

PESTICIDE INCIDENT REPORTING AND TRACKING (PIRT)

REVIEW PANEL

FEBRUARY 19, 2009 MINUTES

DEPARTMENT OF HEALTH

TUMWATER, WASHINGTON

(APPROVED BY PIRT MARCH 19, 2009)

PANEL MEMBERS IN ATTENDANCE:

Cynthia Lopez (CL), Chair	Department of Health	(360) 236-3340
Pam Edwards (PE)	Labor and Industries	(360) 902-6457
Allan Felsot (AF) (phone)	Washington State University	(509) 372-7365
Rich Fenske (RF) (phone)	University of Washington	(206) 543-0916
Karen Ripley (KR)	Department of Natural Resources	(360) 902-1691
William Robertson (WR, alternate) (phone)	Washington Poison Center	(206) 517-2356
Debby Sargeant (DS)	Department of Ecology	(360) 407-6139
Ann Wick (AW)	Department of Agriculture	(360) 902-2051
Liesl Zappler (LZ)	Public Member	(425) 739.8100 EXT. 481

PANEL MEMBERS ABSENT :

Bridget Moran (BM)	Department of Fish and Wildlife	(360) 902-2589
Vacant	Toxicologist	

COORDINATOR

Fran McBride (FM), Coordinator	Department of Health	(360) 236-3367
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IN ATTENDANCE:

Steve Cant (SC) (alternate)	Labor and Industries
Steve Gilbert (SG) (phone)	Independent Toxicologist
Heather Hansen (HH)	Washington Friends of Farms and Forests
Joanne Bonnar Prado (JBP)	Department of Health
Kammeron Todd (KT)	Washington Friends of Farms and Forests

The meeting started at 9:32 a.m. CL announced that FM is recording the meeting. The PIRT-approved minutes are the official meeting record. PIRT members introduced themselves. AW, DS, CL, PE, and LZ were present, and AF and WR were on the phone. CL reviewed the draft agenda. WR moved to approve the agenda, LZ seconded, and all were in favor.

November 20 Minutes

LZ said that her comment on page ten came after a remark from a grower that the farm worker testimony should be stricken from the record. She felt it was important to note that he said this. FM will listen to the recording and verify that the minutes accurately reflect his comments. (RF

joined the meeting here.) DS suggested deleting “those” in the reference to penalties in the Ecology PIRT report section, and clarified that EPA is not reregistering chlorpyrifos, malathion, and diazinon, but that the National Marine Fisheries Service had provided biological opinion on them. AW had already mentioned this with other changes she sent to FM. She requested that on page seven, under pesticide applicator trainings, FM clarify or delete “but has encountered some problems.” AW also suggested that FM specify in the minutes when a section summarizes a speaker’s presentation so it is distinguishable from PIRT opinion, and asked to change language in the toxicologist update to “the Governor’s office will not appoint” one. FM made a few minor changes that she received from Dr. De Roos on her section. AW moved to accept the minutes as amended, WR seconded, and all were in favor.

January 5 Special Meeting Minutes

PE moved to accept the minutes with no changes, LZ and WR seconded, and all were in favor.

January 15 Minutes

AW said she had given the incorrect funding source for the Pesticide Advisory Board (PAB) in the WSDA section in January. The PAB is funded by state general funds, not by local funds, pesticide registration and license fees. RF asked whether the PAB was slated to be eliminated; AW responded that it was. WR moved to accept the minutes as modified, DS seconded, and all were in favor.

(KR joined the meeting here.)

PIRT Business:

Toxicologist Subcommittee: No update.

