has been deteriorating. Yet, thanks to the health department's case management program, she can still live by herself in her own home. She might have to go to a nursing home eventually, but for now, she receives home-delivered meals, has her house cleaned regularly, and has the medical alert/lifeline system in place for emergencies. She was able to sign up for these services because a registered nurse and social worker with the case management program met with her to assess her home care needs.

After work, you pick up your son and take him swimming in a public pool. Once again, you assume that he'll be safe. Once again, you're right. Sanitarians also inspect pools for the correct amount of chlorine, making sure that diseases don't spread.

On the way home, your normal route has been closed to traffic because of a derailed train that spilled gasoline. Hazardous materials come in the form of explosives, flammable, and combustible substances, and are most often released as a result of transportation accidents or chemical accidents in factories. They also have the potential to threaten the environment and the public's health. Unbeknownst to you, however, your community, like every community in the country, is required by federal law to have a Local Emergency Planning Committee (LEPC), which is responsible for developing an emergency plan for preparing and for responding to chemical emergencies in a particular community. As a result, you can continue your journey home, knowing that local officials, including those from the health department, are doing their best to protect you and the environment.

Home again, after dinner, you and your family take a walk, knowing that regular exercise promotes good health. Once inside, you and your wife watch the local late-night news on TV. There's a story about how to live safely around lead. Since your home is 70 years old, the exterior paint contains lead, something that could cause developmental and learning problems for your son. But you don't become overly concerned because the public health official being interviewed gives some tips on what you can do to minimize the danger to your son. You'll check the condition of your paint in the next few days.

With that, your day winds down. As you lie in bed reflecting on the day, you realize that the public health system affects almost every aspect of your daily life.

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Public Health 101: What it Is, What it Does

By Jane Smilie, MPH, Director, Office of Public Health System Improvement, Montana Department of Public Health & Human Services

A number of public opinion polls have indicated many people do not understand what public health is and what it does.... However, a 1999 Harris poll indicated that respondents considered key public health services to be very important, whether or not they were thought of as "public health."

A number of public opinion polls have indicated many people do not understand what public health is and what it does. A common misconception is that public health is primarily a program to provide health care services to indigent persons. However, a 1999 Harris poll indicated that respondents considered key public health services to be very important, whether or not they were thought of as "public health."[1] The table below shows the proportions of respondents to this nationwide poll that rated key public health services as "very important."

Table 1. 1999 Harris Poll Results: Percent of respondents rating key public health services as "very important"

Public Health Service	Respondents rating service as "very important" (n=1,009)
The prevention of the spread of infectious disease like tuberculosis, measles, flu and AIDS	91%
Conducting medical research into the causes and prevention of disease	88%
Immunization to prevent disease	87%
Making sure people are not exposed to unsafe water supply, dangerous air pollution or toxic waste	86%
Working to reduce death and injuries from violence	85%
Encouraging people to live healthier lifestyles, to eat well, and not to smoke	68%
Working to reduce death and injuries from accidents at work, in the home and on the streets	66%

With the mission of the public health system to assure conditions in which people can be healthy, public health works at the community level to:

- Prevent epidemics and the spread of disease
- Protect against environmental hazards
- Prevent injuries
- Promote and encourage healthy behaviors
- Respond to disasters and assist communities in recovery
- Assure the quality and accessibility of health services.[2,3]

Having roots in hygiene and sanitation, public health's focus has always been at a population, rather than an individual level. While medicine seeks to diagnose an individual's condition, develop an individual treatment plan and treat the individual, public health aims to diagnose health problems at a community level, engage in collective decision-making about appropriate ways to reduce problems, and then to ensure the necessary programs and services are in place.[4] In reality, however, medicine and public health work hand-in-hand, and the efforts of one are often indistinguishable from the other.

In addition to taking a broad community approach to disease prevention and health promotion, public health is based on a broad definition of health and the factors that influence health. It attempts to address traditional factors, such as biology and environment, but also social factors, individual behaviors and health care services. A wide variety of public and private organizations and individuals jointly address the mission of public health, however, governmental public health agencies at the local, state and federal levels are at the core of the system and are charged with assuring the mission is addressed. (See graphic "Public Health System Partners.")

Montana's Public Health System

The major governmental public health agencies in Montana include the Department of Public Health and Human Services, Department of Environmental Quality, Billings Area Indian Health Service, county and city-county health departments, tribal health departments and Indian Health Service Units. At the state level, the Health Policy and Services Division (HPSD) of the Montana Department of Public Health and Human Services administers the bulk of the state's public health programs. For the most part, the HPSD contracts with county and city-county public health departments to deliver these programs at the local level. The HPSD includes public health programs addressing communicable and chronic disease prevention and control, food and consumer safety, laboratory services, family, maternal and child health, injury prevention, emergency preparedness and response, and emergency medical services.

Resources, capacities and staffing vary among state level public health programs, driven primarily by available funding and federal guidelines. An analysis conducted in 2001 indicated the HPSD budget included approximately $36 million for public health services.[5] This amount was comprised of $2.7 million in state general funds (≈8%), $2.9 million in state special revenue (generated through fees for services, ≈8%) and over $30 million in federal funds (≈84%). The same analysis indicated approximately 112 FTEs carried out programmatic public health work in the HPSD.

Similarly, resources, staffing and capacities for population-based public health services vary from county to county. For example, some smaller counties employ less than one full-time public health worker, while larger ones may employ more than 60. Approximately $21 million of the $36 million for public health services in the HPSD budget supported local programs and initiatives in 2001.[6] In addition to the state and federal funds provided through the HPSD, local public health funding includes variable levels of county funding and occasional grants from federal and private sources.

Opportunities to Improve Montana's Public Health System

Major national public health organizations have reached consensus that there are a set of core functions and essential public health services that constitute the "standard in the industry" (see "Core Functions" graphic) A 2001 study of Montana's public health system indicated that:

- about 27% of local public health departments were considered to be effectively addressing the core functions of public health.[7]
- more than 40% of Montana's local health departments reported they were meeting half or fewer of their communities' needs for eight of ten essential services.
- 50% reported they were meeting half or fewer of their communities' needs related to ten essential services overall.

Table 2. 2001 Assessment of Montana Local Health Departments (LHDs): Community needs met for essential public health services

Essential Public Health Service	LHDs reporting half or fewer of communities' need met for the service (n=54)
Monitor health status to identify community health problems	59%
Diagnose and investigate health problems and health hazards in the community	44%
Inform, educate, and empower people about health issues	56%
Mobilize community partnerships to identify and solve health problems	41%
Develop policies and plans that support individual and community health efforts	72%
Enforce laws and regulations that protect health and ensure safety	28%
Link people to needed personal health services and assure the provision of health care when otherwise unavailable	41%
Assure a competent public health and personal health care workforce	26%
Evaluate effectiveness, accessibility, and quality of personal and population-based health services	69%
Research for new insights and innovative solutions to health problems	63%
10 essential services	50%

While a majority reported that they were meeting half or more of their communities' needs for programs and services mandated by regulation or law, one quarter indicated that in the last three years, there has been at least one instance in which the local health department failed to implement such a program or service.[8] Further, about 50% reported that resources are not deployed to address local priorities identified through an actual assessment of citizens' health needs.

