



Momentum Builds for Expanding Regional Public Health System

MAHB is closely involved in a project to develop a sustainable, regional public health system in Massachusetts. With public support from Department of Public Health commissioner John Auerbach, the project is steadily building momentum. MAHB is in a unique position to provide legal support for this project and help to guide it in a direction that will bring badly needed resources to local public health without sacrificing the role of elected and appointed board members.

Massachusetts is one of the few states in the nation without a county health system, and we have no comparable regional system for coordinating public health planning, resources, and service delivery. The state's network of emergency preparedness regions is limited in scope and struggling with the impacts of budget cuts. The objective of the project is to strengthen public health in the state by creating a regional infrastructure that would make best use of available resources to provide equitable protection and health promotion for all residents.

The effort, led by MPHA president Harold Cox, under the auspices of the Boston University School of Public Health, involves local public health officials, academics, representatives of the departments of public health and environmental protection, and legislators. It has included intensive research and several large stakeholder meetings, and its tentative findings were the subject of a legislative hearing last fall. Members of the project "work group," which includes Cox, MAHB Staff Attorney Cheryl Sbarra and former MPHA Executive Director Geoff Wilkinson, made nearly two dozen presentations to local public health officials, state leaders, and community members across the state. Consultants are being hired to assist with research on technical issues, and the project's scope is being expanded to consider integration of community health networks.

Recent press coverage has erroneously suggested that the project will forcibly reduce the number of local boards of health in the state. In fact, recommendations for future legislation and administrative action will respect the existing legal authority of health boards and create incentives for local participation.

Outdoor Wood Boilers: A Threat to Public Health and Air Quality

by Professor Curt M. Freedman, P.E., C.E.M.

According to DEP, at least 22 communities have either banned or regulated Outdoor Wood Boilers (OWB), including Longmeadow, West Springfield, Chicopee, Palmer, Monson, South Hadley, Tisbury, Auburn and Holyoke.

Wood burning is a significant contributor to air pollution in Massachusetts and other areas of the country. Wood smoke contains toxic carbon monoxide, smog-causing nitrogen oxides, soot, fine particles, and a range of other chemicals and gases that can cause or worsen serious health problems, particularly among children, pregnant women, and

continued to page 27

Table with 2 columns: Article Title and Page Number. Includes 'Inside This Issue' header and a list of articles such as 'AMALGAM SEPARATORS' and 'ANIMAL HOARDING'.

An End to MAHB MEMBERSHIP MAILINGS!

Beginning July 1, MAHB converted membership dues and certification program registration from paper forms to an enhanced Web based system. This has enabled us to create an accurate online Directory of Local Boards of Health and additional member services including free downloads of the Guidebook for Massachusetts Boards of Health, Legal Memos and job postings. Although the system was designed to be very user friendly, a user guide to all the features is included on page 34 for your convenience.

For as long as we can afford to do so, we will continue to mail this publication to your homes or offices, based upon the information provided in your board profile.

This system allows for more personalized and powerful communications between MAHB and our membership. By filling out the board profile, it enables us to learn more about your interests and the experience and professions represented on the board. It also enables us to collect accurate data for the first time so we will be able to answer questions such as how many boards of health are elected.

Each board of health was mailed a user id and password last fall. If you need to recover this information, please contact the MAHB office by phone or email.

MAHB will no longer be mailing out membership notices and training registration forms, instead we will be relying upon email reminders for dues and certification programs.

It is extremely important that we have working email addresses for every board of health. In the rare instances where communities are not served with broadband and no email exists, we will continue to send mailings. **If your town falls in this category, please contact the office and let us know, so we can provide for alternative notifications.**

For more information on how to use the new MAHB Membership portal, please view the users guide on pages 33-35

New BOARD OF HEALTH MEMBERS?

Get up to speed quickly by attending the BOH Certification Program, which includes a special orientation session. This workshop begins with an overview of the Board of Health, followed by an explanation of the legal authority of Boards of Health, and ends with entertaining and practical role playing covering a variety of common scenarios and problems.

To sign up, log in to the MAHB website, or use the registration form on page 39.

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AND SUPPORT BOARDS OF HEALTH [AND RELATED
GOVERNMENTAL AND COMMUNITY ORGANIZATIONS/
AGENCIES] THROUGHOUT THE COMMONWEALTH IN
MEETING THEIR STATUTORY AND SERVICE
RESPONSIBILITIES, THROUGH PROGRAMS OF
EDUCATION, TECHNICAL ASSISTANCE,
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THE EDITOR'S DESK

Eight years ago, any prophesy that I'd be putting in a plug for **the Coalition for Local Public Health** (CLPH), would have been met with incredulity. The summary history on pg. 7 doesn't reveal the birth agonies. We had to overcome years of distrust arising from inherent conflicts. One of our first battles was over consensus - not a very promising start! But we stayed at the table year after year, found common ground and pooled resources to accomplish our goals, including the work-force survey which forms the basis for the MAHB community survey. I am proud of the progress we made, and of the role the CLPH has played in raising awareness and planning for the future of public health. We have failed, however, to keep our constituents informed of this important advocacy work.

Aren't you a bit curious about neighboring board of health budgets? What about staff education levels or public health nursing hours? Within your region, or statewide, how many public health agents and nurses are eligible to retire in two years? Would it be helpful to know how much other towns take in from fees and special accounts? How many towns have elected boards of health? How many doctors, nurses, engineers, lawyers or veterinarians serve on boards of health?

These are all good questions, and now we have a way to get the answers! With the new MAHB on-line membership program and your participation, we will soon have the most comprehensive data on local public health anywhere in the nation. Please take a few minutes to log in and complete your board and community profiles.

For want of a more descriptive term, we are calling the new web features our on-line membership system, but nearly of all the services are available regardless of membership status. Free services include the directory, community health database and elearning center. Naturally, we hope you will support us by joining MAHB.

MAHB Member Benefits

Until now, the only benefits we could offer our member boards were reduced prices for tuition and publications. The new web portal offers us the possibility to provide a greater range of

member services. These include free downloads of the *Guidebook for Massachusetts Boards of Health*, Legal Memos, and a job posting service. If you have ideas for member services, please let me know.

It has taken a year to implement all of these features on our web site. After several discouraging false starts, it was exciting to find a talented local company willing to listen to what I envisioned and transform my concept for a membership site and database into reality. I hope that everyone will take the opportunity to log on and view their own member's page. To make it easier, Aciron created a user guide on pg. 36.

Regionalization

Citizens across the state do not have equal access to basic public health services which are largely dependent on property taxes. For the first time in the history of Massachusetts public health, there is a real possibility of a major reform in the delivery and funding of public health services. Key legislators, the Coalition of Local Public Health, academics and the Department of Public Health have made a commitment to regionalization. **MAHB is working to ensure that boards of health will retain their regulatory authority**, while gaining economic incentives to improve services through various regional options. The MAHB Certification Program will provide an opportunity to learn more about this project and join in the discussion.

Positive Changes at DPH

It is probably no great exaggeration to write that the local public health community breathed a collective sigh of relief when John Auerbach was appointed Commissioner of Public Health. He was highly respected as the Boston Public Health Commissioner and brings a much needed local perspective to his new office. Last week it was announced that Coalition for Local Public Health partner Geoff Wilkinson, Executive Director of MPHA, will be joining Commissioner Auerbach at DPH. One of his responsibilities will be the Regionalization Project, a task well suited to his leadership talents.

Marcia Elizabeth Benes MS
MAHB Executive Director & Editor

The Massachusetts Department of Public Health: Priorities, Updates, and Next Steps

*Commissioner John Auerbach
Mass. Department of Public Health*

It has been nearly four months now since the new administration started at the Department of Public Health. We began our work, enthusiastic and ambitious, with a clear strategy that would govern our work for the first 120 days and onwards. This strategy included setting new priorities for the Department using reliable health data and the input of the public and of health experts. We also made sure to rely on science and evidence-based processes to guide decisions in all areas of our work. We wanted an infrastructure that would help us nurture the Department's programs and staff as well as allow us to fight for more resources. In addition, we set out to be very visible in promoting public health messages and to form partnerships throughout the Commonwealth.

To tackle the task of identifying the priority areas for the Department, we embarked on eight regional health dialogues, held in all parts of the state- from the Berkshires to the city of Boston. These dialogues were widely successful, with 1000 attendees and hundreds of people sharing their perspective on their region's health successes, concerns, and activities. These meetings also garnered very positive high-profile media attention, and most important, allowed for valuable connections to be made between DPH and local elected officials, health officers, and community agencies.

With the help of these eight statewide regional meetings, quantitative health data, and input from countless Massachusetts residents and public health experts alike, as well as a look at the Governor's own priorities, we were able to determine the following six priority areas on which the Department of Public Health will focus this coming year. These important priority areas are each broken down by current goals and anticipated Year 1 activities in that area:

Eliminate Racial and Ethnic Disparities

We as a Department have many goals in place to eliminate racial and ethnic health disparities in the Commonwealth. These include strengthening uniform data collection on race, ethnicity, language, and socioeconomic status of patient/member populations. Using this data, we can then increase efforts to identify and reduce disparities in clinical practice and in outcomes by incorporating them into performance assessment and quality improvement efforts. We also hope to work on best practices that address social determinants of health such as education and environmental factors. Internally, we wish also to transform program priorities to focus on disparities as well as to increase workforce diversity within our own staff at all levels.

Some of our Year 1 activities geared towards accomplishing this first priority include creating a separate Office of Health Equity / Disparities that will lead DPH's activities in eliminating disparities, from working with key stakeholders to create a set of indicators to measure progress to providing \$1 million in funding to energize community-based efforts in this area. We will soon also require all DPH reports to include data on racial/ethnic disparities where they exist.

Promote Wellness

Another top priority area involves promoting wellness in the workplace, school, community, and at home. In order to do this, we will focus on the five areas of diet, exercise, smoking cessation, oral health and stress reduction. We hope this to be a cross-sector effort by developing and enhancing partnerships with schools, workplaces, and communities in order to improve health outcomes and increase an individual's access to health information and resources.

In order to do concrete work within this priority, we will sponsor free family fitness activities and wellness workshops regularly in communities across the Commonwealth. We also hope to identify innovative programs and provide grants to workplaces and schools to implement these initiatives. We want to start within, by promoting a healthy and active lifestyle among DPH employees by providing wellness-related programs and resources. In addition, we will review and revise regulations to expand and strengthen oral health services

Manage Chronic Disease

Chronic disease affects many of our residents, and we wish to focus on this area to support a comprehensive approach to chronic disease management within primary care settings as well as in community-based efforts. We will also focus on realigning policies that result in a more flexible approach for funded agencies that tackle the problem. Above all, we wish to prioritize primary prevention at all levels of activities.

For the first year, we plan on releasing a \$1 million RFP for cross-cutting chronic disease management efforts, with an emphasis on Community Health Workers and patient navigators, and to widely disseminate this funding across the Commonwealth. We will also work towards identifying and supporting unique models of chronic care self-management through seed funding of Community-Based Organizations.

Support Health Care Reform

With the new Health Care Reform that requires all Massachusetts residents to have health insurance, we would like to ensure that clients served by DPH are educated and enrolled in appropriate health insurance programs. With 150,000 residents enrolled since last summer, we would like to maintain this success by monitoring the effects of health care reform by continually collecting, analyzing, and reviewing data. Guiding our actions will be the goal of implementing measures to maximize quality and minimize cost to all residents (Chapter 58).

To meet our goals, we will provide training to DPH staff and contracted agencies so they can better advise and enroll clients into appropriate health insurance programs. In

addition, we hope to design a DPH-funded mechanism that will assist newly enrolled individuals to meet their co-payments and/or deductibles. We will also examine if this greater insurance coverage will lead to less DPH unit-based service utilization and if appropriate, redirect these funds to other key areas.

Build Public Health Capacity at Local and State Levels

Through our regional meetings, we have heard many concerns about how local public health agencies often feel disconnected from each other and from DPH. To address this issue, we will support the regionalization process and increase local and state health capacity across program areas. We will also ensure that emergency preparedness within DPH and in local communities is strengthened.

Our first year will focus on becoming an active participant in regionalization efforts and increasing the amount of grants and external funding for priority areas to communities across Massachusetts.

Maintain Commitment to Core Public Health Activities

As a Department, we would like to reinforce our strong commitment to the mission of public health. This includes strengthening evidence-based decision-making at the Public Health Council, the Department's Board, and throughout DPH. We will also do our best to enhance and highlight achievements of programs across DPH.

Now that the Department of Public Health has determined our top six priorities to guide our actions and decisions onward, we will work to prepare public documents of these priorities to inform Massachusetts residents the work we are concentrating on. Moreover, we will identify action steps as well as communications, legislative, and fundraising goals to implement each priority. We also plan to continue our model of regional dialogues on a regular basis to keep abreast of the changing or continuing public health concerns in each region of Massachusetts. It has been a busy but productive first few months. We look forward, with great anticipation, to the work ahead.

Environmental Public Health Tracking (EPHT)

*Suzanne K. Condon, Associate Commissioner
Center for Environmental Health;
Martha Steele, Deputy Director
Center for Environmental Health*

In 2002 the Massachusetts Department of Public Health, Bureau of Environmental Health (MDPH/BEH) received federal funding from the Centers for Disease Control and Prevention (CDC) to conduct Environmental Public Health Tracking (EPHT). Massachusetts entered into a cooperative agreement to develop infrastructure enhancement and a data linkage model for environmental public health surveillance as part of a demonstration project. Unlike research, environmental surveillance is the tracking of certain acute and chronic diseases suspected of having an environmental connection. CDC Director Dr. Julie L. Gerberding states, "...linking environmental and health data will enable a timely response to potential public health problems related to the environment" (CDC, 2004).

Massachusetts used this cooperative agreement to explore three important health issues. They include: the prevalence of Systemic Lupus Erythematosus (SLE) in residents of the city of Boston and the relationship with residential proximity to hazardous waste sites containing chemicals suggested in the literature to play a role in SLE (e.g. petroleum distillates), the presence of polychlorinated biphenyl compounds (PCB) exposure and developmental disabilities in residents of Berkshire County and the statewide prevalence of pediatric asthma in children ages 5-14 in relation to indoor air quality (IAQ).