Pesticide Use Reporting Subcommittee: CL distributed a draft letter developed by the subcommittee to Rep. Campbell, who specifically asked PIRT to review his proposal on House Bill (HB) 1946. The letter states the benefits of pesticide use reporting to human health, fish, wildlife and the environment, and agriculture. The burdens identified are primarily cost and increased workload for those who have to report. The letter compares the California, Oregon and New York systems. WSDA presentations on pesticide use reporting and a fiscal analysis are also included. CL requested feedback from the panel. AW thought it would be more appropriate for the letter to come from the subcommittee rather than the panel, and made a motion for this; WR seconded. KR asked why the subcommittee would send the letter when the inquiry was made of the PIRT panel. AW responded that panel members might have difficulty with some statements. CL requested panel feedback so the subcommittee could modify the letter and PIRT can vote on it in March or at a special meeting. AW withdrew her motion. PE suggested including references to back up the data. CL wanted to list information sources instead of citing every statement. (WR left the meeting here.)

Rep. Campbell seemed very interested in the Oregon model, which is new and experiencing some problems. CL is not sure if this is an appropriate comparison for our state. California and New York have older systems. They also have more agriculture than Oregon. Oregon collects information by water basin, which limits the potential benefits of the data. Data are aggregated at a high geographic level and reported annually. The data would be useful for those analyzing effects by water basin, but not necessarily for public health. Benefits to agriculture mainly came from California’s system. AF pointed out that California has had a decentralized system based on the county level because the county agricultural infrastructure is organized or regulated with a

commissioner at the head. Everything is funneled into the local agricultural regulatory apparatus, and then into the state level. He thinks that decentralization is key to the success of its reporting system, in addition to what was originally perceived as an industry benefit for marketing purposes. California has much greater acreage devoted to agriculture, so having the counties provide outreach and support has been very useful. Smaller or subsistence farmers have the most trouble reporting. Having resources at the county level is important for smaller groups. Larger commercial applicators and farms have less trouble with electronic reporting. CL requested comments from the panel by February 27 so the subcommittee can finalize and send the letter.

Forestry Subcommittee: No report.

PIRT Report Executive Summary: To be discussed with the PIRT report.

2009 Yakima Meeting: FM reported on responses to an email about Yakima meeting attendance that she sent to interested parties. Of twelve responses, a small majority said they would attend a Yakima meeting, and two people said that it is very important for PIRT to meet on the eastside. A DOH investigator suggested using radio KDNA's facility as a neutral site. FM is looking into the cost and asked about PIRT preference for an evening or late afternoon meeting. AW suggested looking into fire stations, as usually they are free to state agencies. The meeting would be held on April 16, from 6:30 to 9:30 pm. AW suggested asking someone who is familiar with farm workers' schedules about this before the panel finalizes the meeting. KR moved that FM proceed to schedule a Yakima meeting in April at an inexpensive location; CL clarified that it would be late afternoon or early evening. CL seconded, and all were in favor.

PIRT Report

Labor and Industries - The only change to this section was the number of claims, as L&I and DOH rectified an earlier discrepancy. PE responded to a question previously posed by AF whether someone who is denied a claim and can use DOH data when they go through the appeals process; her answer was yes. DS moved to accept this section, AW seconded, and all were in favor.

Health - CL pointed out an addition to a table on page nine separating the agricultural and non-agricultural cases by county. AW has minor comments to give to FM. PE moved to accept the section, DS seconded, and AW abstained to see what DOH thinks about her comments. All else were in favor.

Executive Summary - KR reported that the subcommittee viewed the executive summary as an opportunity to communicate key points to the legislature. Incident findings were covered thoroughly in the last report. Recent overwhelming issues are associated with the budget. The first three statements support the core agency work of investigators, urge financial support for WAPC, and emphasize the value that PIRT adds to individual agencies' investigations. Points four through nine relate more closely to 2007 data, and highlight issues such as the value of Washington-supported research projects, the importance of growers in pesticide incident prevention practices, children's pesticide incidents, and others. The tenth item welcomes feedback on the report.

Discussion: DS felt that findings and recommendations should relate to the 2007 report, and that points one through three belong in a letter to the appropriate legislators. AF suggested communicating the number of incidents in a more understandable way (e.g., one DPP pesticide poisoning incident every 1.7 days) to let statistics show the importance of tracking these incidents.