Clearly, there are opportunities to improve the state's public health system. Citizens do not have access to the same level and array of public health services across Montana. Yet, all corners of the state experience significant public health issues. To name a few:

- Continued vigilance is necessary to control infectious diseases and ensure communities are prepared for new and emerging public health threats including bioterrorism.
- The prevalence of obesity, overweight and insufficient physical activity is rising, bringing increases in diabetes, heart disease and other chronic diseases and disabilities.
- Areas of the state with significant population growth are experiencing ground water contamination, due to the density of on-site waste water systems.
- American Indians suffer health disparities, including disproportionately high rates of accidents, diabetes and heart disease.
- Montana is experiencing a mental health crisis and its suicide rates are among the highest in the nation.
- Toxic substance releases have occurred at sites where mining, smelting, wood-treating, railroad fueling and degreasing, petroleum refining, land filling and chemical manufacturing/storage activities have been conducted. Contamination of air, surface water, ground water, sediments and soils at these sites can pose human health problems.
- The state has one of the highest proportions of uninsured persons in the country.

Public Health System Improvement Efforts Underway

Aimed at strengthening Montana's public health system and assuring every citizen has access to a consistent set of services, state and local partners are implementing *Montana's Strategic Plan for Public Health System Improvement.*[9] Activities will include workforce education and training, developing public health system standards, better defining the roles and responsibilities of public health agencies, and raising awareness of the importance of public health to every citizen. To maximize use of limited resources, Montana's public health system improvement activities are being closely coordinated with the state's public health preparedness and response activities. While the primary goal of the preparedness and response program is to prepare the public health system to respond to acts of bioterrorism and other public health threats and emergencies, the program will also enhance the public health system to serve the state efficiently and effectively in normal times.

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[1] www.harrisinteractive.com/harris_poll/index.asp?PID=21 and Turnock, BJ. *Public Health: What it is and How it Works.* Gaithersburg, MD:, Aspen Publishers, Inc., 2001, p. 21.

[2] Institute of Medicine. *The Future of Public Health.* Washington, DC: National Academy Press, 1988, p. 7.

[3] Public Health Functions Steering Committee. "Public Health in America." Adopted Fall 1994.

[4] Turnock, BJ. *Public Health: What it is and How it Works.* Gaithersburg, MD:, Aspen Publishers, Inc., 2001, p. 9.

[5]. Montana Department of Public Health and Human Services. "Restructuring State Level Public Health Programs." Draft April 20, 2001.

[6] Montana Department of Public Health and Human Services. "Restructuring State Level Public Health Programs." Draft April 20, 2001.

[7] Smilie, JG. "An Assessment of Montana Local Health Departments' Performance of the Core Functions and Essential Services of Public Health." University of Washington Master's Thesis, 2001, pp. 22, 26.

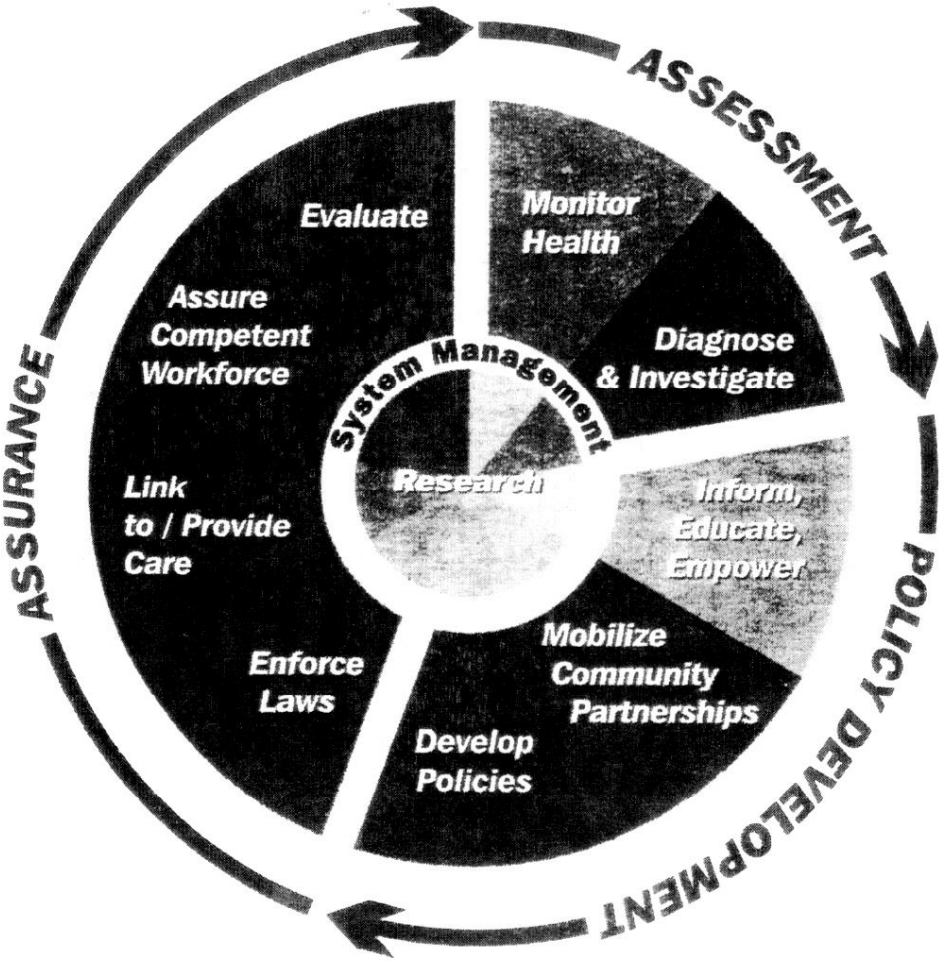
[8] Smilie, JG. "An Assessment of Montana Local Health Departments' Performance of the Core Functions and Essential Services of Public Health." University of Washington Master's Thesis, 2001, pp.16, 26.

[9]. Montana Department of Public Health and Human Services. *A Strategic Plan for Public Health System Improvement in Montana.* Helena, MT: DPHHS, 2000.

Public Health System Partners

Adapted from Alaska Public Health Improvement Process, Alaska Department of Health and Social Services

Core functions and essential services of public health



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Bioterrorism and Public Health Emergencies

By Jane Smilie, MPH, Director, Office of Public Health System Improvement, Montana Department of Public Health & Human Services

In response to events that occurred on September 11, 2001 and the subsequent anthrax attacks, this spring Congress provided funding to strengthen public health systems in every state.... The primary goal of Montana's public health preparedness and response program is to prepare the statewide public health system to respond to acts of bioterrorism and other public health threats and emergencies.