Environmental Public Health Tracking (EPHT) is the ongoing collection, integration, analysis and interpretation of data about environmental hazards, exposure to environmental hazards, and human health effects potentially related to exposure to environmental hazards. It also includes the dissemination of information learned from this data collection effort. The mission of EPHT is to improve the health of communities. Using information from an environmental public health tracking network, federal, state and local agencies as

well as the medical community and advocacy groups will be better prepared to develop and evaluate effective public health actions to prevent or control chronic and acute diseases that can be linked to hazards in the environment. In addition, the public will have a better understanding of what is occurring in their communities and what actions they may take to protect or improve their health (EPHT Program: Closing America's Environmental Public Health Gap 2004, CDC).

The environment plays an important role in human growth and development. Researchers have related exposures to some environmental hazards with specific diseases, for example, exposure to asbestos and lung cancer. Numerous other associations between environmental exposures and health effects are suspected but need further research. However systems that actually track and/or link exposures to health effects are rare. For tracking systems already in existence, the information is usually not compatible with environmental databases making data linking of hazards (asbestos) to health effects (lung cancer) extremely difficult. With enhanced surveillance certain diseases will be more readily available to determine incidence, prevalence and trends data.

We are now entering the Network Implementation phase of EPHT along with the CDC and seventeen other state partners across the US. Several lessons have been learned from our EPHT efforts thus far. For example, we know the pediatric asthma prevalence rate is 10.6% in Massachusetts, one of the highest in the nation. The IAQ and asthma project demonstrated the ability to collect community based information and link asthma data with IAQ results from schools. This work in Massachusetts was featured in a recent US CDC report to Congress. Linkage results demonstrated that rates of asthma were statistically significantly associated with increased levels of mold and moisture. Readily available asthma data also allows MA BEH and local health officials to respond to public concerns in a timely fashion.

The presence of PCB exposures and developmental disabilities in residents in Berkshire County ran into a barrier called FERPA (Family Educational Rights & Privacy Act). This act mandates that no school based records of any student can be shared without active parental consent. Most public health officials do not agree that this was the intent of FERPA when passed originally. Efforts are underway in Congress to amend FERPA in order to allow public health officials and other covered entities access to needed information. Finally the SLE and petroleum distillates in the city of Boston project exposed the challenges of tracking a complex, multi-systemic chronic disease and linking with environmental factors. The results suggest that historical opportunities for exposure to petroleum distillates in some Boston neighborhoods may have played a role in the development of SLE. These findings should be interpreted with caution however they provide an important hypothesis for future research.

For further information on EPHT, contact the project coordinator at 617-624-5757 or visit www.mass.gov/dph/beh and scroll down to Environmental Public Health Tracking.

What is the Coalition for Local Public Health?

With the plethora of Coalitions proliferating across the public health landscape, confusion arises about the history and mission of the Coalition for Local Public Health (CLPH). It started in 1998 at the suggestion of legislators who pointed out that lobbying for public health resources would be more effective if the five constituent organizations collaborated. Thus the Coalition for Local Public Health was founded by MAHB, MHOA, MEHA, MPHA and MAPHN with a mission to collectively promote healthy communities in Massachusetts through strong boards of health and health departments. Our organizations represent over 3,000 citizens and health professionals interested in supporting the Commonwealth's local health infrastructure. We believe the current local health infrastructure is insufficient to respond rapidly to both routine and acute health events.

In 2003, after two years of study and debate, the Coalition produced a report entitled, *A Case for Improving the Massachusetts Local Public Health Infrastructure*. In that same year, the CLPH was a key participant in DPH's first application for the new Bioterrorism Funds. It was the CLPH that assisted DPH in drawing up the boundaries of the 5 Emergency Preparedness Regions. The Coalition also advocated from the outset for 60% of the BT funding going to support local health boards and departments.

CLPH goals / accomplishments include:

- Strategic Planning for Local Public Health;
- Legislative work: local health, budget, population-focused nursing, vaccinations, State Laboratory;
- Advocate for DPH contracts with CLPH member organizations for capacity building support;
- Information sharing and coordination of CLPH member activities;
- Statewide nurse advisor position;
- Establishment of Institute of Local Public Health for work-force development;
- Establishment of State/Local Advisory Council to improve communication and decision making.

In 2006 the Coalition funded a Work-force Survey, which was subsequently incorporated into the MAHB on-line database. (see p. 35)

The Coalition represents its constituent members on the Statewide Emergency Preparedness Advisory Committee.

After CLPH provided data on local health and met with the Regionalization Project Committee, it was decided that CLPH members would join the project. A primary concern was that local public health interests be represented among what had initially been more of an academic approach to Regionalization.

Each CLPH member organization selects two representatives to attend monthly meetings. MAHB is represented by Executive Director Marcia Benes and Staff Attorney Cheryl Sbarra. CLPH minutes can be read at www.mhoa.com/clph/ and are linked with each of the CLPH organizations' websites.

Human/Wildlife Interactions: When Worlds Collide

by Claudia Sarti MDPH

In a world where the urbanization of formerly rural areas is taking place on a larger and larger scale, it's inevitable that people experience more frequent interactions with wildlife and wildlife species, many of which have formerly gone unnoticed by the public at large.

A recent article in *The Amherst Bulletin* (July 06, 2007) warned motorists to be aware of potential wildlife encounters such as occurred in Phillipston on June 23rd, 2007. A Wendell resident was killed when the car she was driving hit and killed a moose in the westbound lane of Route 2. Another moose was struck and killed by a tractor trailer truck on Route 202 in Pelham within weeks of the first incident. Whether they make the news or not, these types of encounters are occurring with greater frequency. Residents in much more thickly settled areas such as Agawam have reported seeing bobcats strolling through their yards. For years it has been rumored that the northern cougar has once again made a reappearance in the Quabbin valley area after having been extirpated for almost 100 years. Canadian geese have wreaked havoc for years with public water supplies and beaches by raising fecal coliform levels in the water.

One of the primary "problems" targeted in human/wildlife interactions is the general human perception that wilderness and its fauna must conform to human expectations; an unfortunate and sometimes dangerous prospect when humans and wildlife "collide."

It has been estimated that in the residential U.S., 25-75% of households feed wildlife as a common practice – this means **intentional** feeding, not the rabbit or deer that bypasses the garden fence to get at your fruits and vegetables. In spite of the warnings from public health departments and officials from the Massachusetts Division of Fisheries and Wildlife, the deliberate human behaviors which attract wild visitors to urban and suburban areas continues, resulting in an increase in the volume of "nuisance" wildlife calls fielded by public health officials, and the number of doctor visits and hospitalizations due to aggressive or defensive wild animal behaviors.

Remember the Yogi Bear cartoons with the constant refrain of "please don't feed the bears!" The refrain continues, but with a slightly altered message: "please don't feed the wildlife" – the interactions could be dangerous to your health and safety". So why do these practices continue? Howard & Jones 2004 In: *Urban Wildlife: More Than Meets the Eye* (Eds Lunney & Burgin), list the following reasons: 1) Feeding wildlife gives pleasure to the person or persons; 2) to educate themselves and their families about nature ; and 3) to deliberately attract wildlife to their yards for their viewing/interaction pleasure. A smaller percentage of those polled genuinely want to "help" what they perceive to be orphaned or injured wildlife and end up unwittingly breaking state and federal laws as well as exposing themselves and their families to possible zoonotic diseases of public health importance, or personal injury. When fielding calls from the public regarding human/wildlife encounters, keep in mind that a wild animal that allows itself to be picked up and/or handled by humans is very likely ill. Children are notorious for picking up small wild rodents and bringing them home or to school for "show and tell."

While most species of wildlife do not adapt to the increased numbers of people and homes - most species prefer to stay away from human disturbance - some species are thriving if not exploding in numbers. In urban/suburban areas, pigeons, raccoons, possums, fox, squirrels, coyote, and bears have adapted quite well and have become opportunistic and "tolerant" to some degree to the human world. Many of these species capitalize on the abundant supply of man-made foods and shelters found in suburbia allowing them to survive and reproduce more successfully than in areas where these artificial resources are lacking. It is important to keep in mind that most of the human/wildlife interactions are mutual. Humans have expectations and animals have expectations. In the natural way of things, wild animals are quite capable of making environmental "assessments" which may be both subtle and sophisticated. Case in point: the raccoon family that visits the improperly sealed or neglected dumpsters and trash cans at the neighboring apartment complex. Residents may find their antics

amusing at first, but often also frustrating and annoying. Easily acclimated to the presence of humans, many wild animals appear to lose their fear, but retain their "wildness." So, the child who attempts to play with the raccoon, or the adult who tries to hand-feed a wild animal table scraps or other "goodies" find themselves subtly enabling the continued behavior. The animal makes the "sophisticated" link between the presence of humans and food. The ultimate result of most of these encounters is typically an unprovoked "attack" leading to bite wounds and scratches to the person or persons. The person perceives the animal as having acted "aggressively," or "abnormally." The animal, on the other hand, may either perceive the interaction as threatening or is simply reacting as a wild animal does – taking its sustenance where it can, and quickly – unmindful of tooth and claw. In the end? The persons exposed are submitted to post-exposure rabies prophylaxis, and the animal is destroyed. This scenario is based on an actual incident report received on my zoonotic disease hotline in western Massachusetts.

In another recent incident, a family purportedly found and brought home a juvenile raccoon which was assumed to be "abandoned" by its mother. Repeated phone calls to the resident seemed to make no impact (in fact, the resident hung up on several different state and federal agencies after being told that the animal would need to be euthanized for rabies analysis – the residents had assumed that it could simply be "blood tested" for the rabies virus and then kept as a pet). The very real (and frightening) threat of contracting rabies from contact with this animal was summarily disregarded. The family was advised to seek medical attention immediately. The residents were subsequently mailed information from the Massachusetts Department of Public Health regarding rabies and rabies post-exposure vaccination. Whether out of ignorance or blatant disregard for Massachusetts wildlife laws which clearly state that no person other than a licensed wildlife rehabilitator can be in possession of a wild animal, it is clear that the public health of those family members and anyone else that came into physical contact with the animal was severely compromised.

While it is impossible to stop the inevitable spread of the human population into areas largely populated by wildlife of varying species, and wildlife encounters (invited or uninvited) become a part of day to day life in many areas, it's important for public health officials to be proactive as opposed to simply reactive when humans and wildlife come face to face. Personal education and awareness of the issues is an absolute must before health officials can be expected to educate the community. While the majority of us in the public health field perceive the tenets of wildlife encounter education, "common sense," be aware that the public at large does not.

In addition to rabies – which always seems to come directly to the forefront of people's minds when dealing with wildlife encounters – there is a wealth of other zoonotic diseases which can be actively or passively transmitted to humans through even "casual" contact with wild animals or wild animal "remains" such as urine and droppings.

Zoonoses (or diseases which are passed from animals to people by way of direct transmission, indirect contact or through means of an insect vector) of wildlife include, but are not limited to: rabies, E.coli bacteria, bubonic plague, Lyme disease, erlichiosis, leptospirosis, psittacosis, salmonellosis, raccoon roundworms, toxoplasmosis, giardia and Hanta virus. Cases of E.coli contamination in Massachusetts due to the high populations of migratory waterfowl has been of concern to the public health in water supplies and swimming areas in the past few years. Cases of giardia infection in humans, otherwise known as "beaver fever," have also been reported. The last group of health-related problems involves physical trauma from a wild animal. If a person is bitten or scratched, public health officials should advise immediate medical attention where the wound can be properly cleaned and treated under medical supervision. The question of rabies should ALWAYS be addressed, depending upon the species of animal and vaccination history. After a bite wound, one of four courses of action should be decided upon:

1. Whether to begin post-exposure rabies prophylaxis immediately.

2. Whether to have a veterinarian or animal control officer euthanize the animal and submit the brain to the State Laboratory for rabies analysis.

3. Determine when there is no risk of rabies and no action is necessary.

4. Receive a tetanus vaccination or anti-toxin. Recommend that the advice of a physician be sought to help make the best possible decisions regarding the management of the injury. 1

The implications for human-wildlife interactions can be serious and should be *taken* seriously. According to the Mass. Dept. of Fisheries and Wildlife (MDFW), "Many kinds of wildlife will always make their home in residential areas, the key is learning when and how to live with wildlife and to make sure your behavior is keeping wild things wild and wary of people."

The first rule regarding invasive or problem wildlife should always be to disenable wildlife from continuing their interactions with humans. Trash cans should be tightly lidded and locked when possible, pet foods should be stored indoors and pets fed indoors as necessary, areas where wild animals can enter dwellings should be appropriately sealed to prevent entrance, the creation of "denning" areas should be prevented (sometimes all this takes is placing wire mesh around areas where wild animals are likely to take up habitation), and above all, NEVER FEED OR HANDLE WILD ANIMALS UNDER ANY CIRCUMSTANCES. If you feel that you have found an injured or orphaned wild animal, call the MDFW for a list of licensed rehabilitators in your area – do not try to take matters into your own hands, even if it means that the animal may be potentially euthanized. Keep in mind that under Massachusetts General Law, Chapter 131, Section 37, property owners may have the right to use lawful means to destroy wildlife **in the act of causing damage or threatening personal safety. The public may *only* address wildlife actually causing damage or posing immediate threats and may not randomly destroy wildlife as a preventive measure.** It is also illegal for a property owner to live-trap a problem animal and move it for release onto public or private property.

Some individuals and pest control businesses have been granted Problem Animal Control (PAC) permits in accordance with 321 CMR 2.14. Individuals or organizations which hold these permits may "harass, take, and destroy, or may release or liberate on site as stipulated in 321 CMR 2.14 (23) non-domesticated reptiles, birds, and mammals the actions of which have or are endangering the life and health of humans or domestic animals; damaging the property of a person, obstructing the reasonable and comfortable use of property by the owner or tenant thereof or otherwise producing such material annoyance, inconvenience, and discomfort that can reasonably be presumed to result in damage or hurt to persons or their property. Specifically, PAC permits authorize the handling of skunk, muskrat, raccoon, weasel, red fox, gray fox, porcupine, Norway rat, mice, voles, red, gray and flying squirrel, opossum, chipmunk, rabbit, woodchuck, snapping turtle, moles, pigeon, house sparrow, starling and certain species of bats.

