

February 1-15, 2001

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Department of
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Conservation

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- ★ Jamie Harvey and Health Care Without Harm
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- ★ Department of Environmental Conservation staff

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“Catch the Fever”

Pharmacy-Fever Thermometer Exchange

February 1-15, 2001

BACKGROUND

The “Catch the Fever” fever thermometer exchange was conducted by the Vermont Department of Environmental Conservation (DEC) February 1-15, 2001 in pharmacies across the state. This document explains the process, the results, challenges and lessons learned in conducting an exchange of this magnitude. The appendices provide more detail on certain aspects of the exchange such as correspondence with pharmacies, press releases and other media materials.

In 1998, the Vermont legislature passed a mercury products law that required manufacturer labeling of certain mercury-added products, established solid waste disposal bans on labeled products, and mercury education and reduction programs to minimize mercury release to the environment. The Environmental Assistance Division (EAD), a non-regulatory division in Vermont DEC, with programs in pollution prevention and compliance assistance, is responsible for implementation of the law. Vermont’s Solid Waste Management Districts (alliances of municipalities) and municipalities are responsible for mercury-added product collection programs and mercury education and reduction efforts.

EAD established a Mercury Education and Reduction Campaign committee (MERC) to guide the development of statewide mercury education and reduction initiatives. MERC consists of state and municipal waste officials and healthcare professionals.

Since most people recognize that fever thermometers contain mercury, EAD considered a fever thermometer exchange as an initial way to remove a significant amount of mercury from the waste stream, and as a way to raise public awareness on the mercury issue. Groundwork for Vermont’s “Catch the Fever” thermometer exchange began by encouraging Vermont pharmacies to pledge to discontinue the sale of mercury fever thermometers across the state. It was determined that to effectively conduct an exchange, there should be no mercury fever thermometers offered for sale in the pharmacies.

Pharmacies who had pledged to discontinue the sale of mercury fever thermometers were contacted to participate in the exchange. Exchange materials, digital thermometers, and a collection/shipping container were mailed to the participating pharmacies. Pharmacies were instructed to distribute one digital thermometer per family in exchange for one (or more) mercury thermometers. The mercury fever thermometers were placed in a collection container provided to each pharmacy. When the exchange was over, the collection containers were sealed as per the instructions and mailed U.S. Postal Service (USPS) to the Chittenden Solid Waste District’s Hazardous Waste Depot in Burlington, a municipal facility permitted to store household hazardous and conditionally exempt generator wastes.

IMPLEMENTATION

The Pledge . . .

On April 7, 2000 the Deputy Commissioner of the Vermont DEC wrote letters to six large pharmacy chains doing business in Vermont. This letter was written as a collaborative effort to support the promotion initiated by Health Care Without Harm (international campaign with over 175 participating organizations) to encourage pharmacy chains to discontinue the sale of mercury fever thermometers. In continuance of this effort, EAD contacted Vermont pharmacies individually to make the same pledge.

EAD presented the proposed pharmacy pledge program and thermometer exchange program to the Vermont State Board of Pharmacy and the Vermont Pharmacists Association. They provided valuable advice on the most effective methods to notify and promote the exchange and also endorsed the pledge program.

In July 2000, a pledge form and letter was sent to all of Vermont's pharmacies (See Appendix A). Thirty-five pharmacies responded positively within the first 30 days of the letter. A second contact to the pharmacies was by telephone. By early September, 95% of Vermont's pharmacies pledged.

EAD distributed a news release acknowledging the pharmacies' commitment to discontinue the sale of mercury fever thermometers (See Appendix B).

The 114 pharmacies that pledged received a letter of recognition from the Deputy Commissioner, a certificate for their participation and two small signs (see Figure 1.) to place near the thermometer sales area .

They also received a return post card to indicate their interest in participating in a statewide fever thermometer exchange (See Appendix C).

Planning . . .

In planning the exchange, EAD involved the Mercury Education and Reduction Campaign (MERC) committee. The committee provided advice and assistance on all aspects of the exchange, including media and promotion, digital thermometer selection, and collection and disposal procedures for pharmacies.

About 40 pharmacies responded favorably to the exchange by returning the post cards. Follow-up telephone calls were made to the remaining pharmacies not responding. This proved extremely successful and an additional 84 pharmacies signed up. Once the word got out, a high school in a remote northeastern region and a hospital in the southeastern region volunteered to host the thermometer exchange due to the absence of a convenient pharmacy in their area. Three hospitals also joined in conducting employee fever thermometer exchanges during the same two weeks in February.

Purchase and selection of thermometers . . .

In selecting a non-mercury thermometer for the exchange, the MERC committee evaluated different types of thermometers. The digital thermometer was chosen because of accuracy and the lack of



Figure 1.

toxicity information available for other liquid non-mercury fever thermometers. In choosing the digital thermometer, the MERC committee considered not only price, but also ease and ability to replace the button cell battery. The thermometer chosen was the Polymedica brand thermometer from K-Jump Medical out of Golden Colorado.

The cost of the digital was \$2.95 each. There was an additional \$35.00 one-time set up charge for the imprinting on the case with the logo.

Initially 10,000 digitals were purchased. Given the uncertainties in the participation rates, EAD purchased a backup supply of 4,500 digitals prior to the start of the exchange. After the first two days of the exchange, an emergency 15,000 digitals had to be ordered to meet the actual demand. A total of 33,000 digitals were purchased for this exchange.

Materials preparation . . .

Digital thermometers –

Since mercury fever thermometers were being replaced with digital fever thermometers containing a mercury-added button cell battery, we felt it was important to use this additional opportunity to inform the public about the presence of mercury in the battery and its proper disposal since these replacements were not totally mercury-free.

Figure 2. EAD staff labels digital thermometer packaging.



This digital fever thermometer contains a replaceable battery, which should last for many years. Button batteries contain a very small amount of mercury and should be recycled through your local Solid Waste District or town's hazardous waste collection program.

Collection system –

To collect mercury thermometers, pharmacies were provided a shipping box, 1 ½ gal metal collection container with lid and plastic ring seal and a universal, absorbent-lined bagging system. The collection system was purchased from HAZMATPAC (Houston, Texas) at approximately \$18.00 per unit. Initially, pharmacies placed mercury thermometers and their plastic cases in the can. When space inside the can became scarce, several pharmacies removed the plastic case and placed the mercury thermometers inside the absorbent material without the case.

Figure 3.



Labeling the collection container

Shipping box – the arrangements with the USPS required a label to be placed on the hazardous packaging box in order to send in the mail which read (see Figure 4.) The other label that was placed just above this label was the mailing label with the shipping address of the Hazardous Waste Depot and the return address of the pharmacy. These labels were printed and applied to the shipping box before it was sent to the pharmacy.

Collection can – inside of the hazardous shipping container was a 5-quart safety can that slipped inside the shipping box. On the lid of the can is a label to use for tabulating the number of thermometers placed into the can by the pharmacy (see Figure 5.). In the end, many pharmacies were not able to accurately count thermometers due to the high volume received.

After the can was sealed for shipment, a plastic ring was placed on the top of the collection can for a final seal. The bag containing this ring was labeled with a precaution message just as a safety measure (see Figure 6.).

Figure 4.



Figure 5.

A rectangular form with a black border. At the top, it says "Collection Information". Below that, it has two lines for data entry: "Mercury Thermometers Collected:" followed by a horizontal line, and "Remaining Digital Thermometers:" followed by a horizontal line.

Figure 6.



Figure 7. Informational brochures included with digital thermometers.



Packing, counting and wrapping

In order to provide the necessary materials to the pharmacies for the exchange, we had to prepare a package of supplies to mail to them. The hazardous waste shipping/collection box doubled as the container used to mail the initial "thermometer exchange" materials (including digital thermometers) to the pharmacy. In order to leave the box unmarked for proper shipping of the mercury thermometers after the exchange, each box was wrapped in brown mailing paper and addressed to each pharmacy on the outside.

Fifty digital thermometers were included in each pharmacy package as the initial supply. Each thermometer case was imprinted with the MERC logo and the thermometer package was labeled with the battery disposal information (see page 5). The two informational brochures below were stapled to the package to educate the public on mercury.