Montana has been involved in bioterrorism preparedness activities for the past three years in collaboration with the states of North Dakota, South Dakota, Wyoming and Idaho. Limited federal funding was provided primarily to enhance epidemiology and surveillance activities and public health communications technology and to begin public health emergency preparedness and response planning. In response to events that occurred on September 11, 2001 and the subsequent anthrax attacks, this spring Congress provided funding to strengthen public health systems in every state. Montana has received $7,008,529 for this purpose through the Centers for Disease Control and Prevention (CDC). This is the first appropriation in what is anticipated to be continued funding in the next federal budget cycle.

The primary goal of Montana's public health preparedness and response program is to prepare the statewide public health system to respond to acts of bioterrorism and other public health threats and emergencies. The state will also aim to develop public health infrastructure that will serve the state efficiently and effectively in normal times. Recognizing that the impact of any event will be experienced at the local level, a majority of the CDC funding will be provided either directly to local health departments or be used in direct support of their efforts.

The CDC organized the public health emergency preparedness grant application around the following areas with critical capacities that must be addressed in each. Below is a summary of the key elements of Montana's proposal.

Preparedness Planning and Readiness Assessment

Leadership for this effort will be provided by the Health Policy and Services Division within the Montana Department of Public Health and Human Services (DPHHS). A statewide Bioterrorism Advisory Council (BTAC) will guide the

activities, and ensure coordination with other state and federal efforts. The BTAC will collaborate closely with the Homeland Defense and Public Health Improvement Task Forces.

Funding and technical assistance will be provided to local and tribal health departments to assess the preparedness of our public health system and to prepare local and regional public health emergency response plans. A comprehensive statewide emergency response plan, including a plan to effectively manage the National Pharmaceutical Stockpile will be created.

Local, regional and statewide planning will occur in collaboration with hospitals, health care providers, emergency management services, tribal governments and other system partners. Exercises and drills will be used to test the effectiveness of and continuously improve local, regional and statewide plans.

Surveillance and Epidemiology Capacity

The DPHHS will immediately deploy funding and technology across the state to meet basic needs in surveillance and epidemiology. State and local systems will be enhanced to better receive, investigate and respond to disease reports and outbreaks on a 24-hour, 7-day per week basis. In addition, the state proposes to obtain placement of a federally-supported epidemiologist and to hire a public health veterinarian to strengthen animal disease reporting, surveillance and response activities.

Disease reporting, investigation and response protocols, procedures and materials will be reviewed, enhanced and standardized. Local public health personnel will work with health care providers and other disease reporters to increase completeness and timeliness of reporting. Pilot projects will test new surveillance methods for earlier detection of disease. DPHHS and local health departments will establish mechanisms to ensure coordinated with neighboring states and Canadian health agencies.

Laboratory Capacity

The Montana Public Health Laboratory (MTPHL) has had no major renovations since 1955. In order to respond to current public health threats, such as bioterrorism, the MTPHL needs significant remodeling. This will include upgrading a portion of the facility to a bio-safety level 3, installation of laboratory security systems and an emergency generator, addition of real-time polymerase chain reaction (PCR) testing and upgrading instrumentation. In addition, laboratory protocols and procedures will be enhanced and staff training will be provided.

In coordination with hospitals, public health agencies, law enforcement and other responders, the MTPHL will develop an integrated plan for laboratory response to bioterrorism and other public health threats. This will include establishing formal relationships between laboratories and other responders, delineating roles and responsibilities of various agencies, developing protocols for transport of specimens, reporting of lab results, and handling specimens that exceed the testing capacity of Montana laboratories, and integrating Montana's laboratory response plan with other emergency response plans.

Health Alert Network (HAN)

This effort will include completion of the physical infrastructure to support high-speed Internet access and e-mail to transmit emergency public health messages. Policies and procedures for use of the HAN will be developed and enhanced. Broadcast fax capabilities, wireless and cellular phones, and possibly other emerging technologies, will be used for redundant emergency communications. DPHHS will ensure all systems are compliant with state- and federally-recommended standards and security requirements.

Risk Communication and Health Information Dissemination

The DPHHS will create a system to provide health/risk information through effective channels of communication that will reach the public, key partners and special populations. System components will include:

- a database of media and other communication channels;
- an emergency communication system with call-down lists of emergency contacts and coordination with the HAN to provide public health messages to local health departments, emergency personnel and health care providers;
- emergency communication system testing procedures;
- print and electronic preparedness materials and resources; and
- support and resources for health/risk communication efforts of local public health departments and other system partners.

Education and Training

A coordinated learning delivery system will be developed using traditional and distance learning modalities. Training and education offerings will be geared toward public health professionals, infectious disease specialists, emergency department personnel and other healthcare providers. All course offerings will address standards and competencies in emergency preparedness that have been defined by national public health organizations.

Hospital Bioterrorism Preparedness

Montana has also received $599,516 for hospital bioterrorism preparedness efforts from the Health Resources and Services Administration. Hospital preparedness enhancements will focus initially on identification of critical needs to prepare and respond, including medicine and vaccine, personal protection, quarantine and decontamination, communication, training, emergent medical staffing and personnel, evacuation and mobilization, and legal and regulatory issues.

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Serving on the Gallatin City-County Board of Health: The Good, the Bad, the Ugly, and the Sublime

By Patricia Butterfield, PhD, RN
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Gallatin County's population increased 58% from 1980 to 2000, yet during that time the number of public health nurses to serve the population changed from 7 to 8.6, an increase of less than 23%. In addition to more people there is evidence that public health needs are increasing in complexity.

Public health has a public relations problem. Ask most Montanans what they think the public health system is, and their response will most likely be something about public assistance and welfare. While it's true that one of public health's most important roles is to provide a health safety net in the community, there are many other roles that Montana county health departments play in preventing disease and promoting health in our communities. Five years of serving on the Board of Health for the Gallatin City-County Health Department has given me a good understanding of the broad vision of health that public health represents. This brief paper addresses the good, the bad, the ugly, and the sublime that I encountered in our monthly board meetings at the Courthouse.

The Gallatin City-County Board of Health is made up of nine members, four of them appointed by the Gallatin County Commissioners, four appointed by the Bozeman City Commissioners, and one member appointed jointly by both commissions on the recommendation of the Board of Health. One member of each of the commissions sits on the Board of Health as well as a civil engineer, the Director of a community clinic, and private citizens. It is critically important to have board members who possess a wide range of expertise so that the Board will have the types of information required to make sound decisions. The Board meets once a month at a minimum, and is responsible for considering broad public health issues, supervising the Director of Public Health, and establishing priorities for the department. There is no compensation for this public service – all of the members serve as citizen volunteers.