"Individuals with damage caused by beaver flooding must contact their **local Board of Health for a determination and necessary permitting.** Damage caused by migratory birds and other birds such as woodpeckers, which are protected under both state and federal law, require a permit from the U.S. Department of Agriculture. Fees may be charged for PAC services. **If you as a property owner call on a PAC agent, he or she should not only handle your immediate situation but also provide information and suggestions which will prevent future wildlife problems.**"²

Please advise residents to leave wild animals wild when the opportunity presents itself. Their presence around us can be an enriching and rewarding experience as we view them from a distance. Asking for anything more can have unwelcome and potentially dangerous consequences.

(Footnotes)

¹ adapted from the following: Pocket Guide to the Humane Control of Wildlife in Cities & Towns, The Humane Society of the United States, 1991.

Basic Wildlife Rehabilitation 1AB, International Wildlife Rehabilitation Council, 1992. ² Massachusetts Department of Fisheries and Wildlife

The Conflict of Interest Law And Boards of Health

by Carol Carson

Massachusetts State Ethics Commission

Members and employees of a municipal board of health — even those who are unpaid and serve solely in an advisory capacity — are considered municipal employees and are covered by the conflict of interest law, G.L. c. 268A. The purpose of the law is to ensure that private interests and relationships do not conflict with public officials' and employees' responsibilities.

Prohibited Actions (§19)

The law generally prohibits municipal officials and employees from taking any official action on matters which would foreseeably affect their own financial interests, or the financial interests of: their immediate family members; partners; employers other than their municipality; those with whom they are negotiating or have an arrangement concerning prospective employment; or organizations for which they serve as an officer, director, partner or trustee. If one of these matters comes up for consideration at a board of health meeting, members must recuse themselves from any action on the matter, and make sure that the minutes of the meeting reflect the recusal. We recommend that members leave the room during both the deliberation and the vote on the matter.

The prohibition on acting in these matters is very broad. Municipal officials and employees may not participate as a board of health member, volunteer or employee in any way: they may not vote on such matters; they may not participate in, moderate or chair discussions about them; they may not delegate them to a subordinate; they may not prepare analyses or other documentation concerning them; and they may not take any other type of official action regarding them.

For example, if an immediate family member of a board member works as health agent, the board member may not participate in the board's consideration of an increase in salary for that position. A health agent may not join in the board's discussions or actions regarding the inspection of a facility owned by his or her

private employer. If an employee is an officer of a charitable organization, he or she may not recommend that the organization should be granted a permit or license.

Note that there are some special cases, including:

Actions Involving Competitor: Actions which affect one business are presumed to also indirectly affect its geographic competitors. Because of this, §19 generally prohibits municipal officials and employees from participating on matters involving a geographic competitor to any business owned by municipal officials and employees, their immediate family members, business partners, private employers, prospective employers, or organizations for which they serve as an officer, director, partner or trustee. See EC-COI-87-31; 87-1; 86-13.

Actions Regarding Abutters: Under the law, property owners are presumed to have a financial interest in matters affecting abutting and nearby property. Therefore, municipal officials and employees generally may not act on any matter involving a business or property which directly abuts their own property, or which is close enough that the outcome of the matter will affect their own property values. Also, they generally may not act in their official capacity on matters involving a business or property which is near to or directly abuts businesses or property owned by their immediate family members, business partners, private employers, prospective employers, or organizations for which they serve as an officer, director, partner or trustee. See Commission Advisory No. 05-02: Voting on Matters Affecting Abutting or Nearby Property for more information.

Municipal Officials and Employees who are Appointed to their Position: before taking any action on a matter subject to §19 restrictions, appointed municipal officials and employees may disclose all the facts about the situation to their appointing authority, and ask for a written determination that the financial interest involved is not likely to affect the integrity of their official actions. If they

receive this type of "prior permission" from their appointing authority, they may then participate in the matter. Note that municipal officials and employees may not use this exemption if they are elected to their position.

Appearances (§23)

The law prohibits municipal officials and employees from taking any type of official action that could create an appearance of impropriety, or acting in a manner which could cause an impartial observer to believe that their actions are tainted with bias or favoritism. Before taking any type of action which could appear to be biased, municipal officials and employees must first make a full, written disclosure of all the relevant facts: if elected, this disclosure should be filed with the City or Town Clerk; if appointed, they must file this disclosure with their appointing authority. We also recommend that municipal officials and employees make the disclosure public at the board meeting where the issue arises, and see that the minutes of the meeting reflect the disclosure. Instances where municipal officials and employees should file such a disclosure include: actions affecting the financial interests of a relative who is not an immediate family member; and actions involving a friend, neighbor, business associate, past employer, or anyone with whom they have a significant personal or professional relationship. If municipal officials and employees are in doubt as to whether there is an "appearance problem", the safest approach is to make the disclosure.

Acting on Behalf of Others and Private Employment (§§ 17 and 18)

Acting as Agent: The law generally prohibits municipal officials and employees from acting as agent or representative for anyone other than their municipality in connection with any matter of direct and substantial interest to their municipality. For instance, they may not contact a municipal agency on behalf of a private individual, company, not-for-profit organization, group, association, or other special interest. They may not appear before a municipal agency on someone else's behalf. They may not allow their name to be used on documents (such as applications, certifications, plans or surveys) which are submitted to a municipal board by someone else. They

may not serve as spokesperson or otherwise represent anyone in connection with municipal business.

Also, except in very rare instances, municipal officials and employees may not privately inspect septic systems for compliance with "Title 5". Under "Title 5", the inspector is generally considered to be acting on behalf of the private homeowner, both while performing the inspection and when a copy of the inspection report is filed with the municipality.

Private Compensation: Section 17 also prohibits municipal officials and employees from receiving pay or other compensation from anyone other than their city or town in connection with any matter (such as "Title 5" inspections) that involves their municipality.

Exemptions to Section 17: There are some exemptions to these general prohibitions. For instance, if municipal officials and employees positions are designated as "special municipal employee" positions^{5/}, they generally may act as agent and be paid in connection with a matter involving their municipality, provided that: they have never personally participated in the matter as a municipal official; the matter is not within their official responsibility; and the matter is not pending before their municipal agency.

Also, municipal officials and employees may always act on their own behalf, and they may always state their own personal points of view. However, they should always make it clear that they are acting on their own behalf, and not acting in any official capacity. Municipal officials and employees may even represent themselves before the municipal agency they work for (but remember that they may not take any type of official action on a matter that affects them).

There is also a "local option" exemption to §17, regarding the installation of septic systems. If the city or town has adopted the provisions of G.L. c. 111, §26G, municipal officials and employees may work privately as a septic system installer. However, neither municipal officials and employees nor any other member of their board of health may perform an installation inspection of a septic system installed by them or their company: these inspections must be performed either

by the board of health of a different municipality, or by a "special health agent" appointed by the mayor or board of selectmen.

For information about other exemptions to §17, see Commission Advisory No. 88-01: Municipal Employees Acting as Agent

Restrictions on Business Partners: Municipal officials' and employees' business partners are generally subject to the same restrictions on private employment.

Restrictions After Municipal Officials and Employees Leave Government Service: Municipal officials and employees may never be paid by anyone but their municipality in connection with a particular matter in which they participated as public officials or employees. For example, a former health agent could not be paid as a consultant to help a local company correct the code violations he noted in a health inspection.

Also, there is a one-year "cooling off" period before municipal officials and employees may personally appear before — or telephone or write to — a municipal agency in connection with a matter that was under their official responsibility, even if they did not participate in it.

For more information on these restrictions, see Commission Advisory No. 90-01: Negotiating for Prospective Employment and Summary No. 13: Former Municipal Employees

Multiple Office Holding (§20)

The law generally prohibits municipal officials and employees from holding more than one position with the same municipality. However, there are many exemptions in this section of the law. Municipal officials and employees may hold as many uncompensated positions as they wish, so long as all of the positions you hold are unpaid. They also may hold multiple elected positions, so long as all of the positions they hold are elected. For information about other exemptions, see Commission Primer: Financial Interests in Contracts for Municipal Employees.

To get advice, call the Commission's "attorney-of-the-day" at (617)-371-9500 or for those outside the 617 area, call (888)485-4766.

Financial Interests in Contracts with the Municipality (§20)

Municipal officials and employees are generally prohibited from having a direct or indirect financial interest in a contract with their municipality. However, there are many exemptions in this section of the law. For instance, municipal officials and employees may own less than 1% of the stock of a company that does business with their municipality. Also, if their position is designated as a "special municipal employee" position, the Board of Selectmen, City Council or Board of Aldermen may vote to grant them an exemption, provided that they also file a disclosure of their interest in the contract with the City or Town Clerk. For information about other exemptions, contact Town Counsel, City Solicitor or the Legal Division of the State Ethics Commission.

Unwarranted Privileges (§23)

The law prohibits municipal officials and employees from using their official position to obtain any type of "unwarranted privilege" for themselves or anyone else. For example: municipal officials and employees may not use official resources (e.g., official cars, office equipment, stationery, the municipal seal) for personal or political purposes. They may not use their official position to get any type of preferential treatment for themselves or anyone else. They may not use their official title to endorse products, companies or activities.

Confidential Information (§23)

The law prohibits municipal officials and employees from publicly revealing confidential information, and from using it for private or political purposes. Anything that is not a "public record" under the Massachusetts Public Records Law is considered confidential.

Bribes (§2)

Municipal officials and employees may not ever accept anything that is given to them with an “intent to influence” their official actions. Anything — of any value — may be considered a bribe if it is given to them in exchange for them agreeing to take some type of official action (or if they agree to not take an official action they would otherwise take).

Gifts and Gratuities (§3)

Municipal officials and employees may not accept anything worth \$50 or more if it is given to them because of something they did, or might do, as a municipal official. Examples of regulated gratuities may include: sports tickets, costs of drinks and meals, travel expenses, conference fees, gifts of appreciation, entertainment expenses, free use of vacation homes and complimentary tickets to charitable events. Generally, if the gift is being given to municipal officials and employees because of their official duties, they may not accept it if it is worth \$50 or more.

Note that municipal officials and employees may not accept multiple gifts from the same person or company if the total value of all the gifts is \$50 or more. Also, they may not accept gifts worth a total of \$50 or more from different sources sharing a “common interest”. The law treats a standing offer (e.g., “I can get you Celtics tickets anytime you want them”) as if it were a case of multiple gifts. Municipal officials and employees should refuse standing offers, since they may be considered to be worth \$50 or more.

Additional information can be found on the State Ethics Commission website (www.mass.gov/ethics). The site provides educational materials, disclosure forms, press releases, summaries of advisory opinions and enforcement actions, commission meeting and hearing notices, and much more about the commission and the conflict of interest law. The State Ethics Commission also provides free educational seminars to municipalities and public groups throughout Massachusetts. Groups interested in sponsoring a seminar should contact the State Ethics Commission at 617-371-9500.

Top Ten Things Municipal Employees Need to Know About the Conflict Law

10. Whether elected or appointed, paid or unpaid, part-time or full-time, you are a municipal employee subject to the conflict of interest law.

9. Don't accept meals, tickets or gifts as a reward for any official action or to influence an official action.

8. Don't accept paid, private work that is incompatible with your public position or duties.

7. Don't disclose or use confidential information that you obtained as a municipal employee.

6. Don't use your official position to get special benefits for yourself or anyone else that are not available to the general public.

5. Publicly disclose significant relationships or circumstances that might cause anyone to think that you might be unfair or biased in your official actions.

4. Don't act on any matter affecting your own financial interests or those of family members, partners or organizations with which you have a private relationship.

3. Don't accept an additional (even unpaid) municipal position before seeking legal advice.

2. After you leave municipal service, don't accept money from or represent anyone other than the municipality if the private work involves a matter that you worked on as a municipal employee.

1. Get Advice! To get advice, call the Commission's “attorney-of-the-day” at (617)-371-9500 or for those outside the 617 area, call (888)485-4766.

Massachusetts Participates in Mid-America Public Health Institute

by Michael Coughlin MS, Director of Health and Human Services for the City of Fall River

Each year the Mid-America Regional Public Health Leadership Institute (MARPHLI) at the University of Illinois at Chicago provides training for approximately 50 public health practice fellows from around the country. In 2005-2006 Massachusetts sent a delegation of fifteen public health leaders to the fourteenth annual institute, themed "The Interface Between Management and Leadership". We met as a full group three times at conferences in the Midwest. The Massachusetts delegation met numerous times over the course of the year to plan joint projects that are part of the Institute curriculum.

MARPHLI is an academic-based, yearlong leadership development experience for public health practitioners and community partners. The goal of the Institute is to train public health practitioners and their community partners, who have been identified as holding leadership positions, to develop personal, team, agency, community and professional leadership skills in order to improve the infrastructure of public health through the application of the core functions and essential services of public health.

The Boston University School of Public Health and the CDC sponsored the Massachusetts delegation. Special thanks to Dan Merrigan from BU who organized the delegation and acted as travel agent for the three trips to the Midwest! Other Members included several senior staff from the Massachusetts Department of Public Health and Board of Health staff from around Massachusetts. I was honored to participate as a representative of the Massachusetts Association of Health Boards, as well as the Fall River Board of Health.

The Institute was developed to assist practitioners holding leadership positions at all levels of the public health system to

become more effective in helping their agencies carry out core assessment, policy development and assurance functions.

The Institute began with a four-day conference outside Chicago that kicked-off the yearlong learning experience. During the conference we met in small groups with a pre-assigned Mentor to discuss leadership concepts and to be introduced to the case study method and the Institute's Case Study Manual. We met again six months after the initial conference in Indianapolis with a focus on developing leadership tools and skills through workshops. Each team presented a case study for discussion and critique by the whole group. The final event, the twelve-month meeting held back in the Chicago area, focused on the development of critical communication tools and skills. It was the culminating Institute experience as the Fellows presented their group Technical Assistance Projects and submitted their individual Mentor/Agency Projects.