RF agreed. AF felt the tone should be more subtle. AW felt that points one through three do not belong in the executive summary, and thought it would be better to communicate this to the legislature in another format. CL suggested a one hour special meeting to finalize the executive summary once the committee revises it. A letter might get out sooner, but may also be delayed. LZ suggested having a deadline. AW reminded the panel that agencies have to support the Governor's budget and that AF's language recommendations are critical. LZ felt the information belongs in the report. DS was concerned that the findings would be buried in the report, and suggested shortening the findings or using bulleted titles. AW suggested specifying that PIRT is talking about supporting all of WAPC, not just its pesticide-related function. CL thought the WAPC section should be referenced with the minutes where WH commented on WAPC cuts. CL moved to get edits and changes to KR by February 27. KR will organize a special meeting in early March. CL amended her motion to include the special meeting in early March and for the panel to get suggested edits to the subcommittee by February 27. DS seconded, and all were in favor.

ACTION: KR and the subcommittee will revise the executive summary. FM will find references for the WAPC section, complete the rest of the executive summary, and help organize a special meeting to finalize the executive summary and the pesticide use reporting letter.

Public Comment

HH commented on the November 20 minutes. In the public comment section, there are a couple of names that are misspelled or incorrect. HH thinks that Dr. Rosa Martinez' comments in the underreporting section should be clearly identified as her personal opinion. If someone gets page eight out of context, it might appear that PIRT endorses this, and there were a number of things that were factually inaccurate. HH realizes that she was presenting her opinion, but she thinks it would be beneficial to PIRT to make that clear. LZ asked what was inaccurate. HH said that the first sentence on page eight implies that organic growers do not use pesticides. AW told HH that she asked FM to identify when the minutes reflect a speaker's comments.

SC observed that in looking at the top ten counties in table four in the DOH section, agriculture-related cases comprise a fraction of all the pesticide definite, probable and possible (DPP) cases that PIRT looks at, and in almost the entire report, most of the activities tend to be skewed toward pesticides in agriculture. CL responded that these were just the top ten counties in absolute terms, and that is one reason why DPP cases by population is presented. In absolute numbers, it is true that there are a lot of urban exposures, but there are also larger populations where we see some of those cases. There is also the concern that urban exposures seem to be reported to DOH in a better fashion than agricultural exposures. CL said that PIRT has had special sections on what are considered more urban exposures like foggers. She is not sure she agrees that there is too heavy a focus on agricultural cases, but it is something to consider if there is another report. SC said that it is clear that the data identifies more impact on the non-agricultural population than in agriculture; PIRT is supposed to be looking at pesticides as a whole. LZ said that with WAPC data and looking at pyrethrin and children, the panel has been looking more at urban or home owner use.

PE moved to break, LZ seconded, and all were in favor. Break at 10:47, reconvene at 11:01.

Science Corner: Increase in Illnesses Associated with Lice Control Products

AF presented on the above topic. See <http://www.doh.wa.gov/ehp/Pirt/pirt-meetings.htm> for materials. Pyrethroids work at the level of the nerve axon membrane by binding to the sodium channel and prolonging its opening, resulting in slow recovery of the nerve so it becomes more sensitive to new input, causing tremor, writhing and salivation. As opposed to organophosphates, which are broken down after binding to cholinesterase, pyrethroids do not break down after binding to the sodium channel, but are broken down by other enzymes when they come off the channel. In humans, detoxification happens mainly by carboxylesterases, but in insects it is mainly by microsomal oxidases. Insects have a large surface area to volume and can absorb these substances quickly and have very low detoxification potential. Pyrethroid affinity for the sodium channel is much higher in arthropods than in mammals and birds. Pyrethroids are not acutely toxic to mammals and birds, but they are toxic to fish.