Other items included in the start-up supplies for the pharmacy were:

- An instruction sheet on how to conduct the exchange.
- A spill instruction card with zip lock bags and nitrile gloves
- A ledger-size poster to display in the pharmacy.
- Two tent cards which could be placed on a counter

- Two sheets of vouchers. Voucher slips were used if pharmacies ran out of digitals and were waiting for replacements. Many pharmacies only kept track of the number of vouchers they distributed, others kept a list of names and telephone numbers of customers to call when they received their shipments.

Mailing and distribution of additional digital thermometers . . .

The initial thermometer exchange materials were mailed to the pharmacies about three weeks prior to the exchange. All packages, including the subsequent mailings, were sent with a delivery confirmation slip so that the package could be tracked. An account was set up at the United States Post Office and all postage charges were deducted from that account.

After the original shipment of 50 digital thermometers, pharmacies were instructed to contact EAD prior to running out of digitals to request more thermometers. Since response to the exchange was much greater than expected; pharmacies started calling even on the first day for more thermometers! After the first two days, the pharmacies had already distributed about 10,000 digitals. EAD received about 75 calls from pharmacies for several days asking questions and placing additional orders.

The pharmacy made the determination as to their potential needs and orders were shipped according to this need and the supply on hand.



Pharmacies contacted one central telephone number to reorder digitals and a spreadsheet was kept on the amounts shipped and the date shipped. All packages were sent USPS fourth-class. Those packages that were shipped before 2:00 p.m. would normally reach their destinations the following day. Those packages that needed to be shipped to more remote areas were often sent priority mail. Many replacement thermometers were hand delivered if a staff person lived in the area.

Stay in touch . . .

Post Cards

Because of the difficulty of getting instructions out to all pharmacies when a question arose, an effective method to relay information was the use of post cards. Before and during the exchange the pharmacies received four different post cards.

- The first two cards were after the pharmacies had signed up to participate in the exchange but before they received any materials to conduct the exchange. Customers had started asking details about the exchange.
- The third was after the pharmacies received the materials and had additional questions of their own.
- The fourth was when supplies of digitals were low and some pharmacies were running out of space for mercury collections (See Appendix E).

Web Site

A web page for the exchange was placed on the Agency's mercury web site, www.mercvt.org. The public could access general exchange information and the location of the nearest participating pharmacy.

Hotline

Over 1,000 calls were handled through EAD's 800-telephone hotline. The hotline number was generally obtained by the public through newspaper ads, television promotions and utility bill inserts.

COLLECTION AND DISPOSAL

All collection containers were to be mailed postage paid to the Hazardous Waste Depot at the conclusion of the exchange. The thermometer waste was to be consolidated at this location for recycling. The positive response to this exchange resulted in pharmacies having more mercury waste than would fit in the collection container.

Collecting the excess . . .

All pharmacies were contacted by telephone at the end of the exchange. Many had more mercury thermometers to dispose of than would fit safely in the collection canister. About 75% of the pharmacies had additional mercury items that needed to be picked up even after they mailed in their collection container. This was due to the overwhelming response and to the fact that some pharmacies accepted other larger mercury items brought in by customers such as: meat thermometers, elemental mercury, candy thermometers, mercury thermostats, mercury switches, outdoor thermometers, dairy thermometers and some even brought in their old digitals to exchange for a new ones.

Figure 8. Miscellaneous items collected by pharmacies during the exchange.



Consolidation . . .

All of the collection boxes were mailed to the Chittenden Solid Waste District's hazardous waste depot in Burlington. The excess mercury products that could not fit into the collection container were picked up from the pharmacies by EAD staff and brought to the Depot for consolidation. It was determined that in order to get an accurate number on the amount of mercury removed from Vermont households, that thermometers should be counted. Another concern was that over half of the thermometers were still in their plastic cases. In order to determine the most cost effective method to handle the thermometers, the plastic cases were removed from a test batch of thermometers to determine the weight of the cases versus the weight of the mercury thermometers. Forty-four pounds of plastic cases and boxes were removed from the mercury thermometers compared to thirty-three pounds of thermometer weight. Although it took about seven working days (one person) to count and remove the cases from the

Figure 9. Thermometers being consolidated for recycling.



thermometers, the cost for recycling would have been at least doubled had the cases not been removed prior to recycling.

Very few pharmacies were able to count their thermometers as we originally anticipated. This would have involved additional handling and time on their part not to mention the chance for mercury exposure or release.

SPILLS

There was a concern for potential thermometer breakage and mercury releases in pharmacies. Pharmacists already had some degree of awareness as to the health hazards of mercury. This knowledge was an asset in the proper handling of mercury thermometers and products. During the exchange there were no spills of any consequence. The collection containers were equipped with the absorbent-lined bagging system that facilitated any breakage within the container. Without that, there may have been problems. One pharmacy experienced a minor spill when a thermometer broke in the pharmacy area. They contacted EAD for instruction and a staff member went to the pharmacy to make certain there were no problems and that the spill had been adequately isolated and properly cleaned up.

THE MEDIA & PROMOTION

Kick off . . .

EAD promoted the exchange as a part of a mercury display for legislators at the State House about one week before the exchange started. The Governor held a press conference that day at the State House to promote mercury product legislation and mercury awareness and to kick off the “Catch the Fever” thermometer exchange.

Just prior to the press conference the Governor filmed a Public Service Announcement promoting the exchange (See Appendix F). Television stations presented the PSA with Howard Dean, M.D. alerting Vermonters of the health risks of mercury and encouraging them to participate in the state-wide fever thermometer exchange by taking their mercury thermometers into their nearest pharmacy.

Radio . . .

A thirty-second PSA was written for many radio stations to promote the exchange (See Appendix G). Several radio stations contacted EAD and requested “on air” interviews to promote the exchange in their areas. The University of Vermont taped a question and answer interview regarding mercury issues in general and the information was distributed to all affiliated stations within the state.

Newspapers . . .

A photo of a child with a digital thermometer in his mouth was provided with the initial news release announcing the exchange (See Appendix H). Many Vermont newspapers including weekly and monthly publications carried the news release. One newspaper printed a 6” x 8” cartoon (see

Figure 10. Thermometers being counted and sorted.

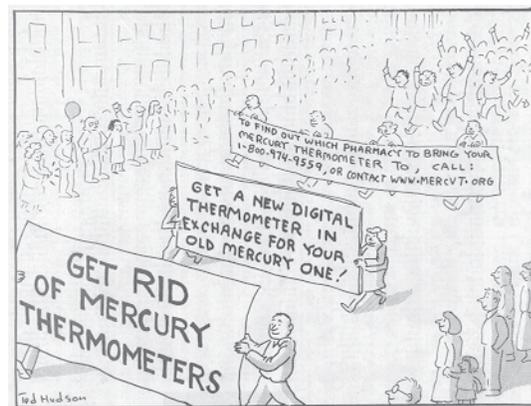


Figure 11. Thermometer exchange cartoon featured in the Burlington Free Press on February 3, 2001.

Figure 11.). Many newspapers carried a final news release upon completion of the exchange reporting the results (See Appendix I).

EAD placed the advertisement (see Figure 12.) in various newspapers around the state. This proved to be a successful outreach piece.

A weekly environmental column prepared by the Vermont Agency of Natural Resources and sent to all newspapers in the state was focused on the thermometer exchange one week prior to its start. A second column was prepared by the Commissioner of the DEC after the exchange had ended focusing on the results of the exchange and what the public could do if they missed the exchange and wanted to properly dispose of mercury thermometers (See Appendix J).

Posters, Tent Cards and Mailers . . .

Letters were sent to school nurses, school principals, leading doctors in the state, and solid waste districts to help get the word out to the public about the exchange. EAD provided posters and tent cards that could be displayed at locations other than pharmacies such as doctors' offices, restaurants, clinics, etc. These posters and tent cards allowed space to fill in a local pharmacy's name or contact information. Schools were provided with a notice that could be photocopied to send home with their students.