Participants heard a number of interesting presentations from national leaders in public health and other fields. These ranged from Brad Perkins from the CDC Director's Office speaking about new directions in the agency; Arthur Himmelman, a well-known author and speaker on collaboration; and Lester Munson of Sports Illustrated, speaking about approaching the media. We also heard from several leading local health directors from the Midwest. MARPHLI Director Dr. Louis Rowitz, of the University of Illinois at Chicago School of Public Health, gave several presentations on issues at the cutting edge of public health nationally.

Each participant worked on an individual project over the course of the year. My personal project involved development of a workplan to expand the Healthy City Fall River Initiative to include an emergency preparedness component. We are currently pulling that together in Fall River, as the Greater Fall River Medical Reserve Corps has emerged in part from our Healthy City Initiative – *A Healthy City is a Prepared City*.

But the most exciting part of the MARPHLI experience is the interaction among the participants. Massachusetts divided into two teams. I was a member of "Mob Fuchsia"

(the color of our team nameplates) collaborated over the course of the year to develop a public health case study based on a Hepatitis outbreak and a final project that involved the development of a tool to ease the use of the Health Alert Network (HHAN). My Mob Fuchsia teammates included Suzanne Condon, and Priscilla Neves, from DPH, Rich Day from Chelmsford, Pat Iyer from Randolph, Ruth Clay from Malden, and our mentor, Geoff Wilkinson from MPHA. Other participants from Massachusetts included Kathy Atkinson, Nancy Ridley, Sally Fogerty, and Steve Hughes from DPH, Harold Cox from the Cambridge Health Alliance (now based at BUSPH), Terri Khoury from Canton, Steve Ward from Watertown, and Mike Moore from Concord.

This experience provided a rare opportunity for public health practitioners at the state and local level to sit together for extended periods to build relationships, share ideas, jointly plan our work – to Collaborate! The MARPHLI experience has much to teach us as the Massachusetts public health system moves towards a greater emphasis on collaboration.

New England Alliance for Public Health Workforce Development

The New England Alliance for Public Health Workforce Development (Alliance) is one of 14 public health training centers across the country funded by the Health Resources and Services Administration (HRSA). These centers improve the Nation's public health system by strengthening the technical, scientific, managerial, and leadership skills and abilities of the current and future public health workforce. The Alliance is housed at the Boston University School of Public Health (BUSPH) and has Academic Partners from Harvard, Tufts, UMass Amherst and Yale. It also has Practice Partners from state, regional and local public health agencies and professional public & environmental health associations, including MAHB.

Visit the Alliance website at: <http://www.bu.edu/publichealthworkforce>. The site provides easy access to training opportunities, resources, career websites and links to a searchable distance-learning database and other public health organizations and

training calendars. It also provides free access to distance-learning training videos and modules and a link to the MAHB elearning course *Conflict Resolution*.

Recent Alliance highlights include:

On-line offerings:

- Massachusetts Public Health Association's *Safe and Healthy Homes* video
- BUSPH's *Program Evaluation in a Nutshell* lecture by Professor Jonathan Howland
- *Hepatitis in Sparta*, a case-based module developed by BUSPH Professor Wayne LaMorte and Dr. Robert Schadt, along with other BUSPH faculty and state (Al DeMaria) and local public health practitioners (Christine Connolly and Alan Balsam)
- *Doing it Right: Swimming Pool and Bathing Beach Sampling* developed with the BUSPH Office of Teaching, Learning and Technology and the Massachusetts Environmental Health Association (MEHA)

Classroom training:

- *Foundations for Local Public Health Practice; Tools Needed to Get the Job Done* in collaboration with the Massachusetts Local Public Health Institute. Upcoming conferences on the Built Environment and Hoarding are planned for later in 2007

Leadership Development

- This past spring the Alliance held two New England-wide Advisory Council meetings in Marlboro, MA to develop a program for emerging public health leaders in New England. The Council will be seeking funds to create a *New England Public Health Leadership Development and Training Network* that will focus on individual competency attainment, including management skill development, and will contain a strong mentor component.

The Alliance is pleased to collaborate with MAHB on two important MAHB initiatives: elearning center and Massachusetts community profiles.

Board of Health Responsibility and Amalgam Separators:

by Al Dube

*Vice President of Sales, Dental Division
SolmeteX, Inc.*

Local Board of Health's are given the responsibility for enforcement of several regulations related to business and industry in their towns. In 2004 the Mass DEP chose to regulate the dental industry with a requirement to install amalgam separators. Mandatory installation date for all dentists who remove, place or alter amalgam fillings to install an amalgam separator was June 2006. At this time, all dentists in the State of Massachusetts must have an amalgam separator in their office if they place or remove or alter amalgam fillings.

So how did this come about? The Governors of New England and the Eastern Canadian Provinces in 1995 met and chose mercury as the number one toxin they wished to remove from the waste waters discharged into lakes, rivers and streams in their respective areas. As such several initiatives to reduce the level of mercury have been put into place. The US EPA in 1999 placed a directive, through the Clean Water Act, directed to Publicly Owned Treatment Works (POTW's) also known as sewage treatment plants allowing these POTW's to limit the amount of mercury the industrial and commercial users of their systems can discharge into the sewers. This Pollution Prevention (P2) strategy is an attempt to catch the hazardous waste at its source (source reduction). Treating at the source reduces the amount of hazardous waste the POTW's would have to treat. At the source the treatment flow is limited and thus easier to treat than at the POTW where they treat literally millions of gallons of waste a day. The efficiencies and economics are proving to be much greater when treated at the source. As such all six New England States as well as the additional states of NY, Oregon and Washington have regulations requiring dental offices to follow "Best Management Practice" and install amalgam separators.

The Mass DEP website link for the 2004 regulation is <http://www.mass.gov/dep/service/regulations/310cmr73.pdf>. Dental offices have been identified as the number one source of mercury to POTW's, not only in Massachusetts but around the country and the world. The Mass 370 CMR 73 regulation is a point source P2 program for dental offices to capture and recycle the mercury found in amalgam before it has the opportunity to go to the POTW's. Mass DEP has given the responsibility for enforcement, verifying the dentists have complied with the regulation, to the BOH of each community.

How significant is the dental mercury discharge? Your silver fillings known as amalgam contain approximately 50% mercury by weight. Where regulation requiring amalgam separators have been enforced for 6 months or greater, reductions of mercury levels at POTW's have been reduced by 50% or greater and in some places in Europe where regulation have been enforced longer, 95% reductions have been documented.

So what is an amalgam separator? Simply, they are solids collectors which have certified collection efficiency. ISO 11143 is the current standard by which systems must be certified to remove greater than 95% of the solids by weight. Mass DEP has chosen to increase that efficiency to 98% ISO 11143. These systems are installed on the suction or vacuum side between the operatory chair and vacuum pump itself. When looking for an amalgam separator in a dental office, the most logical place to look is near where the vacuum pump is (utility closet, basement ...). There are several systems installed around Massachusetts with all systems having been ISO 11143 certified. What is more important is that each office has a separator, not which manufacture or the type.

Additionally, as you read the regulation, there are other requirements to check. Line cleaners, which are used to keep the vacuum lines from building up sludge and causing loss of vacuum, need to have a pH of between 6 and 9 and be non-oxidizing in nature. Oxidation of amalgam fillings has shown they can break down the filling and solubilize the mercury which is more difficult to remove. These cleaners are administered once a day, once a week, or once a month if they are used.

The regulation also requires that dentists with septic systems, must in addition to the amalgam separator, install a system to collect all the commercial waste generated from the practice and send that waste off by a hazardous waste hauler for treatment. These can be carboys, (tanks with handles for portability) or what is known as a tight tank (essentially an additional septic tank) which can be pumped out like a septic tank is.

Each dental office should be visit to verify the installation of an amalgam separator. If the dental office discharges to a septic system, do not be surprised to find that a secondary tank has not been installed. Most dentists have not read the regulation. It has been my experience they are unaware of this part of the regulation. When visiting the dental office ask to see the amalgam separator. If the staff does not understand what that means, then ask to see their vacuum / high speed suction pump. The system will be attached most likely in that area. Related to the additional tank which might be needed for septic systems, there would either be a manhole cover outside or a tank near or around the vacuum pump.

Do a little research before visiting a dental office. There are several publications available on the web which will show you what these systems look like, Google "amalgam separators" and a host of sites will pop up. The ADA JADA articles from May 2002 and August 2003 would be helpful as well as the

publication from the Minnesota Dental Association. Amalgam separators as a whole are not very large however they do look different. It would be helpful to have a concept of what you're looking for. The pH of line cleaners will be a little trickier as the pH may not be listed on the container. There is a list of line cleaner pH values available through the Mass DEP. A visit to a dental office for this purpose should only take 10 minutes or so with a cooperative dental office and should be rather simple as the vast majority of dental offices in Massachusetts have installed a separator. It could turn out to be your most pleasant visit ever to the dentist.

Regional Collaboration Enhances Public Health

*by Michael Coughlin MS Fall River Public
Health Director*

This is an exciting time for local public health in Massachusetts. Over the past two years, local public health is seeing the benefit of federal funding for emergency preparedness, as the networks of Regional Emergency Preparedness Coalitions and Medical Reserve Corps units are becoming an increasingly important part of the Massachusetts public health infrastructure.

After years of budget cuts, the Legislature and the Governor increased the budget of the Department of Public Health by \$74.4 million in FY 08 over the original FY 07 budget and are actively considering legislation that would increase local public health funds much further. Some of these funds will benefit local health directly, all will serve to strengthen the public health system.

The new Commissioner of Public Health is a former local health director. John Auerbach, comes to DPH after nine years as the Director of the Boston Public Health Commission. He is signaling his commitment to enhancing local public health in the state by building a strong collaborative relationship with the Local Public Health Advisory Council and the Coalition for Local Public Health, actively exploring ways to increase local health

resources such as restoring the DPH Office of Local Health, and supporting the ongoing work of the Massachusetts Public Health Regionalization Project (MPHRP).

Taken together, these developments provide a unique opportunity to expand the definition of core public health functions in Massachusetts and will enable local public health to better fulfill the core public health functions of *assurance, assessment, and policy development*, as well as the ten essential services of public health (see appendix) outlined by the Centers for Disease Control and Prevention (CDC, n.d.), that identify a framework for the responsibilities of local public health systems.

The Regionalization Project

An important venue for current discussion of efforts to enhance local public health is the Massachusetts Public Health Regionalization Project. The MPHRP, chaired by Harold Cox of the Boston University School of Public Health, was formed in 2005 to research opportunities to enhance local public health through regional collaborations. In a recent progress report (MPHRP, 2007) the group outlined key principles of a regionalized public health system:

- 1) The system must respect existing legal authority of local boards of health (home rule).
- 2) Communities need incentives, not mandates, to participate.
- 3) One size doesn't fit all. Different models of regional structure and operations will allow communities to form regions appropriate to their needs and capacities. (We have identified four distinct models.)
- 4) The system will require adequate state funding.
- 5) We must augment, not reduce, the existing local public health workforce.

The Project recognizes that regionalization must include incentives for local Boards of Health and other organizations to collaborate regionally as well as adequate and sustainable state funding to support new regional structures. Other elements of the proposed structures include establishing

standards for local and regional public health performance, increased training opportunities, establishing appropriate and legal new governing structures, and integrating the public health system with other related state and local systems including medical care, human services, and public safety (MPHRP, 2007).

Growing Commitment to Collaboration for Public Health

What the Regionalization Project aims to do most is to increase public health resources through increased regional collaboration. The initial report of the group defines public health regionalization as "two or more communities pooling their resources to provide public health resources" (MPHRP, 2006, p. 5). Arthur Himmelman, an author and trainer in collaborative strategies to support public health and other community improvement efforts, has a similar but more expansive definition: "exchanging information, altering activities, sharing resources, and enhancing the capacity of another for mutual benefit and to achieve a common purpose" (Himmelman, 2002, p.3)." In fact, local health departments in Massachusetts for a number of years have exchanged information and shared resources to enforce tobacco control laws, organize Medical Reserve Corps Units, and in several regional public health districts, to provide a full range of public health services.

There is a growing commitment to collaboration within the entire field of public health. The Institute of Medicine (IOM) in its 2003 report on the Future of Public Health in the 21st Century calls for increased collaboration among public health departments and between public health departments and other community organizations. The report states, "Many communities, through individuals and groups, have become partners with health departments in health improvement and have become leaders in spearheading collaborative efforts" (IOM, 2003, p. 181). Today, in Massachusetts, local health departments are working with community organizations on a variety of health improvement projects; in limited collaborations, to apply for and implement grant-funded programs addressing specific issues like school nutrition or anti-gang activities; and in broad-based partner-

ships, such as the Community Health Network Areas (CHNAs) or healthy community initiatives that seek to improve the health and well-being of entire communities.

Another aspect of collaboration is the effort to foster more cross-sector collaboration within public health. A popular metaphor that describes the lack of cross-sector collaboration is that public health is organized in "silos". Because of categorical funding, specialized training, narrowly defined certification and licensure programs, and in some cases tradition, public health is organized in very rigid structures with high walls, like silos, that are hard to climb over if the involved parties want to work together.

The IOM report is instructive again, "Ultimate legal responsibility for safeguarding and promoting the health of the population rests with governmental public agencies at the federal, state, and local levels, but those agencies cannot be effective acting alone. They must be partners in a broader network of individuals and organizations with the potential to act within a public health system."(IOM, 2003, p. 184-5). Regional collaborations in Massachusetts will be most effective if they serve to promote new partnerships between local public health and other individuals and organizations that play a role in assuring the public's health including health care and mental health service providers, social service and community development organizations, educators, the Chamber of Commerce, elected officials, and any other committed individuals and groups.

Collaborative Models in Massachusetts

As we consider regional collaboration as a means of improving public health service delivery, it is helpful to look at successful models already in place. The following initiatives are examples of successful collaborations that have enhanced the capacity of the involved organizations to meet one or more of the ten essential public health services.

Public Health Districts Communities pool resources to deliver local public health services through a district public health organization. This increases the capacity of small communities to hire professional staff to

enforce public health regulations and monitor and investigate health problems in the community. Regional public health districts combine the resources of the participating communities so that the whole is greater than the sum of the parts. Residents of the member communities in the Tri-Town, Quabbin, and Nashoba Public Health Districts enjoy the benefits of professional public health services that exceed what they could pay for if the communities were each on their own.