At Board of Health meetings, the "good" usually comes in the form of updates from programs addressing maternal and child health. As a nurse, this has always been my favorite part of Board of Health meetings. I have the opportunity to ask about programs

such as women, infants, and children (aka WIC), which provides educational information and vouchers for children at risk for poor nutrition. These are not "give-away" programs; each of the maternal child health programs has been documented to be effective in promoting the health of children. For example, Head Start, an education, health, and life skills program for four-year-olds and their families, has been extensively studied by educational and health researchers. Children participating in Head Start programs have consistently been found to have better thinking and social skills in school compared with children who did not participate in this program. At Board of Health meetings, it's encouraging to hear about the successes in these programs and others that focus on immunizations, parenting skills, and the prevention of child abuse.

Children participating in Head Start programs have consistently been found to have better thinking and social skills in school compared with children who did not participate in this program.

"Bad" things can happen when the Board of Health is forced to respond to a public health problem that is caused by neglectful or irresponsible behavior of others. Bad things can also happen when an impossible situation requires an immediate solution. One of the most challenging times in Board of Health meetings occurs when one neighbor petitions for a variance for a well and/or septic permit and another neighbor testifies against the petition. In some cases, long held disputes among neighbors come before the Board when the septic system of one family fails and there is not a good secondary site for a septic system and drain field. One of the cardinal laws of physics is that water (and sewage) flows downhill. The waste created by one family does not stop at the property line, but, depending on its volume and characteristics, can have long-term impacts on health of many other residents in the county. We only need to think of people who irresponsibly dispose of solvents with carcinogenic potential (e.g., toluene, percholoethylene) down their sink drain to find out that many people can be hurt by the actions of a few. At Board of Health meetings, we encourage neighbors with well or septic-related disputes to communicate with each other to try and come to an amicable and scientifically-sound resolution to their problems. At that time, it's appropriate for the Board of Health to review variance requests to make sure that the health of the public is being protected from contaminated water that can cause either acute (e.g., hemolytic uremic syndrome from ingesting pathogenic *e-coli*), or chronic (e.g., Parkinson's disease which has been associated with specific types of pesticides) health problems.

The "ugly" involves doing more and more with less and less. As dollars get stretched more and more, public health agencies (as well as other agencies) have been taking up the slack. However, there comes a time when there is no longer any fat to cut, and many of Montana's health departments passed that point several years ago. Gallatin County's population increased 58% from 1980 to 2000, yet during that time the number of public health nurses to serve the population changed from 7 to 8.6, an increase of less than 23%.[1, 2] There is also evidence that public health needs have been increasing in complexity over the past few years - think only of Montana's Hantavirus cases (and fatalities), elevated cases of motor vehicle-related deaths, and recent threats of bioterrorism to our water systems and at public events. Air quality problems from forest fires over the past two years have also added to the work of public health officials. In Bozeman last summer, the health department fielded numerous calls about air quality during the

It only takes a short history lesson to recall a time when most of the deaths in our country occurred from the lack of a public health system.

Bridger Creek fire. Citizens would call to ask if it was safe for their children to be outside; they could not see the Bridger Mountains because of the air pollution. Often there are no easy or straightforward answers to these and other questions. Public health officials need to be available to address these calls and others, while continuing to conduct restaurant inspections and review septic system plans.

In worst case scenarios, health department personnel are charged to follow up on a number of unpleasant and potentially dangerous situations, such as closing off an unoccupied home that has become inhabited with an overabundance of rodents, or being threatened by an angry homeowner. In such situations, it's important to have board members who understand the level of danger inherent in such threats, and can separate actions that will endanger the public from risks that a consenting adult may choose to take. This means understanding that some elements of health are based on individual actions (e.g., decisions to exercise to prevent a heart attack), but that other facets of health are based on community actions (e.g., assurance of a safe water supply).

The "sublime" comes from doing the right thing - for the public's health. One topic that comes up at public health meetings is the recognition that, in many ways, past public health victories often undermine the recognition of the need for continued support for today's public health activities. It only takes a short history lesson to recall a time when most of the deaths in our country occurred from an inadequate public health system. Infants died of diarrheal diseases caused by contaminated food. Their mothers often died in childbirth, from infections of the womb. It was not unusual to lose fathers from accidents on the job that occurred because of unsafe and inhumane working conditions. Although these occurrences are now rare in the U.S., they still occur in many other parts of the world - from Asia to Africa to Europe to Australia - as close as the U.S.-Mexico border.

There's a saying in public health, "pay now, or pay more later." Public health works in our nation because of the investments that our parents and grandparents made in immunization research, social safety net programs, risk reduction programs for at-risk families, and water treatment facilities. The "sublime" in public health means that, like our parents' investment on our behalf, we will have the opportunity to invest in the health of our children and grandchildren.

Public health works in our nation because of the investments that our parents and grandparents made in immunization research, social safety net programs, risk reduction programs for at-risk families, and water treatment facilities

In a 1909 congressional hearing addressing children's health, public health nurse Lillian Wald noted, "We cherish belief in the children, and hope, through them, in the future. But no longer can a civilized people be satisfied in the casual administration of that trust. Does not the importance of this call for the best statesmanship that our country can produce?"[3] We too are called upon for our best statesmanship to reduce fatal accidents, chronic diseases, infectious diseases, and bioterrorism threats in the next generation of Montanans.

References:

1. Census and Economic Information Center, Montana Department of Commerce. Accessed July 30, 2002 at http://ceic.commerce.state.mt.us/Demog/historic/Censucty18902000.htm
2. Personal communication, Human Services Director, Gallatin City-County Health Department. July 30, 2002.
3. Coss, C. (Ed). 1989. Lillian D. Wald: Progressive activist. New York, NY: The City University of New York.

Montana Policy Review

Montana's Public Health System: A History

By Ellen Leahy
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Long before statehood, Montana's early cities and towns were plagued by epidemic disease. When people migrated west, so did contagious disease, and smallpox was among the most deadly of these diseases. A visit by loathsome smallpox tended to stimulate political action, often resulting in the creation of local boards.

In the throes of a smallpox epidemic, in 1901, the Montana Legislature created the State Board of Health. Not quite a century later, in an act all but unnoticed, the 1995 Legislature took the health board off the books. By this time, of course, smallpox had been eradicated worldwide, monsters like polio and diphtheria had been all but beaten, and food, water and the environment were reliably cleaner and safer. But was the health board's job done? Only time will tell. In the meantime, it is instructive to recall the forces that forged Montana's State Board of Health for it is a story replete with lessons about government's role in protecting citizens' health.