At an annual meeting for regional managers of the Vermont Department of Health, these managers were asked to promote the exchange to low income families and the elderly. The response to this plea was enthusiastic. They requested hundreds of posters and tent cards to post at low-income medical facilities, senior homes and medical facilities for the elderly to promote the exchange in their areas.

Several electric utilities agreed to insert a printed message on utility bills. One utility company was provided with 21,000 inserts for their utility bills- the same one color copy used for the schools was used for this request. This effort alone generated hundreds of calls to the hotline requesting information for exchange locations, and other mercury related questions.

Television . . .

Channel 3 (WCAX) promoted the exchange in the initial press conference with the Governor at the State House. They taped a news segment at the Hazardous Waste Depot during the disposal process of the thermometers. EAD was interviewed for a weekly news and information program called *Across the Fence* about the exchange. The program has a strong following of senior citizens.

Channel 5 (WPTZ, Plattsburgh-Burlington), provided coverage and information to the public throughout the exchange. Prior to the exchange the station aired a popular half-hour program entitled *Target Mercury*. The program highlighted health issues and information on a mercury release in a Vermont high school, a Vermont thermometer plant that had released mercury in the past, and information on mercury product collection and disposal, and the pharmacy pledge program. Channel 5 promoted the exchange on a daily basis with short ads and the Governor's PSA. When the supply of digital thermometers was running low and pharmacies could only provide vouchers until new shipments arrived, the TV station provided information to the public to assure the continuance of the exchange. This television station provided up-to-the-minute information to

“Catch the Fever”

**Mercury Fever
Thermometer Exchange**

February 1-15, 2001

Bring your **mercury**
fever thermometer into a
participating pharmacy
and exchange it for a
FREE
digital thermometer.

It's Just that Simple!

For a list of
participating pharmacies
visit our web site at:
www.mercvt.org
or call
1-800-974-9559

sponsored by:
Vermont
Agency of
Natural Resources



Figure 12. Thermometer exchange ad placed in newspapers across the state.

the public on the exchange including web site addresses and contact telephone numbers for questions.

RESULTS

- 112 pharmacies participated in the exchange (95% of all pharmacies in the state).
- Nearly 15% of households participated in the exchange.
- 33,000 digital thermometers were distributed.
- 45,000 mercury fever thermometers were collected.
- 98 pounds of mercury was collected from thermometers and other devices collected (actual estimated weight of mercury) – 59 pounds from fever thermometers – 39 pounds of elemental mercury.

Costs for the Exchange:

Digital thermometer purchase and shipping costs (33,000 thermometers)	\$ 98,350
Shipping containers (Hazmatpac)	\$ 2,500
Printing (brochures, posters cards, etc)	\$ 6,400
Mercury waste handling	\$ 5,000
Postage	\$ 3,800
Newspaper ads	\$ 850
Miscellaneous (purchases, supplies)	\$ <u>1,100</u>
TOTAL COSTS	\$118,000

CONCLUSIONS

A participation rate of nearly 15% of Vermont households in the two-week fever thermometer exchange was considerably beyond our initial expectations. Much of the success here was the result of effective publicity – some by us and some by the media – TV, newspapers, and radio, in particular. The amount of “free publicity” through the media was a major factor in success. Public service announcements, feature stories, and general coverage gave our media efforts a tremendous boost. Paid newspaper ads and broad distribution of posters seemed to be an effective publicity tool. Notification through utility bill mailings was extremely effective in outreach – although we did have our share of callers with questions related to their utility bills! Our web site address, given out with most publicity, provided Vermonters a convenient way to find the nearest participating pharmacy. This also saved on numerous phone calls of inquiry by the general public. Nevertheless, we still had over 1000 phone calls to our hotline during the exchange period.

A statewide fever thermometer exchange can be successful in removing a significant amount of mercury and number of mercury devices in circulation. Equally or more important is the awareness and education on mercury that comes out of doing an exchange. It is a topic of general human interest to which the media responded. Providing mercury informational brochures with each digital thermometer was a cost-effective means of getting information into the hands of people. Many phone calls were received from Vermonters who had questions on mercury after reading the brochure. The Vermont Poison Control Center noted an increase in calls to their hotline, which they believed was a result of the exchange and the informational brochures.

Pharmacies proved to be an excellent venue for the exchange – they provided convenient locations for nearly all residents of the state.

The pledge program for pharmacies to discontinue the sale of fever thermometers was an essential prerequisite to conducting the exchange. A pharmacy exchange just doesn't make sense if mercury fever thermometers can still be found on the shelves.

Pharmacists responded favorably to the concept, were knowledgeable about mercury hazards, and saw this as an opportunity to provide a service to their customers.

Pharmacies were patient and understanding with VT DEC, as many quickly ran out of thermometers and had to issue vouchers until their stocks were replenished. They also reassured customers that their vouchers would be honored at a later date.

Pharmacies were also willing to accept miscellaneous mercury-containing devices and jars of elemental mercury that customers brought in.

Communicating with both the State Board of Pharmacists and the Vermont Pharmacy Association in the early stages of planning was important in gaining support of pharmacies to participate in both the pledge and exchange. Good communication and planning led to high participation rates in both the pledge and exchange programs.

The timing of the exchange in mid-winter worked in our favor. Many people were visiting pharmacies during the cold and flu season.

The two-week duration of the exchange seemed just about right. It worked for the pharmacies that initially suggested it. It also allowed the media to focus on the event, which worked to our benefit. This also happens to be a relatively slow time of the year for news – after the holidays and before the Legislature is in full swing.

Participation by pharmacies in both the pledge and exchange programs necessitated individual phone calls to follow up on the mailings to assure high participation rates.

Allowing other institutions such as schools and hospitals to serve as collection points in rural areas underserved by pharmacies was a successful way to assure convenience statewide.

Projecting participation rate in the exchange proved extremely difficult and eventually presented numerous logistical and budgetary problems. Participation rate was more than three times what was expected. Initially, we did not have a good way of estimating participation. This cost us time and money and jeopardized the success of the program. It is probably much better to overestimate than to underestimate participation provided that provisions are somehow made for returning extras or selling them to others. Having many pharmacies run out of thermometers on day 1 or 2 of the exchange was extremely stressful. Customers were upset, pharmacies were not happy, and we, of course, had more work to do in replenishing stocks. The Commissioner of DEC made the decision to continue the exchange to completion despite the cost overruns for digital thermometer purchase.

Approximately 75% of the costs for the exchange were related to digital thermometer purchase. With some diligence, it may be possible to find program sponsors (pharmacy chains, health care industry, and non-profit organizations) to contribute to the event.

Care needs to be taken in selection of non-mercury fever thermometers used in the exchange. There are several options – at least one liquid, non-mercury thermometer and several wearable sticker and one-time use versions. We chose a digital thermometer that was inexpensive, had an easy-to-read digital display, and was designed with a replaceable mercury button cell battery for long life (the original button cell should have a long life that may even outlive the thermometer itself). We investigated a liquid non-mercury fever thermometer that contained other heavy metals as a possible choice. It was ruled out due to insufficient information on toxicity and recyclability at end of life. Performance and quality are important characteristics that we unfortunately were not able to fully or effectively evaluate. The thermometer brand we chose had been used previously in other exchanges around the country. We did have reports of defective or non-functioning thermometers, but the numbers were small. We replaced any defective thermometers reported by customers. Since digital thermometers with button cell batteries are not completely mercury-free, we felt an obligation to label each thermometer as such. It was also an opportunity to inform customers that the thermometer is reusable if the battery is replaced.

The collection system for thermometers at the pharmacies worked well, except the container size was too small – a result of our underestimate of participation. Some of the pharmacies had difficulty following instructions for storing and packaging, despite our efforts to provide clear instructions. The simpler the collection system the better. However, it is extremely important to follow postal requirements and hazardous materials transport requirements.

Instructions to pharmacists on how to conduct the exchange proved challenging. We did not fully anticipate all of the issues and questions that could and did arise – such as how to use the collection containers, what to do if the digital thermometer supply became depleted, how to instruct customers if thermometer supplies had run out, and the policies on one digital thermometer per customer.

Some businesses, even physicians offices assumed that they could participate in the exchange. As obvious as it seems, it must be made clear that the exchange is for residential customers only.