Emergency Preparedness Coalitions Regional coalitions organized to work with DPH to meet deliverables from CDC federal funding; activities include exercises and drills, mutual aid, emergency dispensing, and MRC units. These groups, working with a host agent and DPH regional staff, are emerging as key regional planning groups for emergency preparedness activities. The Region 4B EP coalition (Metropolitan Boston) utilizes the Cambridge Health Alliance as host agent, and has organized 27 communities that tap into sophisticated public health resources, including an epidemiologist. Region 4B regularly holds regional exercises and drills, is negotiating mutual aid pacts between participating cities, instituted a 24/7 emergency notification system, and has a large MRC Unit.

Regional Centers for Healthy Communities (RCHCs) Promote partnerships among regional and local public health leaders and to encourage collaboration among communities. Provide technical assistance to communities on organizational development, data analysis, evaluation, community mobilization, and other areas.

Medical Reserve Corps. The **Medical Reserve Corps** (MRC) was founded by the federal government shortly after 9/11. The national system brings together people who have skills related to health care as well as citizen volunteers. They serve as a team during times of emergency or need in their own community. MRC units are trained to respond to emergencies and they provide education, outreach and various health services throughout the year. They function as part of their local emergency preparedness teams. There are over forty MRC units in Massachusetts.

One exciting aspect of the MRCs is that they bring together so many of the different participants in public health. The mission of the MRCs – to prepare for an emergency – is universal. The MRCs are a forum that brings together local public health practitioners whose principal focus has been on one particular aspect of public health. For example, many health agents focus on environmental health; public health nurses often emphasize immunization and communicable disease prevention and treatment; and other practitioners are employed in categorical health program addressing HIV/AIDS, substance abuse, nutrition, or another issue. In recent Massachusetts history, the MRCs are the place where the most broad-based participation has occurred between public health practitioners and representatives of other sectors of the public, including the medical community, schools, faith communities, business, public safety, and lay volunteers. The “*silos*” often come down in the MRCs.

Community Health Network Areas (CHNAs). A Community Health Network is a local coalition of public, non-profit, and private sectors working together to build healthier communities in Massachusetts through community-based prevention planning and health promotion. Since 1994, CHNAs have successfully sponsored many community health improvement projects in their regions.

Successful CHNAs are an example of the community-based partnerships recommended by the IOM. They inform people about health issues, mobilize community partnerships, develop individual and community health improvement efforts, assess effectiveness and quality of public health services. In recent years, CHNAs have made creative use of modest funding from DPH Determination of Need community investment funds to organize their own health improvement projects and to fund community-based projects in their regions through mini-grant programs.

Healthy Community Initiatives. The healthy communities approach defines health broadly by identifying the key determinants of the community’s health and identifies

strategies to address them. Many factors, including social, environmental, and biological conditions shape community health (IOM). Among the specific factors are quality education, adequate housing, gainful employment, job skills training, efficient public transportation, recreational opportunities, healthy and clean physical environments, and health education and preventive services (Ayre, Clough, Norris 2002).

Healthy City Fall River (HCFR) is a cooperative venture between Partners for a Healthier Community, Inc. (CHNA 25) and the City of Fall River. Initiated in 2003, HCFR is a community wide collaboration that addresses many of the essential public health services:

- A community-wide visioning process that incorporated vision statements and input from over 1,000 local residents.
- A community action plan with five priorities – safety and substance abuse, recreation and environment, health education, job training and employment, and community development and housing.
- Incorporation of over 130 individual health improvement projects affiliated with HCFR
- Ongoing community awareness, education and outreach efforts that include a quarterly newsletter, a 500 page website (<http://www.healthycityfallriver.org/>), and frequent community events.
- Plans call for an assessment of progress and a renewed visioning process in 2009.

Regional Centers for Healthy Communities (RCHCs). The Massachusetts Regional Center System provides new and more effective ways to build support for health and safety related initiatives in communities across the Commonwealth. The capacity-building system includes six Regional Centers for Healthy Communities (RCHCs). The goals of the RCHCs are to promote partnerships among regional and local public health leaders and to encourage collaboration among communities to reduce the use of alcohol, tobacco, and other drugs, particularly among

youth and young adults. Among the services RCHCs provide that promote collaboration are:

- Convening cross-regional networks and connections, e.g. meetings for all of the CHNAs in one region
- Data collection and analysis of public health status in communities
- Public health library services
- Technical assistance on meeting procedure, decision-making models, leadership structures, coalition and partnership building strategies, and program evaluation.

Expanding the Definition of Core Local/Regional Public Health Services

The new emphasis on collaboration within public health in Massachusetts provides two important opportunities. First, as new resources (i.e. state funding) become available to support local public health, regional distribution maximizes its effectiveness. DPH, working with the MPHRP is committed to that process. Regional collaboration will increase the overall capacity of local public health to fulfill the core functions and ten essential services.

Another opportunity presents itself. To break down the silos in public health. We have learned enough from the recent history of public health collaboration to derive some lessons that are instructive as we move forward:

1. Recognize the need for direct and explicit support for cross-sector collaboration for local and regional public health.
2. Model collaboration at the state, regional, and local level.
3. Move beyond hierarchical top-down approaches to allow direct investments in communities and regions in response to community and regional priorities.
4. Integrate cross-sector collaboration into program and funding strategies.

5. Broaden the education and training available to the public health workforce to include communication, facilitation, outreach, cultural competency, and other general organizational skills.

6. Establish governing structures that are inclusive and collaborative.

Increased regional collaboration and breaking down the silos will have the additional benefit of expanding the core definition of local public health. As we move forward in this process the support for comprehensive population-based approaches to public health that addresses all of the core functions and essential services will grow and become institutionalized.

Future Directions

The MPHRP is moving forward aggressively in the summer and fall of 2007 to further develop their plans – to “put meat on the bones” in the words of the Chairman. At the same time DPH Commissioner Auerbach is actively exploring ways of moving incrementally forward to support regional collaboration, including distribution of funds and providing other support from the department to regional and local health structures. Legislation is proposed that will provide additional local and regional resources.

None of the collaborative models discussed above, considered alone, promises to deliver all of the essential services. But taken as a whole, these models do address the entire list. The challenge ahead is to identify the important lessons learned from each model and move to construct regional collaboratives that take advantage of existing relationships and build on them. The emerging system will look different in every region. The initial period will be one of experimentation and refinement, as we search for the best models and establish new best practices. As the process moves forward public health practitioners can support collaboration by involving themselves in existing collaborative models, expanding the participation of those collaboratives, and seeking out opportunities to develop new ones. DPH, local health departments, and other public health organizations and practitioners have an

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opportunity to tear down the public health silos and work together to ensure a healthier future for Massachusetts.

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Safer Pest Prevention

By Eric Weltman, Massachusetts Public Health Association

Pests or chemicals? Fortunately, it's a false choice, as residents of Boston's public housing are learning. Thanks to a grant from the W.K. Kellogg Foundation, residents of targeted projects are learning about and obtaining the benefits of Integrated Pest Management (IPM), a preventative approach to reducing both pests and pesticides. It's an approach that local health boards could encourage with building managers, apartment superintendents, and homeowners, as well as school and day care administrators covered by the Children's Protection Act.

Pests, such as roaches, mice, and rats, are both a nuisance and a health problem. The skin and droppings they leave behind can

...scientific evidence has increasingly demonstrated that toxic chemicals, including pesticides, are contributing to a growing epidemic of chronic diseases and disorders.... very low levels of exposure to fetuses and infants can cause significant, long-lasting damage. For example, a review of 31 scientific studies of childhood cancer concluded that the use of pesticides in the home during pregnancy was associated with increased likelihood of brain cancer and leukemia.

trigger asthma attacks, allergies, and other respiratory problems. "Roach dust," made up

of roach body parts and droppings, is a very strong asthma trigger, as is mice urine and dander.

However, pesticides pose their own health threats. In recent decades, scientific evidence has increasingly demonstrated that toxic chemicals, including pesticides, are contributing to a growing epidemic of chronic diseases and disorders. New information shows the crucial impact of the timing of toxic exposure – chiefly, that very low levels of exposure to fetuses and infants can cause significant, long-lasting damage. For example, a review of 31 scientific studies of childhood cancer concluded that the use of pesticides in the home during pregnancy was associated with increased likelihood of brain cancer and leukemia.

Conventional pest control tends to ignore the causes of pest infestations, such as poor sanitation and building disrepair, and instead

relies on routine, scheduled pesticide applications. As a result, pest infestations continue to occur, as does the spraying. In contrast, IPM is what could be called a public health approach to pest management. Don Rivard, an IPM expert and consultant to the Boston project, describes IPM as “a common sense approach using multiple strategies to solve pest problems.” In public health terms, it’s all about *prevention*: long-term solutions utilizing more information about the source of the problem and involving multiple stakeholders in implementing remedies.

In short, IPM works by cutting off the basic needs of pests – food, water, and hiding places – and eliminating their access to our homes, schools, and other buildings. There are four fundamental IPM principles: 1) monitoring pest populations, such as with sticky traps, to find out where pests are living and hiding; 2) blocking pest access and entryways; 3) eliminating food and water; 4) selectively applying least-toxic pest controls, such as mechanical traps, biological controls, and targeted pesticide applications, such as boric acid into wall voids.

The National Coalition Against the Misuse of Pesticides cites six IPM program essentials on their web site, BeyondPesticides.org:

1. **Monitoring.** This includes regular site inspections and trapping to determine the types and infestation levels of pests at each site.
2. **Record-Keeping.** A record-keeping system is essential to establish trends and patterns in pest outbreaks.
3. **Action Levels.** Pests are virtually never eradicated. An action level is the population size which requires remedial action for human health, economic, or aesthetic reasons.
4. **Prevention.** Preventive measures must be incorporated into the existing structures and designs for new structures. Prevention is and should be the primary means of pest control.

the most crucial element of IPM is *education*. Education is an essential component of an IPM program, whether in an apartment building, school, or office building. This education program, in the form of workshops, training sessions, and written materials should involve every building occupant, from residents to administrators, from maintenance workers to food service staff.

5. **Tactics Criteria.** If prevention fails, then use mechanical traps, biological controls, or, if necessary, the least-toxic and low-impact pesticides, applied to minimize exposure to humans and non-target organisms.

6. **Evaluation.** A regular evaluation program is essential to determine the success of the pest management strategies.

There’s much about IPM that’s common sense – but that also may involve changes in the behavior of building occupants and greater attention to building maintenance and repair. Shutting down pest food supply could mean using covered trash cans and taking out the garbage daily. Cutting off their source of water could involve using caulk to seal leaks around sinks and showers. Sealing them out could involve repairing window screens, covering vents with wire mesh, repairing cracks in baseboards and around pipes, and cleaning up clutter.

Of course, the most crucial element of IPM is *education*. Education is an essential component of an IPM program, whether in an apartment building, school, or office building. This education program, in the form of workshops, training sessions, and written materials should involve every building occupant, from residents to administrators,

from maintenance workers to food service staff. As Rivard notes, the key to sustainability of an IPM program is *partnership* – and that necessitates knowledge, buy-in, and involvement on the part of everyone.

That's a lesson well appreciated by the partners in the Boston Healthy Pest Free Housing Initiative, which includes the Boston Public Health Commission, Boston Housing Authority, Coalition for Boston Public Housing, West Broadway Task Force, Boston University School of Public Health, New England Asthma Regional Council, and Massachusetts Public Health Association. The goal of the project is to reduce both pest infestation and pesticide use in public housing, and through this effort develop a model for implementing IPM in low-income housing. Over a three-year period, the project is working in 15 BHA developments.

Project planners realized from the outset that residents learn best from other residents.

Hence, the project planners hired and trained "Community Health Advocates" from the community to conduct outreach and in-home education. In addition to English, languages spoken by the advocates include Spanish, Somali, and Haitian Creole. The advocates were provided with several weeks of training on everything from the hazards of pesticide exposure to use of "Safe Pest Control Kits."

And then they set about the challenging work of helping residents prepare for services by IPM contractors hired by the BHA. At one housing development, health advocates went door to door offering plastic food storage containers in exchange for pesticides. The advocates collected a wide array of pesticides including over-the-counter sprays and bombs, as well as two packets of a pesticide restricted to licensed applicators but available under the counter in small shops and bodegas throughout Boston.

At another project, health advocates reported having trouble getting into homes. Advocates also found young mothers with small children who appeared overwhelmed and as a result had difficulty preparing for the IPM service and addressing sanitation and clutter in their apartments. While advocates focus on IPM, they are trained to assist families to obtain other health and social services.

But the message is starting to get through, and the project is developing resources that will enable other communities to take advantage of IPM. These include a handbook for building managers on IPM and an IPM policy white paper.

Beyond information, of course, there's always a need for vigilance on the part of health advocates and officials. For example, according to an August 2007 report by State Auditor Joe DeNucci, 24 percent of the Commonwealth's public and private schools and 59 percent of our day care centers are not in compliance with the Children's Protection Act of 2000. The law requires schools and child care centers to submit plans for reducing the use of pesticides in their facilities and to implement IPM programs.

Thanks to Ellie Goldberg, M.Ed, Healthy Kids: The Key to Basics, for reviewing a draft of this article.

RESOURCES

- Massachusetts Public Health Association: www.mphaweb.org
- National Coalition Against the Misuse of Pesticides: www.beyondpesticides.org
- New England Asthma Regional Council: www.asthmaregionalcouncil.org
- Alliance for Healthy Homes: www.afhh.org
- Safer Pest Control Project: www.spcpweb.org

BOARD OF HEALTH REGULATIONS vs. TOWN BYLAWS

by Cheryl Sbarra, MAHB Staff Counsel

The question often arises as to whether a city or town, under the Home Rule Amendment, can circumvent board of health regulations by passing ordinances and bylaws that conflict with these regulations. A basic understanding of both the Home Rule Amendment and the legal status of Boards of Health is necessary to answer this question.