Long before statehood, Montana's early cities and towns were plagued by epidemic diseases. When people migrated west, so did contagious disease. Smallpox was among the most deadly of these diseases. Capable of killing a third of its victims, the infection left survivors scarred and often blinded. Vaccination and quarantine were very effective at stopping smallpox's spread, but to prevent exponential spread, communities had to recognize the disease early then act swiftly. Health boards, composed of public officials and physicians, were a good vehicle for carrying out this responsibility. A visit by loathsome smallpox tended to stimulate political action, often resulting in the creation of local boards.

The Missoula City Board of Health was established almost overnight in 1885 when the city council was faced with a smallpox outbreak. Butte, with its teeming population, played host to smallpox epidemics many times despite being equipped with a city health board from its date of incorporation in 1879. The Butte Health Board was quite sophisticated for its time and did a proud job of curtailing contagion within its borders. The limitations of having only a local, not a state approach, however, became evident early on. Localities that had established health board authority could judiciously curtail contagion by enforcing

quarantine and vaccination within city borders, but had no ability to stop the export of contagion from neighboring jurisdictions whose practices were lax.

The events that led to the creation of Silver Bow County's Health Board are a case in point. In 1883, Butte Mayor O.B. Whitcomb, a colorful enterprising physician, publicly castigated Silver Bow County officials for their "apathy in adopting measures to avert the scourge of smallpox, which was threatening the city." The Silver Bow Board of County Commissioners promptly organized a board of health to "at once inaugurate a system of quarantine." Once again, smallpox boosted government's role in public health.

With no state action to impede its course, smallpox was off and running throughout the state.

This pattern repeated itself in the growing state, prompting the physicians of the state, through their professional organization, to call for state action. Here again, smallpox played provocateur. In 1893, a smallpox epidemic took hold in Anaconda and quickly spread to Deer Lodge and Butte, blatantly proving that contagion has no regard for political boundaries. Deer Lodge Mayor Brazelton, determined to halt the disease at his border, stationed a special day policeman at the train depot to keep a "sharp lookout" for anyone entering town who might be harboring smallpox. He further instructed the sheriff not to accept any prisoners from Anaconda lest they bring the contagion with them. But smallpox arrived with its usual costly commotion and when local doctors and officials looked to the state hospital at Warm Springs for help in quarantining and caring for the sick, they found none.

Frustrated by this preventable misadventure and certain of a recurrence, the members of the Montana Medical Association, at their annual convention in 1894, called on Governor Ricketts and the legislature to create a state board of health. But the idea went unrealized until smallpox returned with a vengeance years later.

A smallpox epidemic took root in Great Falls in August of 1899. Local doctors disagreed on whether the rashes they were seeing were smallpox or chickenpox, the latter not requiring quarantine in those times. Although Great Falls had a local health board, the board could not resolve the diagnostic conflict in time to quarantine the first crop of cases and failed to contain the contagion. With no state action to impede its course, smallpox was off and running throughout the state. The controversy of this failure went beyond Montana. Minnesota's state health officer, concerned that Montana was exporting smallpox by rail, called for action. The U.S. Surgeon General, finding no state authority in place, directly ordered the Great Falls authorities to take action. But it was too late. A year later, the elected officials of 13 Montana cities and counties petitioned Governor Smith to create a Board of Health and "stamp out the smallpox epidemic at present raging through the state." But only the legislature had such authority, and although its members exercised it in March of 1901, the smallpox epidemic had gained such a head start that it took a few years for the new board to rein it in. The costs to people, commerce, local and state government have never been fully calculated.

Government has a role in public health whether it is bringing preventive measures to bear up front or cleaning up the mess after losses mount.

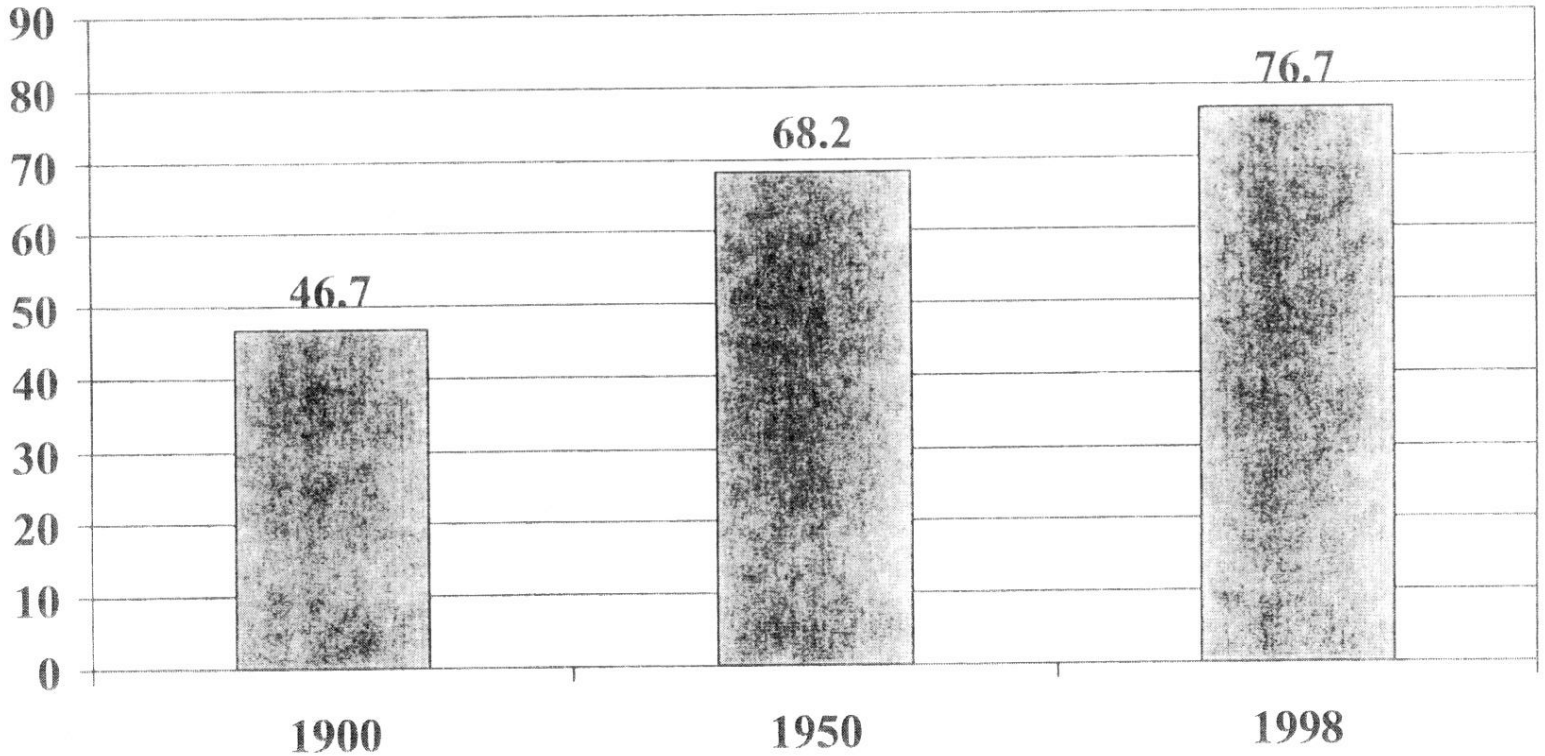
The state board of health went on to address decades of changing health problems. Its most historic was the investigation into the mysterious killer arising out of the Bitterroot Valley that became known as Rocky Mountain spotted fever. In the first decade of the century,