These products may not be as effective for lice control as we think. Pyrethrin activity is affected by temperature; the lower the temperature, the more bioactive they are. Temperature near the scalp is fairly high, so the bioactivity is fairly limited. As far as safety, pyrethrum extracts could contain compounds that are known agents of allergic rhinitis and contact dermatitis and can cause immunological reactions. This could contribute to cases associated with use of pyrethrin lice shampoo. For human use, the Food and Drug Administration recommends leaving pyrethroid products on for ten minutes. The authors of one study think this is not long enough to kill louse eggs. If people don't see effects they may overuse them, or use them too many times in succession. Pyrethroid resistance in lice populations started showing up in the mid 1990's. Researchers have proven that lice have become resistant to pyrethroids and have identified three mutations that cause pyrethrins to bind poorly to the sodium channel in resistant populations. Resistance can mean that if people don't see they are effective, they are likely to misuse them. In one study, malathion turned out to be more effective for lice control than pyrethroids.

Discussion: KR said that in her children's school, the nurse sends home a paper that says chemicals do not work for lice control and recommends combing and other alternatives. She does not know if that makes people avoid chemicals or use more of them. CL said that in the third world, they use head shaving for lice. LZ: Information given out will differ from one district to another. DS asked about synergism. AF replied that in insects, their main breakdown mechanism is through oxidases. Piperonyl butoxide, a synergist, inhibits the activity of oxidases so by slowing the breakdown in an insect, you can enhance the toxicity and use less insecticide. The synergist does not affect humans because oxidases are less active in humans than in insects. SG said that this is a good argument for pesticide use reporting. AW reminded him that because they are not pesticides, this data would not be recorded.

AF left the meeting here.

Legislative Update

CL said that there have been four bills on the cutting of boards and commissions, including PIRT. AW reported on HB 2167 and Senate Bill (SB) 5889, which are the same. The effect of these would be that notification by schools about their pest control procedures and products used would be furnished to parents by request, rather than be given to everyone. As the public member, LZ hopes this does not pass. Parents won't think about requesting that information. It needs to be distributed on the first day of school. AW said there would be no fiscal impact to WSDA, whose stance on this bill is neutral. LZ said that the Washington Education Association is opposed. AW reported that HB 2087 and SB 5995, which eliminate boards and commissions, have been through

hearings and readings. HB 1074 requires that anyone who makes an application to a freshwater lake provide notification within a specified distance by certified mail. WSDA is neutral on this, but there is a large fiscal note attached to this because of the cost of certified mail and of finding recipients' addresses. HB 2032 requests re-funding for the Opportunities Industrial Center for pass-through money from WSDA for training of Spanish-speaking farm workers. The last day to consider bills in house of origin is March 12. The budget report is due March 19.

Results for the Participation Survey for the Pesticide Notification Project

AW reported on the results of the survey on the pilot pesticide notification project, in which hospitals, schools, and daycares could elect to be on a list to receive notification of local aerial or airblast sprayer applications. Because of the low response to the notification project, WSDA hired a graduate student to survey some of the daycares that had received the original mailing from WSDA. Most survey participants were from small towns in eastern Washington that are near agricultural areas. Responses to a question about proximity to the nearest field where pesticides are being sprayed indicated that respondents either weren't aware of agriculture going on around them or overestimated the distance from agricultural fields.

A summary of findings: Eighty-three percent of participants hadn't heard of the voluntary notification project prior to the survey, indicating that even though WSDA sent out mailings to each of the establishments, they probably didn't get read, or were discarded, or forgotten. A better method of disseminating this information would be through social organizations or the radio. One conclusion is that being notified wasn't enough of a concern to many people. Although some respondents expressed interest in participating in the notification project, they didn't sign up. The burden is on the childcare center to contact WSDA to be placed on the notification list and indicate how they would like to be notified. LZ asked what happens next. AW responded that WSDA staff that work with schools and daycares in areas prone to pesticide drift will emphasize this type of communication and determine whether they are interested in web-based notification. CL asked about putting daycares on the list and having them opt out, rather than inviting them to sign up. AW said they may not want to be on the list, and it is difficult to keep the daycare list updated, as they are in and out of business quickly. DSHS is wary of sharing the information on licensed daycares.