The Home Rule Amendment gives cities and towns in Massachusetts the power to govern locally. This amendment states, in part, that "any city or town may, by the adoption, amendment, or repeal of local ordinances or bylaws, exercise any power or function which the general court has power to confer upon it which is not inconsistent with the constitution or laws enacted by the general court ...and which is not denied, either expressly or by clear implication, to the city or town by its charter." (M.G.L.A. Const.Amend. Art. 2, s. 6, as amended by Amend. Art. 89). Section 7 of the Home Rule Amendment lists several limitations on this grant of power. In addition, any legislative action, whether state or local, must be in furtherance of the legislature's authority to act for the good of the state and must not contravene limitations placed on the state's legislative power by the state or federal constitutions. Generally, in cases dealing with inconsistencies between local regulations and state statutes, considerable latitude is given to municipalities. A sharp conflict between local and state laws is required before a local regulation is held invalid. Bloom v. City of Winchester 363 Mass. 136, 293 N.E.2d 268 (1973). Thus, a city or town may legislate more stringently on the same matter as an act of the Legislature unless the legislature expressly preempts the local government from doing so or has so comprehensively legislated on the subject matter as to leave no room for local action. At first glance it seems that the Home Rule Amendment gives cities and towns the ability to overturn health board regulations by

At first glance it seems that the Home Rule Amendment gives cities and towns the ability to overturn health board regulations by passing ordinances and bylaws that conflict with these regulations but this is not the case.

passing ordinances and by-laws that conflict with these regulations but this is not the case. As part of the legislative preemption under the Home Rule Amendment, a municipality's exercise of powers under the amendment is limited to acts which are not inconsistent with those taken by agents of the Legislature. In Massachusetts, Boards of Health are agents of the State Legislature. They derive their power from the Legislature and their duties have been defined by the Legislature. (See, Board of Health of North Adams v. Mayor of North Adams et al., 334 N.E.2d 34 (1975); Gibney v. Mayor of Fall River, 29 N.E.2d 133 (1940).) In Gibney, the Supreme Judicial Court stated that "a municipality can exercise no direction or control over one whose duties have been defined by the Legislature." Thus, town efforts to usurp the authority of boards of health generally fail.

The Commonwealth of Massachusetts has delegated its authority to regulate public health and make public health policy at the local level to Boards of Health. This is done through broadly worded statutes such as M.G.L. ch. 111, s. 31 which authorizes Boards of Health to make reasonable health regulations and M.G.L. ch. 111, s.122 which directs Boards of Health to "examine all nuisances, sources of filth and causes of sickness". Several other statutes delegate more specific regulatory authority to local Boards of Health which supplement these broad grants of power. As a result, Boards of Health have virtually unlimited power to regulate all areas of public health.

people coping with asthma or other respiratory diseases.

Whether the move to regulate comes from concerned citizens or board members, accurate information is a necessary precursor to informed decisions and successful implementation. It is recommended that any grass roots effort be supplemented with technical information delivered by professionals. If resources allow, utilize registered professional engineers, attorneys, or other experts to provide information to your community. It is important to build public support for health regulations, especially those that can be misunderstood as controlling personal activity. Without public education, well intended and technically correct actions can backfire politically. Environmental tobacco smoke regulation is a highly successful example also relating to air quality, personal rights and public health. Professionals and citizen advocates teamed up to build support for regulations banning smoking in public places.

Facts on Outdoor Wood Boilers and Wood Smoke

The banning of OWB's by Boards of Health is another example of the health needs of a community taking priority over the personal priorities and misguided actions of individuals. The large amounts of wood smoke from an Outdoor Wood Boiler have been widely recognized as a threat to public health by several organizations including, but not limited to The New England American Lung Association, Mass DEP, and states of Maine, Maryland, New York, Vermont and Washington.

If a board is considering regulatory action, it is better to ban outdoor wood boilers before they are installed because the \$10,000-\$20,000 installed cost can create a financial hardship for those affected which promotes political pressure to maintain them. Since the banning of existing OWB's may spawn litigation by the OWB owners, prohibiting OWBs before they are installed is an effective proactive measure. The Longmeadow regulation cited both Ch111 section 31 and section 31C, which is the air pollution regulation section requiring DEP approval. This regula-

tion has already been approved by DEP and can be found on the MAHB website resource library.

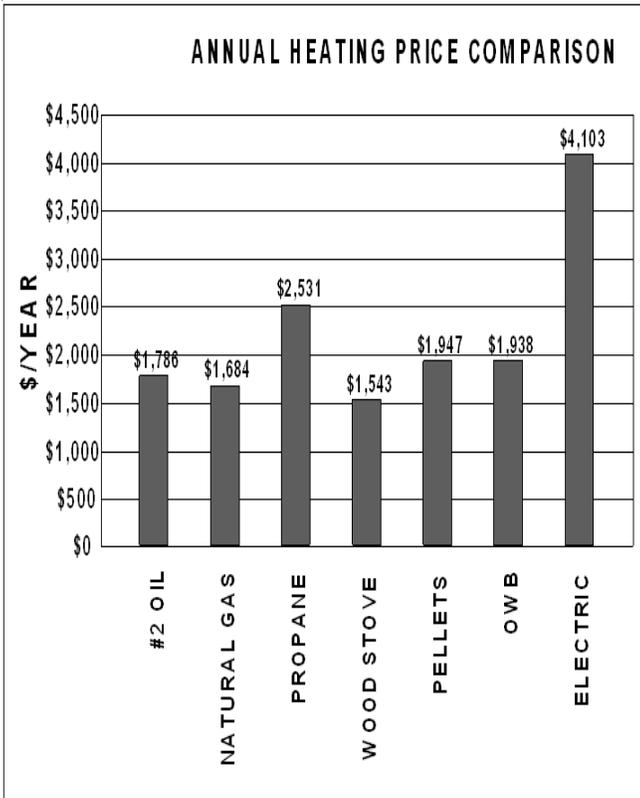
Solid Fuels can be a True Health Hazard

In a misguided attempt to stay warm for less money, along with misplaced concerns for global warming, many people are mistakenly choosing to burn solid fuels such as cord wood, wood pellets, coal, or corn pellets. The alleged popularity and benefit of "biomass" or heating with wood and other solid fuels is simply not justified by the expense, detrimental health impacts of second hand" wood smoke, fire hazards, and poor heating performance of solid fueled wood, coal or corn stoves.

The media including: newspapers, magazines, movies and television often promote the use of wood stoves and fireplaces as being romantic and natural. Such images however, do not responsibly present the detrimental health and safety ramifications of heating with solid fuels nor do they discuss more cost-effective alternatives that would promote improved energy efficiency, conservation, air quality, health, and safety. OWB manufacturers are actively marketing a message to the public that it is their patriotic duty to part with up to \$20,000 or more to spew smoke with their devices; promoting the further increase in fine particulate pollution by the dirtiest form of heat will not improve health quality or help the environment.

Interest in energy cost reduction and conservation has increased recently due to the following developments:

- a) Increase in natural gas prices caused by increased demand; the Wall Street Journal has reported that the increase in demand can be directly linked to the increased utilization of natural gas for electric power generation.
- b) Unrest in the Mid-East;; Increase in demand for oil and higher prices caused by the strong global economy; concern for price volatility caused by low domestic oil supplies;
- c) The Energy Policy Act of 2005



As a licensed professional engineer in the Commonwealth of Massachusetts and a college professor specializing in energy management and alternative energy, I have major concerns with wood heat. There is inadequate economic benefit to burn wood; a modern high efficiency oil, propane or natural gas appliance will provide excellent performance especially in comparison to electric heat. A modern conventional system also provides the opportunity for zoning and set-back temperature control to achieve both improved comfort and economy.

Fine particulate emissions from OWBs can be higher because:

- 1) The OWBs are much less efficient; with more incomplete combustion, especially when an OWB is in its idling (smoldering) mode. While an EPA woodstove will release 2.4 gm of PM 2.5 per lb of wood, an OWB can release 3-4 times the PM per 2.5 lb of wood burned.
- 2) The firing rate of an OWB is much higher. While an EPA wood stove has a maximum energy input rate of 15,000 Btu/hr (1 kg of wood/hr), an OWB can be 10-20+ times the firing rate of an EPA wood stove.

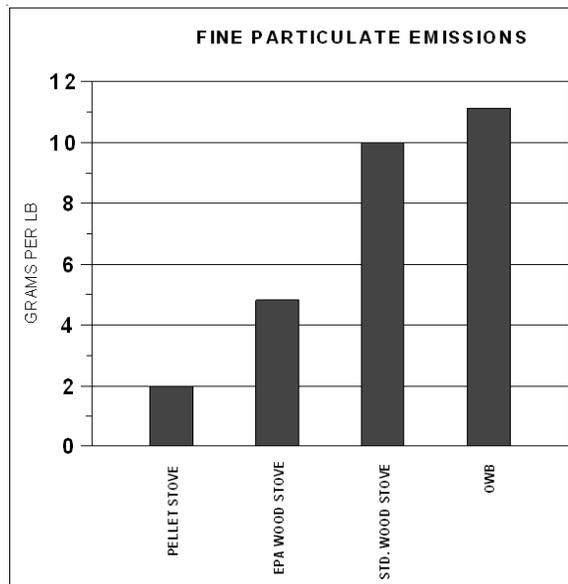
3) Some larger OWBs have more than double the firing rate (500,000 Btu/hr) of an average outdoor wood boiler and pollute even more.

4) The quality and type of wood placed in an OWB, such as wet or soft woods will produce far more smoke than seasoned hard wood.

Economic Comparison

A comparison of heating consumption and cost based on a home consuming 100 million BTU of energy per year (1 BTU will heat 1 lb of water 1°F):

Fuel	Unit Price	Efficiency
#2 heating oil	\$2.10/gallon	84%
850 gal	\$1,788	
Natural gas	\$1.60/therm	95%
1,053 therms	\$1,684	
Propane	\$2.20/gallon	95%
1,1050 gallon	\$2,531	
Wood Stove	\$200/cord	54%
7.7 cords	\$1,543	
Wood Pellets	\$4.98/40 lb bag	78%
391 bags	\$1,947	
Outdoor Boiler	\$200/cord	43%
9.7 cords	\$1,938	
Electric	\$0.14/k/Wh	100%
42,875Kwh	\$4,103	



Price Comparison Based on Annual Heating Consumption of 100 Million BTU:

When one adds the \$2,000 to \$20,000 initial equipment cost and the ongoing value of a person's time to clean the equipment and load the fuel, an investment in a solid fueled wood or pellet stove or outdoor wood boiler may have no reasonable economic payback.

Health Impacts

There can be significant health impacts; a wood stove is 500-1,000 times dirtier than a modern natural gas, propane or oil appliance.

Wood smoke emissions contain fine particulate pollution as well as other carcinogens and can have similar detrimental health effects as tobacco smoke. Experts have documented that the chemical components in wood smoke cause irritation to the respiratory system resulting in bronchitis, asthma, and sinus infections weakening the immune system, and lower resistance to infectious diseases. It is time for more responsible energy policies to direct citizens in a more environmentally and economically smarter route on the highway of the 21st Century. The public should know that returning home in a gas guzzling SUV to their glass enclosed family room heated with a wood stove and a redwood Jacuzzi heated with wood from an 80 year old red oak tree may not be environmentally friendly. We need to utilize equipment that has comparable emission levels and protects clean air quality standards. We need to more aggressively promote energy & electrical conservation to reduce our emissions from, and consumption of fossil fuels. Burning healthy hardwood trees is not the proper utilization of our forests. Biomass proponents have never explained how chopping down and burning oxygen producing, CO2 consuming trees reduces global warming. **BURNING WOOD IS NOT ENVIRONMENTALLY NEUTRAL.**

There are other very good reasons to utilize conventional fuels:

"Wood smoke is significantly associated with respiratory function decrements in young children with asthma." In the Seattle area, "60%-90% of particles in residential neighborhoods ... are from wood burning year round."

-EPA report: "A Summary of The Emissions Characterization and Non-Cancer Respiratory Effects of Wood Smoke," 12/1993.

"Individuals can also help reduce particulate pollution through simple steps such as using energy efficient light bulbs and appliances, maintaining cars properly, insulating homes, and curtailing use of wood stoves for home heating in favor of cleaner fuels." -NRDC report: "Danger in the air," 1996.

One Outdoor Wood Boiler (OWB) emits as much fine particulate pollution as:

- 2 heavy-duty diesel trucks
- 12 EPA-certified indoor wood stoves
- 45 passenger cars
- 1,000 homes with oil heat
- 1,800 homes with natural gas heat

~New York State AG's Environmental Protection Bureau, 2005.

Summary and recommendations:

1) Everyone must know the detrimental effects of secondhand wood smoke; solid fueled appliances should have warning labels as do cigarettes; we all have a right to know of substances that are unhealthful; people will make better fuel use choices if better informed.

2) In order to reduce Global Warming, we should all aggressively implement energy and electrical conservation to reduce fossil fuel emissions in our homes and in our vehicles. Example: additional zones and/or nighttime set-backs will save energy in our homes and reduced highway speeds would improve mileage on our vehicles. Take advantage of the tax credits from the Energy Policy Act of 2005:

New Windows or Storm Windows:	\$200
New Doors or Storm Doors:	\$200
Insulation:	\$500
High Efficiency Furnace/Boiler:	\$150
Solar Hot Water:	\$2,000

3) It is far better to convert from electric heating to conventional fuels instead of converting from electric to wood;

4) Re-establish the right of every citizen in this country to breath clean air and not be detrimentally impacted by fine particulate pollution; if we were putting creosote in our water supply there would be a public outcry;

5) Inform the public that during periods of fog or nighttime inversions atmospheric conditions may not allow sufficient atmospheric ventilation to justify using a wood stove or fireplace 24 hours a day. A conventional heating system must also be installed so that cleaner conventional fuels can be utilized when atmospheric conditions do not allow sufficient atmospheric ventilation or when the solid fuel appliance becomes a nuisance to abutters.

Lung Association Calls Outdoor Wood Boilers a Health Hazard

Outdoor Wood Boilers were the focus of the American Lung Association of Maine press event, being identified by the organization as a health hazard to the public health. Supporters of the organization gathered at a local wood stove retail shop to highlight the risks associated with operating Outdoor Wood Boilers (OWBs). They called on the Maine Department of Environmental Protection (DEP) and OWB manufacturers to take swift action to make these products safer.