spurred by a deadly typhoid outbreak, the legislature expanded the board's charge to oversee sewage disposal. In the teens, the legislature and board worked with local leaders to establish rules governing the control of tuberculosis and the Galen Hospital. Programs to improve the health of women, infants and children followed. And the board, working with local boards, doctors, schools, and citizens, was instrumental in making sure that breakthrough vaccines were administered to Montana's children. Ironically, tuberculosis was reappearing, and doing so in dangerous drug-resistant forms, about the time the state board was retired.

Our citizens and our private and public coffers are just as vulnerable to the ravages of preventable disease as Montana's population was to smallpox a century ago.

The lessons are obvious but bear repeating. Government has a role in public health whether it is bringing preventive measures to bear up front or cleaning up the mess after losses mount. Although the nature of disease has changed in the last century – chronic diseases replacing infectious diseases as our top, costly killers – contagion still lurks and the majority of modern disease is, in fact, preventable. Our citizens and our private and public coffers are just as vulnerable to the ravages of preventable disease as Montana's population was to smallpox a century ago. Perhaps it is the case that state health boards are no longer the best vehicle. About half of the states in the nation have disbanded their health boards. But as our health problems change, so must our solutions, and state government has a role in assuring that the vigilance and resources necessary to protect the public health are in place, whatever threats emerge.

Life expectancy at birth, 1900, 1950, 1998, U.S.



Adapted from: *Health United States, 1999*, National Ctr for Health Statistics, PHS, 1999 and Turnock, BJ. *Public Health: What it Is and How it Works*, Aspen Publ, 2001, p. 2.

Montana Policy Review

Mental Health Care

By Dan Anderson, Administrator
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For most of Montana State Hospital's history there was so little knowledge of the causes and nature of mental illness that treatment was minimally effective and often considered a waste of time. In short, "mental health" was not considered part of the larger healthcare system and was clearly not thought of as a "public health" issue.

In 1877, Montana territory contracted with two physicians to care for people with mental illnesses at the doctors' health spa at Warm Springs. With this contract, what was later called Montana State Hospital became the first public healthcare facility in Montana. During most of the last 125 years, this state mental hospital was the only public mental health program in the state. For most Montanans, its purpose was to assure the public safety by keeping citizens with serious mental illness separate from other citizens, rather than to provide treatments necessary for recovery. For most of Montana State Hospital's history there was so little knowledge of the causes and nature of mental illness that treatment was minimally effective and often considered a waste of time. In short, "mental health" was not considered part of the larger healthcare system and was clearly not thought of as a "public health" issue.

Several factors have brought mental illness to its legitimate place as a public health concern. First, and most important, medical science has finally determined what mental illnesses are – diseases of the brain that can be identified and treated. It has thankfully become increasingly rare to hear mental illness described as moral weakness or caused by inept parents. Understanding the nature of the various brain illnesses has led to significant strides in the development of medications that actually treat specific brain dysfunction rather that merely sedate the patient. Rehabilitation strategies have also become far more sophisticated. Goals for patients have changed from group home living and day treatment, to full integration as independent living and working citizens. Children and adolescents with emotional disturbance are, through

Understanding the nature of the various brain illnesses has led to significant strides in the development of medications that actually treat specific brain dysfunction rather that merely sedate the patient.

own homes and schools.

A second factor in the evolution of public mental health services has been changes in state and federal funding strategies. After nearly 80 years of Montana State Hospital providing the only mental health treatment in Montana, mental hygiene clinics were created in the 1950's, followed by federally funded community mental health centers in the 1960s. These programs were intended to provide alternative services for individuals who would otherwise require institutional care. The shift in how resources are used in Montana is dramatic; 48% of state mental health funding was used for state institutions in 1992 while community based care received 52% of the funds. In 2002, state institutional treatment received just 22% of the funds while community based programs received 78% of the funds.

Within the child protective services and juvenile corrections systems, a parallel process has been at work. Community services such as therapeutic foster care and family and school based services were developed to provide alternatives to placements in juvenile correctional facilities and institutions for many young people who have emotional disturbances. The Medicaid program has fueled the development of expanded treatment options for low income and disabled persons with mental illness. This state-federal program has been used in Montana and elsewhere to fund many of the community based mental health services that have been developed over the past twenty years.

In 2002, state institutional treatment received just 22% of the funds while community based programs received 78% of the funds.

Finally, the advocacy movement in mental health has had a huge impact on how mental illness is viewed by the general public as well as by the medical and policy-making

who have mental illness and their families have increasingly been willing to identify themselves and help guide public understanding and public policy. The Mental Health Association of Montana is the oldest non-governmental advocacy group in our state. It has been joined in recent years by a rapidly growing National Alliance for the Mentally Ill (NAMI-Montana), and child advocacy groups such as Parents Let's Unite for Kids (PLUK). Government-affiliated advocacy organizations include the Montana Advocacy Program, which is a federally funded agency. Montana state government includes the Mental Disabilities Board of Visitors, and the Mental Health Ombudsman, both attached to the Governor's Office. The Mental Health Oversight Advisory Council was created by the State Legislature in 1999 to bring together the various stakeholders interested in the public mental health services and to work closely with the Department of Public Health and Human Services (DPHHS) and local advisory committees on continued development of an effective mental health system.

The Mental Health Association of Montana is the oldest non-governmental advocacy group in our state.

The public mental health system in 2002 is very large and diffuse – so diffuse that many are reluctant to call it a "system" at all. Approximately 20,000 Montanans receive DPHHS-funded mental health services each year. Those services are provided by well over 1,000 different practitioners and agencies which range from independent family physicians who might treat a handful of Medicaid recipients for a mental illness in a year, to large multi-million dollar mental health centers that specialize in a wide range of services for children and adults with mental illnesses.

The public mental health system in Montana was consolidated in 1997. Pieces of the

"system" previously managed separately as state institutions, community mental health, child protective services, juvenile corrections and Medicaid have been brought together within a single division of DPHHS. Critical issues for the public mental health program include:

- Continued refinement of community-based services for adults with severe and disabling mental illness that promote recovery as close to home as possible and which reduce the need for out-of-home or institutional treatment. This goal must include close collaboration with the larger healthcare system as well as substance abuse services, local housing authorities, law enforcement, vocational rehabilitation systems and other agencies and organizations offering community supports.