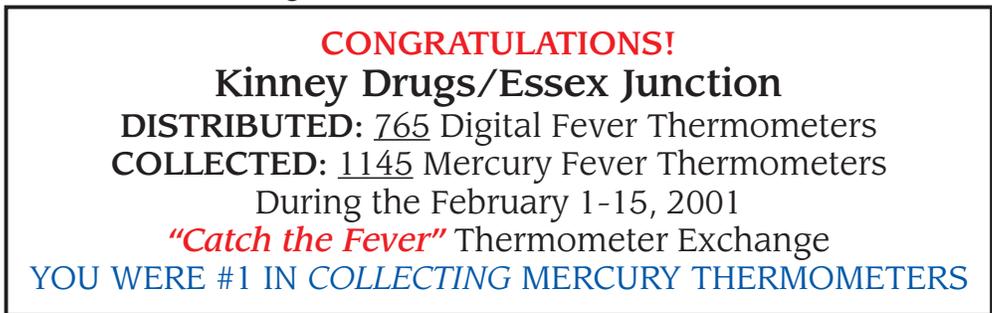
Consolidation of thermometers at an HHW collection facility worked well – it saved on disposal costs. Removal of plastic cases was done, saving money on disposal, but still costing for labor. It is

not prudent to have pharmacies remove the plastic cases, in the event of a broken thermometer. Nonetheless, some accomplished this without a problem. It also provided them with more storage space in the collection container for thermometers.

Mercury spills at pharmacies – we were fortunate in that there was only one incident of a droplet of mercury spilling on a counter at a pharmacy. Nevertheless, a small release is a possibility, especially if a customer brings in a broken thermometer. Pharmacies can become busy places and attention to detail can be a problem. Communication with staff on different shifts is important so that they all know the procedures for the exchange. We also felt it was imperative that the exchange be conducted under the pharmacists control in the pharmacy area of the store. Pharmacies with carpeted floors should not, in our opinion, participate in the exchange unless an alternate location in an uncarpeted area can be arranged.

Pharmacies should be thanked and acknowledged in any way possible after the exchange. Many, in fact most, were interested in knowing how many thermometers they actually exchanged. A thank you letter was sent to each pharmacy with a note as to their particular collection number (see Figure 13.).

Figure 13. Example of a thermometer exchange participant distribution and collection acknowledgement.



Many went above and beyond the call of duty in dealing with customers questions and concerns, in collecting other mercury wastes that customers brought in, and in dealing with depleted stocks of digital thermometers. Only one pharmacy decided to withdraw from the program after 100 digital thermometers were distributed.

Planning for a successful exchange takes a long time! We began planning for our exchange in May 2000 and did not complete all aspects of the exchange (primarily waste disposal/recycling) until May 2001. It can also take a lot of staff time, and any outside resources available can make the job all that much easier.

Would we do the exchange again? Yes! Would we do it a little differently? Yes! The aggravations were well worth the results. Hopefully this information will be useful to others who attempt it.

APPENDIX A

Pharmacy Pledge Letter

Pledge Form

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Commissioner's Office
103 South Main Street
Waterbury, VT 05671-0411
(802) 241-3800

July 11, 2000

Dear Vermont Pharmacist:

Due to the health and environmental concerns of mercury, I am seeking the cooperation of all pharmacies to voluntarily discontinue the sale of mercury fever thermometers. Pharmacies that participate in this statewide pledge program will be recognized during a public awareness promotional kick-off this fall.

Mercury is very toxic and may form compounds that can persist and accumulate in body tissues, and is implicated in several severe health effects. The Vermont Department of Health has issued warnings throughout the state that recommend limiting consumption of certain types of fish that have elevated levels of mercury.

Two-thirds of the mercury in our environment comes from human activities such as waste incineration and disposal of mercury-containing products together with the emissions from coal burning utilities. According to EPA, 17 tons of mercury is released directly into the environment from broken thermometers and from thermometers discarded into solid waste annually. With alternative thermometers available, you can help reduce the amount of mercury released by ending the sale of mercury thermometers. The primary alternative to a liquid mercury fever thermometer is a digital thermometer (*see note at end of letter*).

In 1998, the Vermont Legislature formed an Advisory Committee on Mercury Pollution (ACMP) to study and address environmental and health concerns related to mercury. The committee supports voluntary efforts of pharmacies to discontinue the sale of mercury fever thermometers. The ACMP will be considering legislative recommendations to ban the sale of mercury fever thermometers in Vermont (New Hampshire has banned the retail sale of mercury thermometers through recent legislation).

This *Pharmacy Pledge* effort is being organized by the Environmental Assistance Division of the Department of Environmental Conservation in conjunction with Vermont's Mercury Education and Reduction Campaign (M.E.R.C.) Committee. The M.E.R.C. Committee consists of Environmental Assistance Division, solid waste district and health care organization representatives across the state who are developing programs to reduce and eliminate the use of mercury, including that in fever thermometers.

Pharmacies that sign up for the pledge program will have the option to participate in two additional programs. One program is to host a fever thermometer exchange in your pharmacy as part of a week-long promotional event this fall. Assistance will be provided with collection and removal of discarded mercury thermometers. Pharmacies will be provided with digital thermometers for the exchange by the Agency. The second program is currently being established with healthcare facilities to distribute vouchers to parents of newborns to redeem at participating pharmacies for non-mercury fever thermometers. The Agency will reimburse pharmacies \$5.00 for each thermometer distributed from their inventory for this program.

Page 2

Your efforts will make a difference in reversing the trend in mercury contamination in our environment by pledging to discontinue the sale of mercury fever thermometers. To be recognized as a participating pharmacy in our statewide promotional kick-off efforts, please complete the pledge form and return in the enclosed envelope by **August 15, 2000**.

If you have further questions about the program, contact Karen Busshart at (802) 241-3455. Thank you in advance for your cooperation and support.

Sincerely,

Christopher Recchia
Deputy Commissioner

cc: Vermont Board of Pharmacies
Vermont Pharmacists Association

Note: Although the button cell batteries in digital thermometers contain mercury, the amount is considerably less than found in mercury thermometers. These batteries can and should be recycled through municipal household hazardous waste collection programs.

PHARMACY PLEDGE

Yes! _____ (pharmacy) pledges to voluntarily discontinue the sale of mercury-containing fever thermometers once those in stock are sold. We understand that we will be contacted and will receive a certificate and shelf placard acknowledging participation in the program.

Date: _____

Name of Pharmacy: _____

Address: _____

Contact Person: _____

Title: _____

Telephone: _____

We would like more information.

We are not interested at this time.

Note: Deadline to take advantage of media promotion for kick-off event is Aug. 15, 2000.

By participating in this program, we have the opportunity to be involved in other initiatives. We are interested in learning more about:

Thermometer exchange program.

The voucher program for parents of newborns.



VT AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Environmental Assistance Division
103 South Main Street, Laundry Building
Waterbury, Vermont 05671-0411

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APPENDIX B

Pledge News Release

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Environmental Assistance Division
103 South Main Street
Laundry Building
Waterbury, VT 05671-0411
(802) 241-3628
Fax: (802) 241-3273

November 9, 2000

PRESS RELEASE
FOR IMMEDIATE RELEASE

Contact: Kare Busshart
Karenbu@dec.anr.state.vt.us

PHARMACIES ACROSS THE STATE PLEDGE TO DISCONTINUE THE SALE OF MERCURY-CONTAINING FEVER THERMOMETERS

WATERBURY - The **Department of Environmental Conservation, Environmental Assistance Division** announced today that it is implementing a program to encourage Vermont pharmacies to discontinue the sale of mercury-containing fever thermometers once those in stock are sold. The Department requested commitment from Vermont pharmacies and to date over 90% of the pharmacies have pledged to make that commitment, 112 pharmacies in total.