Because OWBs are not subject to any federal or state regulations limiting their emissions, pollution levels can be extremely high compared to other wood burning devices that are currently being sold. Edward Miller, CEO of the American Lung Association of Maine, stated, "The Lung Association considers the use of Outdoor Wood Boilers to be a serious emerging lung health hazard that must be addressed immediately."

Substantial scientific evidence has shown that wood smoke can cause and/or contribute to cardiopulmonary disease, asthma, bronchitis, emphysema and other problems such as eye irritation, sinus infections, and acid reflux. My experience with fine particulate air pollution began fourteen years ago when my neighbor installed an **EPA approved** wood stove (with

a catalytic converter) that resulted in my wife and older son developing bronchitis, my infant son being hospitalized and my normally healthy lungs became so irritated that I was coughing up blood. I resolved the problem with my neighbor by investing in a natural gas hydronic heating system for their family room so they could utilize a heating system that releases 1/1000th the PM10 and PM 2.5 pollution of a wood stove. After this experience, I became an advocate in my community identifying problems with the use of solid fuels and promoted Best Available Technologies or "**BATs**" utilizing conventional heating equipment.

In subsequent years, I have presented documentation to the Longmeadow Board of Health resulting in the Longmeadow Bertucci's Wood burning Pizza Restaurant converting its 80 ton/year wood burning oven to natural gas. The emissions from the wood oven became a nuisance after the wood smoke continued to detrimentally impact the occupants of a nearby commercial office building, including the chairman of the Board of Health.

-The author is a registered professional engineer in the states of: CT, MA, ME, NH, NJ, NY, PA, RI & VT and a Certified Energy Manager (CEM) by the Association of Energy Engineers. He teaches Energy Management, Alternative Energy and a Materials Science Laboratory at Western New England College.

Additional Resources:

American Lung Association - www.lungma.org

Massachusetts DEP - www.MDEP.state.ma.us

Burning Issues - www.burningissues.org

State of New York - www.oag.state.ny.us/press/2005/avg/August%202005.pdf

State of Vermont:www.vtwoodsmoke.org

State of Washington:www.ecy.wa.gov/programs/air/AOP_Permits/Boiler/Outdoor_Boilers_home.html

State of Maryland - www.mde.state.md.us/ResearchCenter/Publications/General/eMDE/vol2no4/burners.asp

Northeast States for Coordinated Air Use Management (NESCAUM): Information on OWB's - www.nescaum.org/topics/outdoor-hydronic-heaters

ANIMAL HOARDING: PUBLIC HEALTH IMPACT AND RESOLUTION

by Claudia Sarti

It's a health inspector's worst nightmare (no, it's not the one where you're being chased by an angry public armed with torches and pitchforks). It's a call to help with a hoarding situation. Housing inspections can be difficult enough with their own pitfalls and problems. Add compulsive hoarding to the equation, and that pitfall you try to avoid may be literal. Compulsive hoarding/cluttering can be defined as **the collection or failure to discard large numbers of objects even when their storage causes significant clutter and impairment to basic living activities such as moving around the house, cooking, cleaning or sleeping.**¹

As many health inspectors already know, from personal experience, trying to address housing, as well as health and safety concerns where a compulsive hoarder lives can be an arduous and mentally taxing ordeal. The situation at hand oftentimes does not resolve itself with a single sweeping cleanout of the residence. Cluttering can be an ingrained habit. Once the premises are cleaned, the hoarder simply may begin the cycle of collecting all over again. In addition to the accumulation of "stuff," there may be an additional element which presents a challenge to addressing the overall situation; this is when people hoard animals as well as objects.

Houses occupied by people who hoard animals are almost immediately recognizable even before the health inspector gets to the door. A case of animal hoarding in addition to the reported hoarding of miscellaneous materials which occurred in Granby Massachusetts was initially identified not by gaining access to the interior of the dwelling, but by the noxious and pervasive odor of cats detected from a distance of 500ft. in the middle of winter. Upon gaining access to the dwelling, the local board of health discovered a "significant depth" of cat feces on the floor throughout the dwelling (4-6"), and approximately 30-50 cats of varying ages and



degrees of wellness in the two bedroom home. The board reported having *"some history with the tenant regarding his inability to control the propagation and cleanliness of the cats."*

For most people, the term "animal hoarding" conjures up images of the quintessential eccentric "cat lady." "Hoarding is very often a symptom of a greater mental illness, such as obsessive-compulsive disorder. For most hoarders, it is likely that their actions are the result of a true pathology, even though they are still usually able to function quite well in society," says Randall Lockwood of the Humane Society of the United States (HSUS) vice president for Research and Educational Outreach.

One of the quandaries that many health departments responding to a "hoarding" case often have difficulty with is differentiating between legitimate animal sheltering or animal fanciers, and a person with a pathological problem. To help clear up the mystery, following are two sets of criteria to help determine when animal hoarding is occurring and when it is not.

The term "animal hoarder" does NOT apply to a person or persons who simply have a large number of animals in their home. According to experts, it's not the **number** of pets but **how they and their owners live** that defines hoarding. For example, someone with 10 or more dogs who keeps them in a healthy, sanitary condition would not be considered a hoarder.

Statistics on animal hoarding reveal that the primary offenders tend to share a specific set of characteristics. Animal hoarders or “collectors” often:

- Accumulate a large number of animals.
- Fail to provide minimal standards of nutrition, sanitation and veterinary care.
- Fail to act on the deteriorating condition of the animals or their environments.
- Fail to act on or recognize the negative impact of their animal collecting on their own health and well-being.²

So what is it that predisposes a person to hoard animals? This is an oft repeated question with variable answers. I will present a couple of scenarios which may help to illustrate the motivation behind the hoarding of animals.

Scenario #1: Mary* had been an animal lover and proponent of responsible pet owning all of her life. At one point, she actually worked as a veterinary nurse and then as a small shelter coordinator. Disheartened by the number of “throw-away” pets, and the high numbers of euthanasias which occur as the inevitable result of lack of space and too few appropriate adoptive homes, Mary felt that taking in a few of these homeless animals which were quite literally at “death door” would be the most humane thing to do. Mary’s coworkers always found her a bit eccentric, perhaps in part because she was older than the typical shelter worker, but also because she was all too willing to adopt and take in animals whom she deemed to be on “death row”. The majority of workers in animal shelters experience symptoms similar to those which Mary had been feeling – feelings of helplessness and resentment towards the former pet owners who seemed very cavalier in surrendering their problem, knowing full well that the final outcome might be a humane death at the hands of caring shelter staff.

Mary’s case might not be that much different than that of her colleagues, with the exception of her blind desire to “save them all” – an unrealistic expectation, though an outwardly noble one.

As Mary’s colleagues began to notice her taking on larger and larger numbers of animals, the shelter director eventually refused to adopt out any more animals to her. Taking umbrage

to the director’s admonitions to cease taking in further animals (and knowing full well that on her meager salary, Mary was struggling to get by, never mind adding a herd of animals with varying degrees of behavioral and sometimes medical problems to her home), Mary quit the shelter and decided to start her own backyard sheltering operation.

While this went well for a while – well meaning people who could no longer properly care for their animals liked the idea of a local “no-kill” shelter, where they were promised that their animals would spend the rest of their days in a loving atmosphere. Unbeknownst to many of these people, Mary was also patrolling the streets of her city looking for ferals and strays to add to her growing menagerie.

Unfortunately, by the time city public health officials were able to catch up with her, her problem had blossomed into something one might call a monstrous situation. Unable to work because of her preoccupation with keeping her animals safe, her own health had begun to take a toll, and damages to her property as the result of having too many animals in too small a space were taking a toll, too. When the health department finally arrived, they were greeted by the overwhelming stench of urine and feces, as well as an innumerable number of dogs, cats and other animals running through her home which had been all but destroyed by the animals inside. When one housing inspector opened the freezer, he was shocked to find several dead cats inside which the occupant insisted were being prepared for burial in her back yard. When asked where she slept, she revealed to inspectors a tiny room with a fold out cot and a space heater, explaining that this was the one room in the house that she did not house animals.

After an abbreviated discussion with the county health directory, and the local shelter from which Mary had resigned some years earlier, the house was deemed to be unfit for human habitation and summarily condemned. At this time, Mary was 64 years old. She was able to find alternative housing (with a no-pet clause) through the help of an elder service organization, and through copious tears and recriminations, Mary finally signed a release form so that the remaining animals in her home could be properly dealt with.

Ironically, the majority of them ended up back where they had come from initially – at the shelter where Mary had once worked, and the very thing that she had tried to protect them from (euthanasia), became the last kind thing that the shelter staff could do to end the cycle of animal suffering.

“Mary’s” situation shows only one example of animal hoarding. There are many others.

The next “story” will help to illustrate another example of compulsive animal hoarding.

Scenario #2: Martha is a woman in her early 60’s and had been a compulsive “collector” for the better part of her life. Two years after her husband of 37 years passed away (the couple was childless), her obsession with collecting possessions spilled over into the collection of cats – perhaps a way of filling her childless/companionless void of loneliness. What began as the initial acquisition of two kittens (unfortunately a male and female) for the purposes of companionship rapidly began to result in an increasing number of animals inside her residence. A woman of limited financial means, and a woman who was naturally reclusive by nature, she initially failed to follow through on the post-adoption guidelines of spaying and neutering her initial two cats. What began as two cats, rapidly multiplied exponentially in the matter of a few years. Still, Martha was thrilled with the continual new additions to her “family,” failing to recognize that the level of care needed by her pets were going largely unrecognized and unmet.

A few short years later (and several dozen cats later), Martha began to experience debilitating health problems. No longer able to leave her house, she found herself in the unfortunate position of being both unable to care for herself and being unable to provide for the animals which she accumulated. In fact, so attached was she to her furry family, that she either failed or refused to acknowledge the health and behavioral problems which were beginning to manifest themselves in her pets.

Following a 911 call for emergency assistance – Martha had suffered a debilitating stroke – first responders were shocked at the interior of the dwelling. Similar to Mary’s case, cat feces and urine were present throughout the house and covered almost every conceivable living space. Litter boxes looked as though they had not been cleaned in many, many months and empty cat food cans and empty bags littered the floor. Even more disturbing were the decomposing animal carcasses found scattered here and there – some of which had been partially cannibalized by the semi-feral, starving cats. When confronted with the obvious evidence of extreme neglect (not to mention the health code violations), Martha seemed to be oblivious to her surroundings and the suffering of the animals with which she had surrounded herself. When the county health department became involved, she continued to insist that all was well within her household and that the reports had been greatly exaggerated. When all was said and done, Martha was removed from the dwelling and was found a place in a supervised housing situation with round-the-clock medical care. No charges were pressed against her for animal neglect or cruelty – her apparent mental illness (as later diagnosed by an attending psychiatrist) testified to the fact that she was unable to clearly “see” her surroundings, much less be motivated in a positive way to correct her “unperceived” problems. Again, not a tremendously happy ending for her cats. While some of the kittens were treated by veterinarians on staff with a local animal shelter and subsequently put up for adoption, the majority were too ill or too feral to be put up for adoption and were subsequently euthanized.

Both of these scenarios involve women. While this is not meant to be a social stereotype, it has been documented that the majority of people involved in cases of animal hoarding are women (76% of all animal hoarders are female), 46% are women over the age of 60, most are unmarried and live alone, dead or sick animals were found in 80% of animal hoarding cases, and yet in 60% of the cases the hoarders did not acknowledge that there was a problem.³ Rarely do animal hoarders

harm their pets as a result of intentional cruelty or neglect. In keeping with their particular pathology, most truly believe that they are acting in the best interest of their animals.

Dr. Gary Patronek of Tufts University in Grafton has been a leader in the forefront of studying animal hoarding cases. It is estimated that there at least 700 new cases of animal hoarding, sometimes called collecting, every year in the United States.

Getting to the Root of the Problem

The Hoarding of Animals Research Consortium was established in 1997 by an interdisciplinary group that includes a veterinarian, a physician, a psychologist, social workers, and a humane society leader to study the problem, increase awareness among mental health and social services professionals and municipal officials, and develop more effective interventions.

The consortium defines an animal hoarder as someone who has:

- Accumulated a large number of animals, overwhelming that person's ability to provide even minimal standards of nutrition, sanitation, and veterinary care
- Failed to acknowledge the deteriorating condition of the animals (including disease, starvation, and even death) and household environment (severe overcrowding, very unsanitary conditions)
- Failed to recognize the negative effect of the collection on his or her own health and well-being, and on that of other household members

Though some humane organizations refer to animal hoarders as "collectors," the term does not accurately describe the behavior and may undermine efforts to gain recognition of animal hoarding as a serious public health problem. According to the consortium, hoarding denotes a pathological condition, while collecting denotes a benign hobby.⁴

It has been speculated by various mental health experts in the field of hoarding that people who participate in animal hoarding

Unfortunately, the resolution of these cases is often protracted and difficult, and the hoarder frequently resumed the behavior. Sixty percent of the hoarders studied by mental health professionals were repeat offenders.

have somehow adopted a parental role with respect to their animals. This resulted in reluctance to remove any animals, even when adequate homes were available. Many of the collectors emphasized that their animals gave them "unquestioning and uncritical love." They tended to personalize and anthropomorphize their pets and viewed themselves as rescuers of suffering or unloved animals (Worth and Beck, 1981).

Unfortunately, the resolution of these cases is often protracted and difficult, and the hoarder frequently resumed the behavior. Sixty percent of the hoarders studied by mental health professionals were repeat offenders. Several psychiatric models have been suggested for problematic animal hoarding. The **delusional model** (Lockwood, 1994) suggests that people who hoard animals suffer from a highly focused form of delusional disorder. Patronek (1999) suggested that animal hoarding may be a "warning sign for early stages of dementia," which would suggest a **dementia model**. This was based on the number of people who were placed in a residential facility or under guardianship (26%) and that the individuals showed no insight into the irrationality of their behavior. Lockwood (1994) suggested an **addictions model** based on similarities to substance abuse, including a preoccupation with animals, denial of a problem, excuses for the behavior, isolation from society, claims of persecution, and neglect of personal and environmental conditions.