For survey details, see <http://www.doh.wa.gov/ehp/Pirt/pirt-meetings.htm>.

DOH Expedited Cases

JBP, epidemiologist in the DOH Pesticide Program, presented a follow-up to her September presentation on expedited case investigations. "Expedited" in this sense means that investigators would document certain important case elements (outcome, product, exposure scenario and severity) based on the initial report of illness and without obtaining medical records, interviews, and confirming product information, as is currently done in all investigations. Only those non-occupational, residential cases from WAPC, with familiar products and with exposures resulting in minor injury reported less than 24 hours after exposure would qualify for expedited investigation. Samples of this type of case were culled from 2006/2007 data and used in an exercise with investigators to get a sense of how accurately and completely they could fill out the current investigation data form based only on the initial WAPC report. Results were presented at the September PIRT meeting. One of the issues brought up by panel members was in determining the level of accuracy that would be acceptable. The discussion was tabled as the Pesticide Program

worked on closing investigations and PIRT report analyses. Given the current potential for funding cuts, the program is revisiting this issue and trying to understand what elements of a full investigation would be maintained or lost with expedited investigations.

In January 2009, the Pesticide Program started a prospective study of cases fitting the expedited investigation criteria, in which investigators would measure the time spent on cases and degree of concordance between the full and expedited investigations with separate investigators. So far, there have been no cases fitting that scenario; they typically come in during spring and summer. Based on the last three to four years, there would be about 20 cases fitting these criteria. Investigators want to define the acceptable level of accuracy and work with WAPC on areas on initial case reports that may be perfected. KR had voiced concern that because eighty percent of investigations have a mild severity, it would be difficult to tell when an expedited case is considered to be mild due to consistency between investigators versus just playing the numbers. JBP responded that WAPC also has a severity rating; DOH would only be looking at mild WAPC cases for expedited investigation. More severe cases would not qualify for expedited investigation. A certain number of cases get upgraded to moderate or severe after investigation. We don't know how many cases were reclassified, but would get that from the study. DOH does get updated reports when WAPC makes callbacks. One option would be to call the patient to ask the final outcome. The study will go on for six months to a year, but may end sooner if the Pesticide Program is cut. CL added that if WAPC is gone, the program cannot do expedited cases, and workload may actually increase if WAPC calls come to DOH.

Update on Proposed 2009 - 2011 Budget

CL reported that funding for the PIRT panel is still proposed for cuts in recent bills. The only change from the Governor's proposal is that PIRT would be cut, but the reporting function will stay with DOH. Originally, both PIRT and the reporting function were cut. In HB 2187, it appears that DOH will continue to report on DOH data, and not necessarily coordinate all chapters of the PIRT report as it now exists. There is still a proposed cut of \$842 thousand from the Pesticide Program, so the program will be required to both investigate and report, and probably to review its own data, rather than having the PIRT panel review it.

AW reported that WSDA has new information on how much to cut from next year's budget, and is looking at where to cut. The WSDA Pesticide Program has already given up all of its general funds. Other divisions are looking at what can be eliminated. The Pesticide Program is primarily funded by local funds. The PAB is also on the proposed list to be cut by the Governor's budget and by bills. RF asked whether the Commission on Pesticide Registration (CPR) is being cut. AW said that it is not. There is an Integrated Pest Management (IPM) Reporting Committee which has accomplished its function and was proposed to be cut. CL said that she and PE are on the CPR, which is funded by general state funds pass through from WSU. RF asked why that commission dealing with pesticides is not on the list for cuts when all the other ones seem to be. AW said that commodity commissions were taken off the list because they were not supported by general funds, but on fees assessed to the members. LZ commented that she doesn't necessarily think that the IPM Reporting Committee has achieved its function; there are still a lot of school districts, colleges and government entities that don't have IPM plans.