Mercury is a toxic heavy metal that can form compounds that persist and accumulate in body tissues. Mercury typically enters the body directly through the skin, by ingestion, or by inhalation. Once in the body, mercury can effect the nervous, digestive, and respiratory systems. Exposure to mercury can be most harmful to young children and women of childbearing age. The Vermont Department of Health has issued warnings that recomend limiting consumption of certain types of fish with elevated levels of mercury. [The Advisory can be accessed on the Internet at <http://www.state.vt.us/health/fish.htm>]

Nearly two-thirds of the mercury released into the environment comes from anthropogenic, or human activities such as waste incineration, the burning of coal to generate electricity, and the disposal of mercury-containing products. According to EPA, 17 tons of mercury is released directly into the environment from broken and discarded thermometers annually. "With reliable non-mercury fever thermometers now widely available," stated Chris Recchia, Deputy Commissioner of the Department of Environmental Conservation, "the challenge remains to help consumers responsibly dispose of theri mercury fever thermometers and to promote the use of non-mercury fever thermometers. The Pharmacy Pledge program is designed to address the source and disposal issues."

Recchia looks at initiatives like this as an important way to promote public awareness about mercury. "I am very excited and pleased that we received such a positive and prompt response from our area pharmacies. It shows that voluntary efforts are a very worthy tool to employ in our efforts to reduce mercury around the state, and the result here demonstrates how successful these types of joint partnerships can be."

more

To address the issue of proper disposal, Vermont's Mercury Education and Reduction Campaign Committee (M.E.R.C.), consisting of the Department of Environmental Conservation, municipal solid waste districts, and health care organizations, is sponsoring fever thermometer exchanges across the state in those pharmacies that have pledged to stop selling mercury-containing fever thermometers. The two-week exchange is planned for February 1-15, 2001. During the exchange, Vermonters will be able to bring their mercury-containing fever thermometers to a local pharmacy to exchange for digital thermometers--at no cost. Details of the exchanges will be announced some time in January.

[For additional information about the Mercury Education and Reduction Campaign, please visit the Internet at <http://www.mercvt.org>]

APPENDIX C

Congratulatory Letter

Exchange Post Card

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Office of the Commissioner
103 South Main Street
Building 1 South
Waterbury, VT 05671-0411
(802) 241-3808
Fax: (802) 244-5141

November 7, 2000

FIELD(Pharmacy)

Dear FIELD(Name):

Thank you, and Congratulations! As a Vermont Pharmacy, you have chosen to make a difference in your community and your state. By pledging to discontinue the sale of mercury fever thermometers in your pharmacy, you are not only encouraging your customers to purchase non-mercury thermometers, you are educating them as to the health and environmental hazards of mercury. In removing mercury-containing thermometers from your shelves, you help keep mercury out of the homes of countless Vermonters — and prevent its eventual disposal into the environment.

Certificates and Shelf Display Materials:

We have enclosed a certificate of appreciation acknowledging that Austin's Drug has made a conscientious decision to participate in a program that benefits both their customers and the environment. We encourage you to post this certificate together with the small signs designed to inform and educate your customers about your participation in the program.

Mercury Thermometer Exchange Program:

Your decision to discontinue the sale of mercury thermometers means you are in good company. To date, nearly 90% of Vermont's pharmacies have joined the Mercury Education and Reduction Campaign's (M.E.R.C.) pharmacy pledge program. To further promote the success of your efforts and to capture additional household mercury, we are sponsoring a state-wide, two-week long thermometer exchange we are calling "*Catch The Fever*". Plans are underway now for a kick-off campaign in January, 2001. The campaign will be advertised to your customers using newspaper ads, posters and various other promotional events. The exchange is scheduled to be held **February 1-15, 2001**. We are planning this event in advance to allow sufficient time for promotion and to obtain and distribute the necessary materials to facilitate the exchange. For the exchange, pharmacies will be provided, free of cost, a supply of digital thermometers and postage paid disposal containers. Customers will simply bring in their mercury fever thermometers and exchange them for a digital thermometer. The pharmacy collects the mercury thermometers in the disposal containers and mails the container to a mercury collection center once the container is full. It's that simple!

Please consider the value of this promotion not only for your pharmacy but for the health and welfare of the citizens of your community. We hope you will consider participating in the thermometer exchange program and have included a post card for you to complete to convey your interest. Please complete and return the postcard no later than **December 4, 2000** so that there will be sufficient time to order materials in advance.

We wish, once again, to thank you for your participation. We are both excited and pleased to have received such a positive response from pharmacies throughout Vermont. It clearly shows that voluntary efforts are a very worthy tool to employ in efforts to reduce mercury contamination and the amount of mercury found in the environment. We look forward to working with you in February to "*Catch The Fever*".

Sincerely,

Christopher Recchia
Deputy Commissioner

Karen Busshart
Environmental Assistance Division
103 South Main Street
Waterbury, VT 05671-0411

Postage has been paid by sender



M.E.R.C. ✓**t**
Mercury Education & Reduction Campaign

post card - front



Yes - Please include

_____ pharmacy
in the "Catch the Fever" thermometer
exchange scheduled for Feb. 1-15, 2001.

Address _____

Contact _____ Phone _____

I do not wish to participate at this time.

post card - back

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APPENDIX D

Exchange Materials:

Instruction Sheet

Spill Instruction Card

Poster

Tent Cards

Vouchers

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**INSTRUCTIONS FOR PARTICIPATING PHARMACIES
MERCURY FEVER THERMOMETER EXCHANGE
FEBRUARY 1-15, 2001**

PRIOR TO EXCHANGE

Please read through these instructions carefully upon receipt. If there is anything you don't understand please call 241-3455 or 241-3472.

1. Verify receipt of all materials listed on the enclosed list. If you do not have all the above listed materials please contact Tom Benoit at (802) 241-3472 or Karen Busshart at (802) 241-3455 immediately.
2. We recommend placing promotional materials (i.e, posters, tent cards) in a prominent location prior to the thermometer exchange or as soon as you receive them.
3. Remove all digital thermometers and attached brochures from the safety box and place separately from the disposal container.
4. Place the plastic bag and yellow absorbent lining inside the can using your hand inside the pouch to slide it all the way into the can. The mercury fever thermometers should be placed inside this padded pouch inside the safety can which is kept inside the HAZMATPAC safety box.
5. Place the prepared safety box, can and absorbent bag in an easily accessible but safe and secure location behind the counter.

EXCHANGE:

1. **Each participant will be given one (1) digital thermometer for one (or more) mercury fever thermometer(s). Each participant will also receive one (1) General Mercury Brochure and one (1) Thermometer Brochure.** You should exchange one (1) digital thermometer for one or more mercury thermometers. Limit one per family so your quantities will last.
2. Place the exchanged mercury fever thermometer(s) inside the padded pouch which is inside the safety can (per #4 above) as soon as it is received to avoid breakage. Please keep track of the number of mercury thermometers you have collected so you can place a total on the can lid when the exchange is completed. The can should always be kept inside the safety box during the collection period (Note: Please place the lid on loosely after each exchange until the end of all exchanges, when it should be securely fastened).
3. If it appears that a thermometer is broken, please place it inside one of the supplied Ziploc bags and place within the padded pouch in the safety can. In the unlikely event of a broken thermometer with a visible mercury release, please refer to the spill clean-up instructions included (Orange card).

IF YOU ANTICIPATE RUNNING OUT OF DIGITAL THERMOMETERS BASED ON THE RATE OF CUSTOMER RESPONSE, PLEASE CALL US SO THAT WE CAN IMMEDIATELY SEND YOU ADDITIONAL DIGITAL THERMOMETERS. (802)-241-3455

4. In the event that you run out of digital thermometers while conducting the exchange, and additional thermometers have not arrived, we have enclosed Thermometer Exchange Vouchers (which can be photocopied) until additional thermometers can be sent. **Please use these**

vouchers only if you run out prior to additional thermometers being sent. All Vouchers will be honored up until February 27, 2001. Pharmacies must notify the Agency of Natural Resources (241-3455) on the exact number of vouchers handed out and/or the number of digital thermometers needed before this date.