Unfortunately, none of these models seem to help the public health inspector or their department when dealing with these situations. General frustration with the psychiatric

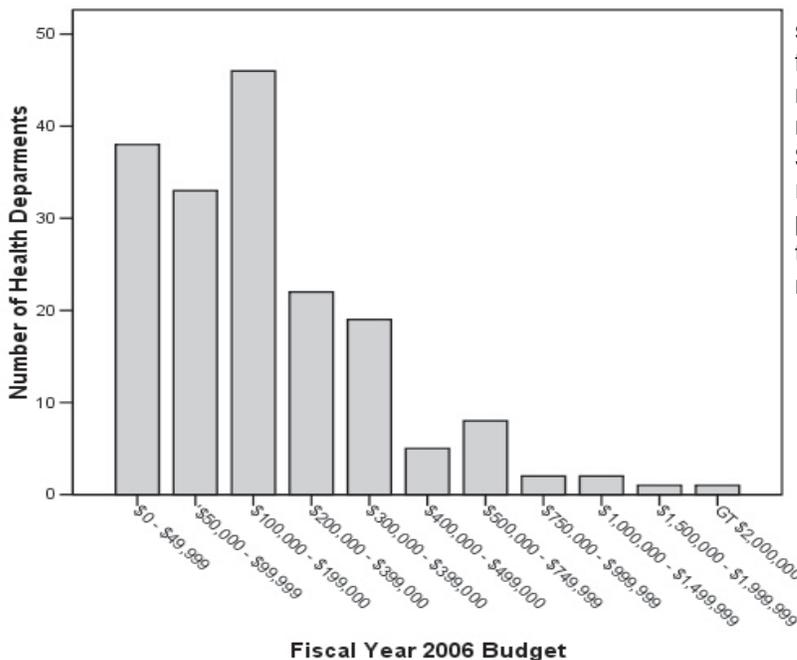
community and their perceived lack of responsiveness to individual cases increases the sense of helplessness experience by many health departments called in to deal with housing situations exacerbated by animal hoarding behaviors. So what resources do health departments have when confronted with a situation of this caliber? Dr. Gary Patronek makes the following suggestion: "Developing relationships with local social service, and enforcement agencies is important," he said, explaining that successful interventions generally require a team approach. The animal control officer governing the community in which the resident resides is a good starting resource, in addition to involving elder service agencies (if the resident is over the age of 60), and mental health professionals. In these situations, it's almost impossible for a single health department to move ahead with making significant progress by themselves which is why it is important to involve as many agencies as possible who are willing to lend help and support in finding resolution to the problem. Area veterinarians are also another underused resource who may or may not have professional relationships with animal hoard-

ers and may be willing to lend assistance. When children are found in the home, the Department of Social Services may need to be involved. Rarely do court injunctions and fines help to remedy the situation when the issue of animal neglect and/or cruelty come to the forefront. Instead, they may increase the feelings of persecution and isolation by the hoarder. Support groups for compulsive hoarders exist and may be underutilized due to the secretive nature of the problem. Still, offering referrals followed by frequent "follow-ups" may be in order. "The communities who seem to handle these situations better are the ones that take a task force approach," Dr. Patronek says.

(Footnotes)

- 1 Frost, R.O.; Hartl, T.L. (1996). **A cognitive-behavioral model of compulsive hoarding.** *Behavior Research and Therapy*, 34 (4), 341-50.
- 2 The Hoarding of Animals Research Consortium
- * All names are fictitious and are not meant to represent actual individuals or cases.
- 3 Patronek, G, 1999
- 4 Bridget M. Kuehn; *Journal of the American Veterinary Association*, 2002

Community Survey Stats Corner



By updating your town's data on the MAHB Website we will be able to provide you with some helpful statistics for strategic and financial planning. As shown below, the median Annual Budget for Health Departments through out Massachusetts is \$131,094. The distribution of budgets reflects the diversity of town size, population and resources. Remember, the more towns that submit information, the more valuable our database is to all of us.

Variable N = 177 (94.7% of Towns) Statistic

Mean	\$206,050
Median	\$131,094
Minimum	\$0
Maximum	\$2,542,218

MAHB MEMBERSHIP ONLINE SYSTEM

USER GUIDE

Designed and developed by Aciron Consulting www.aciron.com

WELCOME PAGE:

All of the features described below with the exception of member services, are available to all boards of health and health districts, regardless of membership status. Log-in is required to access tabs from the navigation menu on the left with the exception of the public directory, job postings, and eLearning center which are all available to the public. Within the home page, users can find helpful navigation tips, explaining each tab on the navigation menu. Contact MAHB if you do not know the user ID and Password assigned to your board of health or district. www.MAHB.org → Membership → Login with your user name and password →

MEMBERSHIP PROFILE:

Each district and town can access the system to create and update their membership profiles; users can modify contact information as well as add and delete associated members. Home address and email is confidential and does not appear in the public directory. It is only accessible to MAHB for the purpose of sending relevant email notices and mailings.

The screenshot displays the MAHB Membership Profile page. On the left is a navigation menu with options: Membership Profile (selected), Membership Status, Member Services, Community Survey, Certification (Register), Public Directory, Job Postings, and eLearning Center. The main content area is titled 'Whitman' and includes a 'Home | Contact Us | Logout' link. It features three main sections: 'Information About Your BOH:' with fields for Name, BOH Model, Elected/Appointed, Address, Telephone, Fax, Email, and Website; 'Current BOH Member/Staff Information:' with an 'Add New' button and fields for Name, Position, Profession, Work Phone, Cell Phone, Email, and Home Address; and a section for 'Home Phone:' and 'Home Email:' with 'Delete' and 'Add' buttons. The footer contains copyright information for MAHB and credits Aciron Consulting.

MEMBERSHIP STATUS:

The system is configured to provide a real-time update on members' dues status. It takes the process a step further by giving users the option to download and print dues invoices. As each check is received, members can receive confirmation that their dues are received, and they can receive current updates on their membership status.

MEMBER SERVICES:

The system has additional value-added services for MAHB members. For instance, they can access an on-line copy of the latest MAHB *Guidebook for Massachusetts Boards of Health*, legal memos, and job postings.

COMMUNITY SURVEY:

Each town provides data on salaries, budgets, staffing and other important information. Data entered on each page is saved, so the survey does not need to be completed at one sitting. The information gathered here will be instantly available to all who participate. Future modifications to the program will also allow users to download reports.

The screenshot shows the MAHB website's Community Survey page. The header includes 'Whitman' and navigation links for 'Home', 'Contact Us', and 'Logout'. A sidebar on the left contains a menu with items like 'Membership Profile', 'Membership Status', 'Member Services', 'Community Survey' (highlighted), 'Certification (Register)', 'Public Directory', 'Job Postings', and 'eLearning Center'. The main content area features a form with dropdown menus for 'View Whitman's Survey Data' and 'View others Survey Data', a 'Submit New Survey Data' button, and a text box with instructions: 'We anticipate that this survey will take approximately 20-25 minutes to complete. Please answer the questions to the best of your ability. If the question is not Applicable to your department, you do not know the answer to a question or cannot provide a best estimate, you may leave the question un-answered. If you have any questions concerning this survey, please contact us. Enter Survey Data for 2007:'.

CERTIFICATION:

Members can register for training sessions by filling out the on-line form and also download and print invoices for certification.

PUBLIC DIRECTORY:

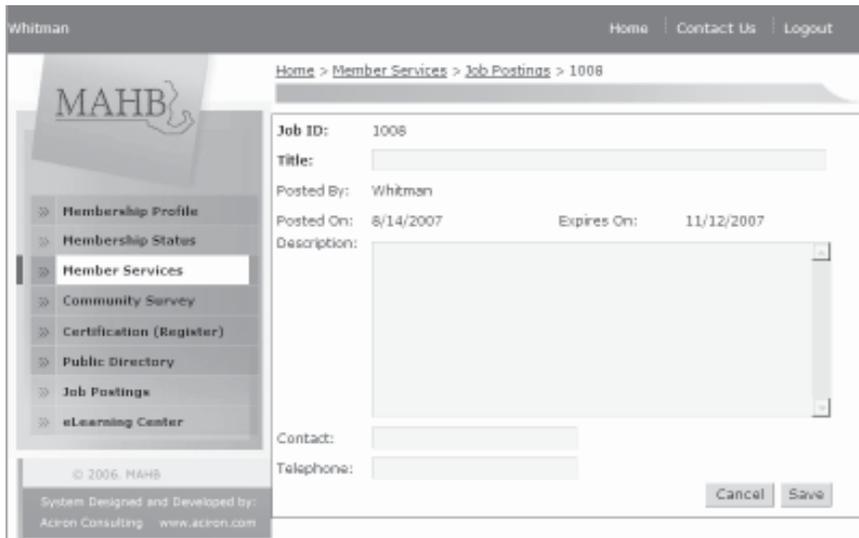
This is a centralized location of up-to-date contact information for all districts, towns, and associated members. It also includes a list of corporate sponsors. The directory compiles all of the data supplied by the members themselves to create a quick reference guide. Directory listings are updated every time the member profile is changed.

The screenshot shows the MAHB website's Public Directory page for 'Boards of Health' in Whitman. The breadcrumb trail is 'Home > Public Directory > Boards of Health'. There are links to 'Go to: Health Districts' and 'Corporate Sponsors'. The town information for Whitman is listed: Address: P. O. Box 426 54 South Ave., Whitman, MA-02382; Phone: 781-618-9755; Email: Barbara.White@Whitman-ma.gov; Website: (blank). Below this is a table listing the members of the Board of Health (BOH).

Member	Position	Email
Ruth A. Burke	BOH Member	
John Duval	BOH Chairman	
William F. Lemon	BOH Member	
Eric Badger	Health Agent	Eric.Badger@Whitman-ma.gov
Barbara J. White	Administrative Assistant/Secretary	Barbara.White@Whitman-ma.gov

JOB POSTINGS:

The latest enhancement to the system is the job postings board, which enables MAHB members to post job vacancies within their town or district. Members can post new jobs by accessing the Member Services page and selecting the job postings link. From there, members can choose to post a new job and fill out the required form. These postings will be made available to the public, accessible through the job postings link on the left navigation menu.



The screenshot shows a web browser window with the URL [Home > Member Services > Job Postings > 1008](#). The page features a navigation menu on the left with the MAHB logo and links for Membership Profile, Membership States, Member Services (highlighted), Community Survey, Certification (Register), Public Directory, Job Postings, and eLearning Center. The main content area contains a form for job posting with the following fields: Job ID (1008), Title (empty), Posted By (Whitman), Posted On (8/14/2007), Expires On (11/12/2007), Description (empty text area), Contact (empty text field), and Telephone (empty text field). There are 'Cancel' and 'Save' buttons at the bottom right of the form. The footer includes the copyright notice '© 2006, MAHB' and the text 'System Designed and Developed by: Acron Consulting www.acron.com'.

E-LEARNING:

The E-Learning center provides online, interactive tutorials available to the public; its content becomes accessible after a quick registration process. Users can search for courses by category or by viewing all courses.



The screenshot shows the MAHB E-Learning center interface. The navigation menu on the left is identical to the previous screenshot, with 'eLearning Center' highlighted. The main content area displays a list of courses under the heading 'Expand all Collapse all' and a 'Go To: Course List' link. The courses are categorized as follows:

- Category: Community Health
- Category: Emergency Preparedness
 - Title: [Avian and Pandemic Influenza](#)
Duration: 1 hour 20 minutes
Description: What is the difference between Avian and Pandemic Flu? A detailed look at the biology and emergency preparedness aspects of influenza.
Alfred DeMaria, Jr., M.D. Assistant Commissioner; MDPH
 - Title: [Bioterrorism Preparedness Training Overview](#)
Duration: 4 minutes
Description: A PowerPoint overview of Bioterrorism Preparedness Training.
 - Title: [Overview of Bioterrorism Agents](#)
Duration: 9 minutes
Description: A PowerPoint review of infectious agents which might be employed in a bioterrorist attack.
- Category: Governance
- Category: Public Health Law

The footer includes the copyright notice '© 2006, MAHB' and the text 'System Designed and Developed by: Acron Consulting www.acron.com'.



2007 Certification Program

Co-sponsored by the Mass. Department of Public Health



Governance

- Orientation for New Board Members
- Joint Session on Regionalization of Local Public Health
- Legal Case Study

Environmental & Community Health

- Tanning Beds - Public Health Threats and Regulations
- Tiered Approach to Complex Local Health Problems
- Fires Floods and Restaurants

Community Health

- Public Health Nursing - Case Studies Exemplify the Role of the PHN
- Community Mitigation: Reducing the Impact of the Pandemic at the Community Level
- The Role of Public Health in Preventing/Reducing Chronic Disease

Please register online through the MAHB Members Page. **Use this form only if you do not have access to the Internet.**

Check Location/Date-

Registration and networking breakfast 8 am

Programs 8:45 A.M. - 4 P.M.

CMEs and CEUs for Registered Nurses, Registered Sanitarians & Certified Health Officers.

[] **November 3rd** West Springfield Best Western – located near the intersection of Interstate 91 and the Massachusetts State Turnpike Route 90.

[] **November 17th** - Holiday Inn Taunton off Rt. 495 Exit 9

[] **December 1st** – Marlborough Royal Plaza Take exit 24b off Interstate 495. Hotel is one mile on the right

A limited number of scholarships are available. Please contact the office for more information.

Please use additional paper if needed. **Type or print clearly to eliminate mistakes on Certificates.**

Name _____ Title _____ CEU's (Y N)

Town _____ Email _____ Phone _____

Check applicable box : BOH member [] Agent/director [] Public Health Nurse [] Other []

Cost: \$90 per person for members, \$135 per person for non members.

Amount enclosed: \$ _____

Please send registration form and fee to MAHB 56 Taunton St. Plainville MA 02762

REMINDER:

If you have not already done so, please pay your MAHB membership Dues. To check your dues status and download an invoice, go to the MAHB website . A detailed guide to using the new membership web service is included on page 36 of this issue.

IMPORTANT: If there is no email address for your board of health and you need to receive dues and other notices by mail, please contact the office and request to be put on the postal mailing list.

MAHB Certification Program (see reverse side)

SAVE THESE DATES!

November 3 - West Springfield Best Western

November 17- Taunton Holiday Inn

December 1 – Marlborough Royal Plaza Take

Massachusetts Association of Health Boards
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