UW – RF said that ten percent cuts for next year are being requested of all units. Higher education is not protected the way K-12 is.

KR reported that the WSU cooperative extension project was asked to consider a 12 to 18 percent to the public, which would mean a 46 to 75 percent cut to extension services. Forestry relies a lot on WSU county extension agents to do public education and technical assistance and develop education material; that would be a serious blow.

Agency Updates

WSDA – AW announced that WSDA has a new director, Representative Dan Newhouse, a grower from eastern Washington. Bob Gore is now the deputy director and John Daly has gone back to retirement.

Health - The budget situation has taken most of the program's time. Expedited case investigation is moving along.

L&I – PE reported that Agricultural Safety Day is next week in Yakima. March 10 is the cholinesterase stakeholder meeting to start the season. L&I is working to have a training with WSDA and DOH in April to go over the types of things they do in the field.

Natural Resources – KR reported that there is a new commissioner of public lands. KR provided him with briefings about PIRT but there hasn't been an agency position on PIRT. KR continues to be the representative and Wendy Brown the alternate.

Draft March Agenda

CL encouraged panel members to request topics of interest for upcoming meetings from the list of possible agenda topics. If PIRT is cut, there will be four more meetings. PE would like to hear about the Pesticide Program Dialogue Committee by Matt Keifer. DS is interested in ecology-related topics, acute toxicity or clinical toxicology literature on pesticide poisonings. She asked about the reactive airway topic. This was proposed as a Science Corner topic by Steve Gilbert. FM will distribute papers on this topic so the panel can decide on their interest. CL proposed another update on WNV before the season begins. DOH can give an update on Section 18 permits. AW suggested a discussion on National Pollution Discharge Elimination System permits and aquatic applications after March. PIRT needs to draft an agenda for the Yakima meeting. KR would like to hear information on monetary penalties for violations, and discuss that as an effective policy. AW said that the maximum amounts are set in statute and then the amount is decided by the court. WSDA has data on the number of repeat offenders, which would be an indication about whether they are deterrents. WSDA does not have a lot of incidents compared to the number of applications. LZ volunteered to look at other states. CL suggested that some data on this topic may be available in agricultural economic literature. SC commented that Washington Industrial Safety and Health Act (WISHA) penalties follow statutorily the same penalty structure as federal Occupational Safety and Health Act (OSHA). In Congress, there will be a review of the federal OSHA penalty structure. There is consensus that there will be updates to the federal OSHA statute which will result in updates to WA state statute. At this time, L&I would not put resources into looking at its statutory penalty structure, because this will go through an appropriate public process of review and an update, probably in the next two years. CL suggested doing a literature search before putting the penalty topic on the agenda.

ACTION: FM will contact Matt Keifer to see what meeting he might be able to present. FM will distribute papers on reactive airway. Agenda topics will be left to the discretion of CL and FM. LZ will do a literature search on penalties.

Public Comment

During the break, FM asked HH to clarify her comments on the November minutes. Referring to the discussion on page eight, HH recalls clearly that Dr. Martinez was asked by someone if she herself reported when she diagnosed a pesticide-related illness, and her response was no, she did not. She referred to “*CL asked her if she was taught in medical school how to recognize chemical exposures, and whether there is much training in the medical community. Dr. Martinez said no to both.*” As a side note, HH knows that DOH has a program and that Matt Keifer has helped or participated to train physicians to recognize pesticide symptoms. Apparently that program has not reached Dr. Martinez, as it has not been able to reach many physicians.

DS moved to adjourn, PE seconded, and all were in favor. The meeting adjourned at 12:43.

Future PIRT Meetings

March 19	Labor and Industries, Tukwila
April 16*	Northwest Communities Education Center, Granger
May 21	Department of Health, Tumwater
June 18	Labor and Industries, Tukwila

See <http://www.doh.wa.gov/ehp/Pirt/pirt-meetings.htm> for agendas directions, and meeting materials.

* *NOTE: Please check PIRT webpage for date change for April PIRT meeting.*