AFTER THE EXCHANGE

1. Upon completion of all mercury thermometer exchanges (February 15, 2001) and before February 28, 2001, the accompanying HAZMATPAC safety packaging system must be packed and sealed as follows:
 - A. Please be sure that all thermometers are inside the yellow absorbent pouch. The yellow absorbent pouch should form a protective surrounding for the exchanged mercury thermometers. This can be accomplished by folding the flaps of the absorbent lining over the top of the mercury thermometers.
 - B. Place the pouch completely inside the plastic bag and close with a twist tie (included).
 - C. Place the mercury thermometers and absorbent bag into the Safety can. Then place the lid on the safety can and gently tap closed. After the lid is secured, the HAZLOC locking ring (white plastic ring) can be secured by also gently tapping. Be sure to include an accurate mercury thermometer count on the attached label on the top of the safety can. Place the Safety can into the inner partition (cardboard box) and push in the corner tabs on the top of the inner partition. Use the red tape to seal the inner box.
 - D. Fold the flaps of the outer box and seal with clear packing tape (included). The HAZMATPAC box is now ready for shipment.
2. Once the pre-labeled HAZMATPAC safety system has been properly packaged and sealed, it can simply be brought to your local U.S. Post Office or picked up by your U.S. Postal carrier. **All postage has been prepaid.** All thermometer exchange shipments must be shipped in the provided box only.

NOTE: The HAZMATPAC should be shipped no later than February 28, 2001. Please mail on a Monday, Tuesday or Wednesday in order for the destination facility to receive your package during operating hours.

Any questions or comments, contact:

Thomas A. Benoit at (802) 241-3472 or Karen Busshart at (802) 241-3455
Vermont Department of Environmental Conservation
Environmental Assistance Division

MERCURY THERMOMETER EXCHANGE

FEBRUARY 1-15, 2001

Enclosed are your materials for the Mercury Fever Thermometer Exchange scheduled for February 1-15, 2001. Please read the enclosed instructions carefully. Thank You!

ENCLOSED MATERIALS

Exchange Materials

- (50) Digital Thermometers with attached informational brochures.
- (2) Promotional posters.
- (2) Promotional Tent counter cards.
- (1) Digital thermometer Voucher sheet (4 per sheet) to be used only if you run out of digital thermometers.

SHIPPING MATERIALS

- (1) HAZMATPAC safety shipping system consisting of:
 - (1) safety can and packing material
 - (1) pre-labeled safety box and
 - (1) set of packaging instructions.
- (1) Broken Thermometer kit consisting of:
 - (1) Broken Thermometer clean-up instructions (Orange index card)
 - (1) pair gloves
 - (2) plastic Ziploc bags.

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BROKEN THERMOMETER CLEAN-UP:

A broken thermometer should be rarely encountered but in the event of an accidental mercury fever thermometer breaking the following instructions should be followed.

1. Make sure the area is adequately ventilated.
2. Isolate the spill immediately. Even if it falls just a short distance, mercury will splatter into very fine droplets that are very hard to remove. If the spill is on a raised surface, contain it so that mercury doesn't roll onto the floor. Divert the spilled mercury from drains, cracks and crevices.
3. Wear rubber gloves to prevent skin contact. Keep your hands away from your face- especially your eyes, nose and mouth.
4. Carefully pick up pieces of broken glass and place them on a paper towel or tissue. Wrap or fold the paper towel, and place it in a leak-proof plastic bag.
5. Working from the outside of the spill area toward the center, push small mercury beads together with a card, stiff paper, or squeegee to form larger droplets. Then use an eye dropper or two stiff pieces of paper to pick up the droplets of mercury. Place all droplets into a leak-proof plastic bag. **DO NOT VACUUM.**
6. Using the sticky side of duct tape or masking tape (two-inches or wider) pick up any remaining glass and mercury droplets. Pay special attention to cracks or crevices in tile or wood floors. Place the glass, mercury and tape into the same leak-proof plastic bag.
7. Using a flashlight look all around in the area of the spill. The light will reflect off the shiny mercury beads making it easier to see them. Pick-up any droplets using the above procedure.
8. When finished, carefully remove your rubber gloves and place them in the leak-proof plastic bag.
9. Place all mercury containing clean-up debris (gloves, tape, mercury, etc contained in a leak-proof plastic bag) into another leak-proof plastic bag, twist and seal the opening with tape.
10. Place the broken thermometer(s) and mercury clean-up debris in the HAZMATPAC shipping box with any intact exchanged thermometers. Please be sure to notify Gary Winnie of the Chittenden Solid Waste District at (802) 865-4663 of any exchange shipments with broken thermometers.

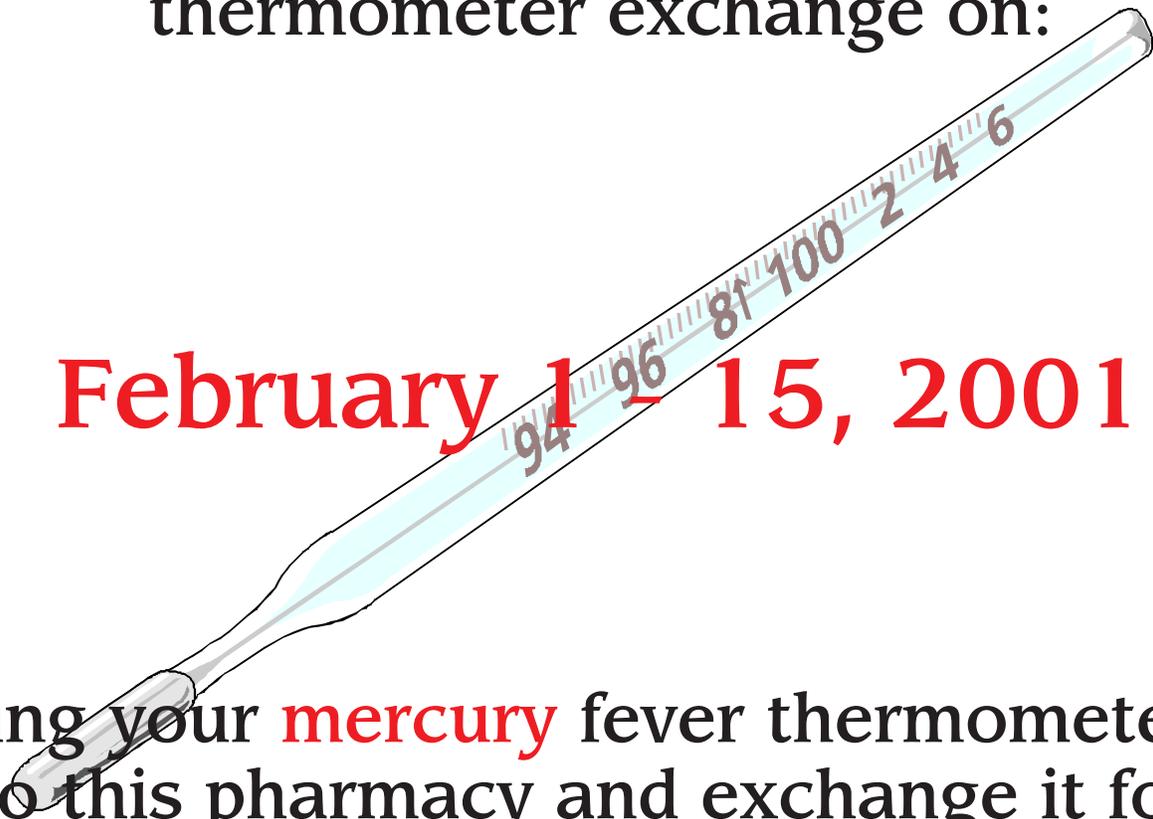
Any questions or comments, contact Thomas A. Benoit at (802) 241-3472 or Karen Busshart at (802) 241-3455.

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Mercury Fever Thermometer Exchange

“Catch the Fever”

Your pharmacy will be hosting a fever
thermometer exchange on:

February 1  15, 2001

Bring your **mercury** fever thermometer
into this pharmacy and exchange it for a
FREE digital thermometer.

It's Just That Simple...



SPONSORED BY:
VERMONT AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
www.mercvt.org



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“Catch the Fever”

Mercury Fever Thermometer Exchange



Bring your **mercury** fever thermometer into a participating pharmacy* and exchange it for a **FREE** digital thermometer.

* see the back of this card for participating pharmacies in your area

FEBRUARY 1-15, 2001

It's Just That Simple!