- Continue the process of developing a truly multiagency family-centered approach to services for children and adolescents with serious emotional disturbances through coordination with schools, child protective service, juvenile probation, substance abuse programs, Tribal health services, and the medical community so that out-of-home and especially out-of-state services are minimized.

- For those Montanans that do require institutional care, maintain the high level of quality in services provided at Montana State Hospital and Montana Mental Health Nursing Care Center.

- Retain critical and high priority services in the face of increasing budget pressures. The state-funded mental health program has experienced demand for services which have exceeded the available budget for several years. An almost continuous process of determining the most critical needs and adjusting the program accordingly, has occurred since 1999.

DPHHS has undertaken a planning and system change process intended to achieve its programmatic vision within the available resources. The service area authorities would be given significant authority by DPHHS in determining how best to organize and manage mental health services within their areas and significant responsibility to do so within the budget provided.

The plan is to create three regional "service area authorities," each governed by a broad-based coalition of advocates, consumers, providers, and community agencies.

Bringing together a coalition of stakeholders to form a structure capable of taking on these responsibilities in a way that will meet state and federal approval and have local credibility, is a difficult and time-consuming process – one that may take several more years. If done carefully, openly and comprehensively, however, the service area authority model has the promise to take the next step for a system which began as a single facility 125 years ago and seeks to become a comprehensive and effective component of Montana's public health system.

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Public Health Response to an Outbreak of Hepatitis B Virus in Cascade County

By: Cherry Loney, R.N., M.A.S.,
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Cascade County experienced an unprecedented outbreak of Hepatitis B among injecting drug users over an 18 month period between October, 1998 and March, 2000. In spite of control efforts, the outbreak continued through March, 2000 with a total of 21 individuals diagnosed with Hepatitis B. Nearly 50% of these individuals died of acute liver failure.

In what was described as a "very significant health event, not only on a local and state level, but on a national level as well," Cascade County experienced an unprecedented outbreak of Hepatitis B among injecting drug users over an 18 month period between October 1998 and March 2000. A total of 21 injecting drug users were diagnosed with Hepatitis B, 10 of whom died. All but one of the cases was Native American. To put this in perspective, Cascade County has an occasional case of Hepatitis B (maybe one a year) and Hepatitis B is rarely fatal.

The initial case involved a young male who was previously healthy and died of sudden liver failure in October 1998. In December 1998 a second previously healthy adult became ill and died while awaiting a liver transplant out of state. In mid-February a thirty-one year old Native American male was hospitalized with sudden liver failure. All of these individuals had a history of injecting drug use and knew one another. Laboratory evidence indicated they were all infected with acute Hepatitis B, Hepatitis C, and had elevated levels of acetaminophin (Tylenol).

Cascade City-County Health Department contacted the Montana Department of Public Health and Human Services and requested assistance with the investigation from state health officials as well as the United States Centers for Disease Control and Prevention (CDC). Because the outbreak involved Native Americans, officials from the Indian Health Service also responded. With the assistance of state and federal officials, Cascade City-County Health Department conducted an extensive investigation to determine what factors contributed to the severity of liver damage in the deceased individuals and to determine what control measures needed to be instituted to prevent further cases. Efforts were made to identify, contact, test, counsel, and provide vaccine for Hepatitis A and B to individuals linked with identified cases.

In spite of control efforts, the outbreak continued through March, 2000, with a total of 21 individuals diagnosed with Hepatitis B. Nearly 50% of these individuals died of acute liver failure. Case fatalities ranged from 21 to 52 years in age. Four of the 10 who died were women of child-bearing age, one of whom was pregnant at the time of her death. All were positive for Hepatitis C, had a history of alcohol, methamphetamine and/or cocaine use, which continued even after they began to feel ill, had weight loss and poor nutrition prior to death, and all but one had heavy use of acetaminophen.

Part of the investigation involved screening contacts for immunity to Hepatitis B either through past infection or vaccination. Only about 10% of the population at risk showed immunity to Hepatitis B. Many of these people traveled throughout north central Montana. As a result, CDC recommended broadening the vaccination effort to include injecting drug users in the entire north central Montana region. This was estimated to be about 800 individuals. Using vaccine supplied by CDC, Indian Health Service, and the Montana Department of Public Health and Human Services, a Hepatitis B vaccine program for injecting drug users throughout the entire region was initiated by Cascade City-County Health Department, local Indian Health Service Units, and other local health departments. The series of three shots was offered free of charge. While a challenging and time intensive undertaking, the vaccine effort was hugely successful. In the end, nearly 700 people were vaccinated with over 400 completing all three shots in the series. Outreach required some creativity and included use of the media, other agencies, street outreach workers, wallet cards, posters, special clinics, incentives, etc. In addition, a vaccine tracking, recall system was implemented early on.

While a challenging and time intensive undertaking, the vaccine effort was hugely successful.

According to CDC, the outbreak in Cascade County had one of the highest mortality rates in the nation. Over a period of several months the outbreak was studied by a team of experts from the CDC to determine why it was so deadly. CDC determined there were slight differences in the specific molecular makeup of the Hepatitis B virus associated with the Cascade County outbreak. These differences may have enhanced the ability of the virus to replicate as well as make it less vulnerable to the natural immune response of the human body. However, the most notable differences between those who survived and those who did not boiled down to lifestyle. Those who survived tended to continue with better nutrition, discontinue over-the-counter medications including acetaminophen, discontinue or greatly reduce alcohol consumption, and discontinue or greatly reduce IV drug use. An initial source of infection was never identified.

According to CDC, the outbreak in Cascade County had one of the highest mortality rates in the nation.

This unique and daunting situation posed quite a challenge to public health officials, particularly the local health department. Because this was an unprecedented set of events, we were charting our course as the investigation progressed. We were dealing with a population that was hard to identify and locate, hard to motivate, and distrustful of the system. There were issues related to both the Native American culture and the injecting drug use culture. This was a very time-intensive, costly effort. It was all consuming and unrelenting for local health department staff. Other activities were suspended and staff reassigned to respond to the outbreak. In spite of the unique challenges presented by this situation, public health interventions were

successful by all measures. The disease outbreak illustrated the respective roles and responsibilities of local, state, and federal public health officials in protecting the public's health and exemplified a collaborative approach toward doing so.

This outbreak is a grim reminder of how public health is grossly underfunded to deal with one of its fundamental responsibilities – controlling the spread of communicable diseases. It is also a grim reminder of the ever-growing problem of drug and substance abuse in our society and its role in the spread of communicable diseases. Blood borne illnesses are rampant among injecting drug users. The prevalence rate of Hepatitis C among injecting drug users is estimated to be 60 – 90%. On all fronts we must continue and redouble the fight against illicit drug use. At the same time however, public health must place more emphasis on preventing blood-borne infections among injecting drug users. The benefits of timely access to substance abuse treatment, community outreach, HIV and Hepatitis C counseling and testing targeting injecting drug users, and other prevention services are well documented. While waging the war on drugs, we must also work with current users to reduce risk, control the spread of infectious diseases, and mitigate the overall impact of illicit drug use.