Sponsored by:
Vermont Department of Environmental Conservation

Tent Card - Front

“Catch the Fever”
Participating Area Pharmacies

For more information contact:

Tent Card - Back

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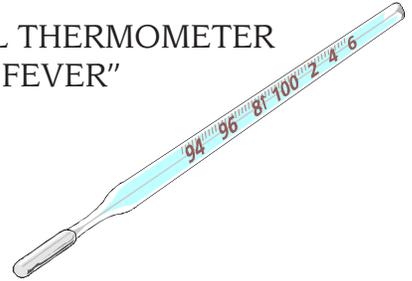
THERMOMETER EXCHANGE VOUCHER

REDEEMABLE FOR ONE (1) FREE DIGITAL THERMOMETER
FOR PARTICIPATION IN THE "CATCH THE FEVER"
THERMOMETER EXCHANGE

Valid until February 27, 2001

Participating Pharmacy _____

Pharmacist Initials _____ Date _____



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APPENDIX E

Pharmacy Post Cards

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“Catch the Fever”

Dear Pharmacy Manager:

It won't be long now! The **“Catch the Fever”** Thermometer Exchange is scheduled for February 1-15th. Soon you will be receiving your exchange materials package. The package will contain 50 digital thermometers, mercury information brochures, a disposal container with box and instructions on how to conduct the exchange. You should receive your package no later than January 26, 2001. If you have not received your package by that date or if you have any questions, contact me at (802) 241-3455.

Thank you for your participation,

Karen Busshart

Mercury Project Coordinator

Department of Environmental Conservation



“Catch the Fever”

PLEASE POST THIS NOTICE FOR YOUR CUSTOMERS

- Please provide **one** digital fever thermometer **per family** for the exchange. We want to try to provide a digital thermometer to as many Vermont households as possible before the supply runs out.
- If you have a customer that wants to turn in **more than one** mercury thermometer, you may take the extra thermometers for disposal and we will pay for the disposal of the extra thermometers - we encourage households to dispose of any extra mercury thermometers they may have in their medicine cabinet to avoid breakage or disposal costs at a later date. However, please limit the digital thermometers to one per family.

If your customers have any questions or concerns about this condition, please have them call me at (802) 241-3455.

Thank you for your participation,

Karen Busshart

Mercury Project Coordinator

Department of Environmental Conservation



“Catch the Fever”

Dear Pharmacy Manager,

Any day now you will receive the exchange materials for the **“Catch the Fever”** thermometer exchange either in the mail or hand delivered. These are a few reminders about the exchange:

- 1 The exchange begins on **February 1st**. Tell your customers to be patient until that date. Put your poster up now which shows the dates.
- 2 The box that you receive is your collection box, so don't let it get damaged - it is already labeled and the postage is in place.
- 3 Tell your customers you can only accept **mercury fever** thermometers. Suggest that any other mercury products be taken to a Solid Waste District or municipal hazardous waste collection program as you are not equipped for anything other than fever thermometers.
- 4 Call me **well** in advance if you believe you will run out of digital thermometers (**don't wait**) - based on the rate you are giving them out. If by some chance you do run out, give your customers the voucher and ask them to return in a few days. We will get more thermometers to you quickly.

Call me if you have any questions (802) 241-3455.

Thank you for your participation,

Karen Busshart

Mercury Project Coordinator

Department of Environmental Conservation



Dear Pharmacist

Thank you for your patience and understanding during the overwhelming response to the fever thermometer exchange. Here are a few updates and clarifications on the exchange:

- If your collection container is full, please try to store any excess in a sealable plastic bag, and place it inside another container (a plastic one with a lid is good). We will make arrangements at the end of the exchange to have the extras picked up.
- Please continue to give out one thermometer per family. However, if someone states that they are bringing in thermometers for other families or elderly relatives, you can provide additional digital thermometers at your discretion.
- Please continue to supply vouchers to customers when you are out of thermometers. Keep track of how many vouchers you give out so we can supply you with an adequate amount of thermometers to replace the vouchers.

As always, if you have any questions don't hesitate to call me at (802) 241-3455.

Thank you for your participation,

Karen Busshart

Mercury Project Coordinator, VTDEC



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APPENDIX F

Television PSA

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Environmental Assistance Division
103 South Main Street
Laundry Building
Waterbury, VT 05671-0411
(802) 241-3628
Fax: (802) 241-3273

Date: January 22, 2001

Text for the 30-second "Catch the Fever" PSA featuring Governor Dean.

I'm Governor Howard Dean. Mercury is a highly toxic metal that can harm people -- particularly children -- and damage the environment. If you still have a mercury thermometer like this [close-up of Governor holding up thermometer] in your home, here's a great opportunity to trade it in. Between February 1st and 15th, more than 100 pharmacies across Vermont will take your old thermometer and exchange it FREE for a new digital thermometer. To learn more about the "Catch the Fever" thermometer exchange, call 1-800-974-9559.

During the final sentence, the following text appears on the screen:

"Catch the Fever" Thermometer Exchange
Vermont Agency of Natural Resources
1-800-974-9559
www.mercvt.org

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APPENDIX G

Radio PSA

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Environmental Assistance Division
103 South Main Street
Laundry Building
Waterbury, VT 05671-0411
(802) 241-3628
Fax: (802) 241-3273

Text for the "Catch the Fever" radio PSA.

No one likes a fever, right? Well, here's one fever you'll be glad to catch. Between February 1st and 15th, you can take your old mercury fever thermometer to one of more than 100 pharmacies across Vermont and exchange it FREE for a new digital thermometer. The switch to digital will get toxic mercury out of your home and help protect Vermont's environment. To learn more about the "Catch the Fever" thermometer exchange, call the Department of Environmental Conservation at 1-800-974-9559. For the list of participating pharmacies, visit our web site at www.mercvt.org.

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APPENDIX H

Exchange News Release

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Environmental Assistance Division
103 South Main Street
Laundry Building
Waterbury, VT 05671-0411
(802) 241-3628
Fax: (802) 241-3273

January 3, 2001

PRESS RELEASE
FOR IMMEDIATE RELEASE

Contact: Kare Busshart
Karenbu@dec.anr.state.vt.us

PHARMACIES ACROSS THE STATE HOST MERCURY FEVER THERMOMETER EXCHANGE

WATERBURY – Most of Vermont's pharmacies will be participating in a statewide mercury fever thermometer exchange sponsored by the Vermont Department of Environmental Conservation February 1-15. During the first 15 days of February, Vermonters can bring their mercury fever thermometers to participating pharmacies and exchange them for a free digital thermometer.

"The *Catch the Fever* campaign will alert Vermonters to the hazards of mercury contamination and provide information on how to properly dispose of products that contain mercury," said Scott Johnstone, Secretary of the Agency of Natural Resources. "When a mercury thermometer breaks in someone's home, it can contribute to mercury releases that eventually contaminate our waterways and the fish we eat."

Mercury is a silvery liquid metal that is used in consumer products such as thermometers, thermostats, household appliance switches and fluorescent lamps. Mercury is released to the environment when these products are disposed in landfills or burned in incinerators. Another mercury source is coal-burning power plants, especially those located in the Midwest and South.

Mercury concentrates in fish to levels that can be dangerous for those that consume fish, especially for pregnant women and young children. Mercury can affect nervous system development, causing many side effects, such as impaired speech and motor development. The Vermont Department of Health issues fish consumption advisories cautioning Vermonters and others to limit the intake of certain fish due to mercury contamination.

Last year, 114 Vermont pharmacies voluntarily pledged to discontinue the sale of mercury fever thermometers. Of these pharmacies, more than 100 will be participating in the *Catch the Fever* thermometer exchange. The mercury fever thermometer exchange is one of many initiatives of the State's Mercury Education and Reduction Campaign. Vermont's Solid Waste Districts and health care organizations are participating in this and other campaign initiatives.

-- MORE --

“Vermont and other states are setting goals to virtually eliminate all mercury releases from human activities so that we can reverse the mercury contamination trend and not have to worry about the fish we eat,” according to Karen Busshart, Mercury Project Coordinator for the Department of Environmental Conservation. “The main message we hope to relay to Vermonters through this promotion,” Busshart added, “is that mercury is a toxic substance and we need to keep all products that contain mercury out of the trash and recycle them as a hazardous waste.”