Although an extreme situation, this is but one example of disease prevention activities that go on every day in public health."

Although an extreme situation, this is but one example of disease prevention activities that go on every day in public health. The science and activities of public health have been described as the immune system of health in our communities. Ongoing surveillance activities enable us to detect disease and potential threats to the public's health and to mount an early and rapid response. Disease investigation and follow-up enable us to control the spread of disease. Identification and notification of contacts or those potentially exposed to disease along with preventive measures such as vaccines and risk reduction education are critical. This all takes time and resources. Current efforts to improve the state's public health system along with the federal initiative to prevent or mitigate bioterrorism will only enhance our ability to control the spread of communicable diseases.

Montana Policy Review

Environmental and Public Health Partnership

By Tom Ellerhoff, Administrative Officer,
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Recently a railroad derailment spilled 65,000 gallons of hot oil east of Bozeman. Less than a week later, officials reported that a horse in Shepard was believed to be Montana's first reported case of the West Nile Virus. Although one might think these incidents are unrelated, both are concerns for those working in environ-mental health and public health. The common denominator of human health is the basis for all environmental and public health laws.

The common denominator of human health is the basis for all environmental and public health laws... The directors of the two new agencies recognized that human health was the important tie between environmental and public health.

Prior to the latest reorganization of state government in 1995, environmental health and public health were in the same agency, the Department of Health and Environmental Sciences. Reorganization placed environmental health in the Department of Environmental Quality (DEQ) and public health in the Department of Public Health and Human Services (DPHHS). The directors of the two new agencies recognized that human health was the important tie between environmental and public health. In order to retain this link, the directors created a memorandum of understanding (MOU). This outlines the duties of both concerns and common areas of interest. One element of the MOU requires DPHHS and DEQ to meet quarterly to discuss common concerns, address possible problems, and generally share relevant information. The agencies also make an effort to invite representatives of local health departments throughout the state.

As for the recent incidents, the DPHHS and DEQ representatives were talking at their quarterly meeting last spring about how they would jointly approach the advent of the West Nile Virus arriving in Montana. This groundwork was helpful in establishing how the agencies ultimately were able to respond to the reported arrival of the virus.

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Treasure County Public Health
Deborah French, RN; Public Health Nurse
P.O. Box 942, Forsyth MT 59327
347-5454

Valley County Health Department
Vicki Bell, RN; Director
501 Court Square Box 11, Glasgow MT 59230
228-6263

Wheatland (see Fergus County)

Wibaux County Health Office
Barbara Maus, RN; Public Health Nurse
P.O. Box 117, Wibaux MT 59353
796-2485

Yellowstone City-County Health Department
Lil Anderson, Director/Health Officer
PO Box 35033, Billings MT 59107
247-3200

Tribal Health and Indian Health Service Unit Contacts

Blackfeet Tribal Health Department
June Tatsey, Director
PO Box 866, Browning MT 59417
338-6317

Blackfeet PHS Indian Hospital
Reis Fisher, Service Unit Director
PO Box 760, Browning MT 59417
338-6157

Crow Tribal Health Department
Manuella Mesteth, Director
PO Box 159, Crow Agency MT 59022
638-2601 ext 3966

Crow PHS Indian Hospital
Susan Fredricks, Service Unit Director
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Fort Belknap Tribal Health Department
Richard King, Director
RR 1, Box 66, Harlem MT 59526
353-8486

Ft. Belknap PHS Indian Hospital
Daryl Brockie, Service Unit Director
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353-3211

Fort Peck Tribal Health Department
Gary James Melbourne, Director
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768-3491

Ft. Peck Indian Health Service Unit
Kenneth Smoker, Service Unit Director
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768-3491

Northern Cheyenne Tribal Health Department
Marlene Redneck, Director
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477-6722

Northern Cheyenne Indian Health Service Unit
Zane Spang, Director
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477-4410

Rocky Boy Tribal Health Center
James Eastlick, Interim CEO
RR 1, Box 664, Box Elder MT 59521
395-4486

Confederated Salish & Kootenai
Tribal Health & Human Services
S. Kevin Howlett, Department Head
Box 880 Mission Drive
St. Ignatius MT 59865
745-3525

Resources on Public Health

Publications

A Strategic Plan for Public Health System Improvement - This document describes Montana's public health system and offers strategies to enhance and improve the system. Published by the Montana Department of Public Health and Human Services. Copies are available by contacting the Montana Office of Public Health System Improvement at (406) 444-4474 or by clicking on the Department's website: www.dphhs.state.mt.us/hpsd/pubheal/healplan/pdf/healthplan.pdf

Montana Health Agenda - This document describes key priorities for a healthy Montana. Published by the Montana Department of Public Health and Human Services. Copies are available by contacting the Department's Health Policy and Services Division at (406) 444-4542 or by clicking on the Division's website: http://www.dphhs.state.mt.us/hpsd/index.htm

Public Health: A Legislator's Guide - This booklet explains what the American public health system is, why it exists, and what it does. This is published by the National Conference of State Legislatures and can be purchased by calling their publications department at (303) 830-2054 or by clicking on this website: http://www.ncsl.org/programs/health/publichealth.htm

Websites

National Association of Local Boards of Health (NALBOH) The goals of NALBOH are to provide a national voice for the concerns of local boards of health and to help board members acquire the knowledge, skills and abilities to effectively protect and promote public health in their communities. http://www.nalboh.org/index.html

National Association of County and City Health Officials (NACCHO) - This national organization providers leadership on emerging public health issues and relays vital information to local public health departments. Serves as a national voice for local public health. http://www.naccho.org/

National Public Health Performance Standards - The Centers for Disease Control (CDC), in collaboration with other national public health partners, has developed a comprehensive evaluation which will equip governing bodies such as local boards of health with the tools to become more effective in their oversight of local health departments, their participation in the local health system, and their provision of essential public health services. http://www.phppo.cdc.gov/nphpsp

Audiovisuals

These videotapes are available through the Montana Public Health Training Institute at the Montana Department of Public Health and Human Services. Please contact them at (406) 444-4474.

Public Health: An Investment in The Future - This 15 minute videotape describes Montana's public health system. Produced by the Montana Public Health Association.

A Day in the Life of Public Health - Produced by the Kansas Health Foundation. This 10-minute videotape provides examples of the importance of public health.

Assessment, Policy Development and Assurance: The Role of the Local Board of Health This videotape highlights the role of the board of health with the core functions of public health.