A list of participating pharmacies and additional information about the Mercury Education and Reduction Campaign can be found on the Internet at www.mercvt.org or by calling (802) 241-3455.

Several Vermont hospitals have also joined in with the program to promote the use of non-mercury thermometers by holding thermometer exchanges for their employees. Starting in February, most hospitals in Vermont will begin distributing digital thermometers to parents of newborns. Funding for the kick-off of this program has been made available by The Vermont Health Plan (TVHP) and Blue Cross/Blue Shield of Vermont

APPENDIX I

Final News Release

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State of Vermont

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Environmental Assistance Division
103 South Main Street
Laundry Building
Waterbury, VT 05671-0411
(802) 241-3628
Fax: (802) 241-3273

April 10, 2001

PRESS RELEASE FOR IMMEDIATE RELEASE

Contact: Rich Phillips (802)241-3589
Karen Busshart (802) 241-3455

VERMONTERS EXCHANGE 45,000 MERCURY THERMOMETERS

WATERBURY – Vermonters turned in nearly 45,000 mercury thermometers during the two-week “*Catch the Fever*” thermometer exchange in February, the Vermont Agency of Natural Resources announced today.

By exchanging their old thermometers for new digital thermometers, Vermonters removed more than 98 pounds of mercury from homes across the state.

“The cumulative impact of all our daily activities is something we talk about often around here,” said Secretary Scott Johnstone. “Each fever thermometer contains less than one gram of mercury, which seems insignificant. But, this program safely removed nearly 100 pounds of mercury. Individuals can have a tremendous effect on pollution prevention and conservation, whether we’re talking about our driving habits, the way we use electricity or eliminating toxic materials, such as mercury, in our homes.”

Mercury is a silvery liquid metal that is used in consumer products such as thermometers, thermostats, household appliance switches and fluorescent lamps. Mercury is released into the environment when these products are disposed in landfills or burned in incinerators. Mercury concentrates in fish to levels that can be dangerous for people who eat fish, especially for pregnant women and young children. Mercury can affect nervous system development, causing many side effects, such as impaired speech and motor development. The Vermont Department of Health issues fish consumption advisories cautioning Vermonters and others to limit the intake of certain fish due to mercury contamination.

During the first two weeks of February, Vermonters brought in their old mercury thermometers and exchanged them free for a new digital model at 111 pharmacies across the state. These pharmacies distributed a total of 33,000 digital thermometers. All of these pharmacies voluntarily pledged to discontinue the sale of mercury thermometers.

— more —

In addition, one hospital and one school participated in communities where there weren't pharmacies available to be part of the Catch the Fever exchange. Three other hospitals conducted thermometer exchanges for their employees at the same time.

"The great success of this event was due in large part to the enthusiasm of Vermont's pharmacies," said Rich Phillips, Director of the Agency's Environmental Assistance Division. "They not only displayed a strong willingness to make this program a success, but a commitment to provide a service to their customers."

Although the exchange has ended, Vermonters with mercury fever thermometers and other products that contain mercury can contact their local solid waste district or municipality for further information about hazardous waste collection programs.

The mercury fever thermometer exchange was one of many initiatives of the State's Mercury Education and Reduction Campaign. Another part of the campaign is the Department of Environmental Conservation's School Science Lab and Mercury Cleanout Project, which has removed more than 600 pounds of mercury from 80 Vermont schools. Many of these initiatives are collaborative efforts with the state's solid waste districts, municipalities and other partners. The Chittenden Solid Waste District has assisted the Department in the statewide collection of mercury and other hazardous materials from both of these projects.

Current legislation before the General Assembly would prohibit certain non-essential uses of mercury, such as novelties and games, and ban the sale of mercury fever thermometers and the use of mercury in schools.

Additional information about mercury and products that contain mercury can be found on the Internet at www.mercvt.org or by calling (802) 241-3455.

APPENDIX J

Reflections on the Environment Articles

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Free Digital Thermometers in Exchange for Your Household Mercury Thermometers

By Canute Dalmasse

Some of us shudder when we think back our to childhood and consider the precautions we *didn't* take. Thirty years ago, most of us didn't wear seatbelts, and bike helmets were rarely seen.

And then there's mercury. Many of us can remember the excitement of a classmate bringing to school mercury from a broken thermometer back at home. We took turns pushing the silvery liquid metal around with the ends of our pencils or our fingertips, fascinated with the way it wobbled, shimmered and easily broke into smaller pieces — only to come back together again.

Just as we've learned about the importance of wearing seatbelts and bike helmets, we've become more careful about mercury, and most of us today wouldn't consider allowing our children to play with mercury from a broken thermometer. We know mercury is a highly toxic metal which can cause neurological damage to children.

Mercury is also a problem in the outdoors, as it concentrates in fish to levels that can be dangerous for those who eat the fish, especially for pregnant women and young children. The Vermont Department of Health has issued consumption advisories in recent years cautioning anglers to limit the intake of certain fish species due to mercury contamination.

Mercury thermometers remain common in homes across Vermont, however, in large part because they work and people are reluctant to throw them out. (In fact, you should never toss a mercury thermometer into your trash.)

Now Vermonters can reduce the risk from mercury to themselves and their families and get a new digital thermometer — *for free*. In cooperation with more than 100 Vermont pharmacies, the Vermont Agency of Natural Resources is sponsoring the *Catch the Fever* thermometer exchange, February 1-15. To get a new digital thermometer, all you have to do is bring your old mercury thermometer to one of the participating pharmacies and turn it in for a new, safer digital model.

The mercury fever thermometer exchange is one of many initiatives of the State's Mercury Education and Reduction Campaign. Vermont's Solid Waste Districts and health care organizations are participating in this and other campaign initiatives. For example, 114 Vermont pharmacies last year voluntarily pledged to discontinue the sale of mercury fever thermometers.

A list of participating pharmacies and additional information about the Mercury Education and Reduction Campaign can be found on the Internet at www.mercvt.org or by calling (802) 241-3455.

*Canute Dalmasse is Commissioner of the Department of Environmental Conservation,
Vermont Agency of Natural Resources.*

Article posted for the week of January 29, 2001.

Reflections

On The Environment

***“Catch the Fever”* Thermometer Exchange A Success!**

By Scott Johnstone

Earlier this year, we at the Agency of Natural Resources asked Vermonters to look through your medicine cabinets and kitchen cupboards to find your old mercury thermometers and then bring them to your local pharmacy to exchange for a new digital thermometer.

And did you respond!

The *“Catch the Fever”* thermometer exchange collected nearly 45,000 mercury thermometers. Because thousands of Vermonters understand the importance of safely disposing mercury, more than 98 pounds of this toxic metal were collected through the exchange.

We believe about one out of every seven Vermont families exchanged at least one mercury thermometer, a tremendous response rate. Based on exchanges in other states, the Agency anticipated a need for between 10,000 and 15,000 digital thermometers. Midway through the exchange, as the response rate soared beyond anything seen in other states, we had to quickly order more. By the time we were done, participating pharmacies handed out 33,000 free digital thermometers.

Of course, this exchange program, part of the Mercury Education and Reduction Campaign, never could have happened without the support of our state’s pharmacies. A total of 111 pharmacies across Vermont – more than 90 percent of all pharmacies in the state — participated in the Catch the Fever thermometer exchange.

Mercury is a silvery liquid metal used in consumer products such as thermostats, household appliance switches and fluorescent lamps. It gets released into the environment when these products are disposed in landfills or burned in incinerators. Once in the environment, mercury concentrates in fish to levels that can be dangerous for people who eat fish, particularly pregnant women and young children, as it can damage nervous system development. The Vermont Department of Health has issued consumption advisories in recent years cautioning anglers to limit the intake of certain fish species due to mercury contamination.

If you missed the Catch the Fever thermometer exchange but still would like to safely dispose of a mercury thermometer, contact your local solid waste district or municipality for information on hazardous waste collection programs.

Scott Johnstone is Secretary of the Vermont Agency of Natural Resources.

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