

Environmental Health Tracking and Biomonitoring Advisory Panel Meeting Summary

Date: 06/11/2019
Minutes prepared by: Char Napurski
Location: American Lung Association in Minnesota, 490 Concordia Ave, St. Paul, MN

Attendance

- Panel members: Bruce Alexander, University of Minnesota (UMN); Kristie Ellickson, MN Pollution Control Agency (MPCA); Tom Hawkinson, Wenck Associates; Jill Heins Nesvold, American Lung Association in Minnesota; Ruby Nguyen, UMN; Geary Olsen, 3M; Cathy Villas-Horns, MN Department of Agriculture; Eileen Weber, UMN; Lisa Yost, Ramboll
- MDH Staff: Joanne Bartkus, Public Health Laboratory (PHL); Michelle Gin, Environmental Health Division (EH); Carin Huset, PHL; Jim Kelly, EH; Tess Konen, Environmental Epidemiology Unit (EE); Mary Manning, Health Promotion and Chronic Disease; Char Napurski, EE; Jessica Nelson, EE; Kate Murray, EE; Stefan Saravia, PHL; Deanna Scher, EH; Jessie Shmool, EE; Dan Tranter, EH
- Guests: Yuko Ekyalongo, UMN student, formerly EE; Kari Palmer, MPCA
- Regrets: Farhiya Farah, St. Mary's University of Minnesota

Legislative updates

Mary Manning provided updates on the legislative session that ended in May. Minnesota Family Investment Program (MFIP) increased grants to families by \$100 per month. Opioid intervention received an increase in funding for culturally specific treatments. Suicide prevention received funding. The provider tax, which affects various MDH programs, will continue albeit at a lower rate than previous years. The governor's gas tax plan did not pass. North Minneapolis received a one-time appropriation for enhanced blood lead testing, lead poisoning prevention efforts and asthma education as recommended by the Northern Metals Consent Decree Advisory Committee. The legislative session also brought changes for assisted living and more legislation for vulnerable adults. Other related legislative updates mentioned by attendees included: radon testing required for schools and charter schools; fee for drinking water increased; MDH Public Health Laboratory received \$1.5 million for equipment upgrades; and e-cigarettes banned in indoor spaces.

Minnesota and Wisconsin Heat Vulnerability project

Tess Konen, MN Tracking, presented on the Minnesota and Wisconsin Heat Vulnerability project. For more information on this topic, please refer to this section in the June 2019 Advisory Panel book.

Discussion

Kristie Ellickson asked if there was any information on the length of emergency department (ED) or hospital stay. Tess responded no, all data for this project was de-identified so there was no way to follow up on individual cases for more information. Ruby Nguyen commented that using hospital/ED data involves broader ICD-9 codes. It was not possible to know if admittance was for dehydration or cardiac event related to heat. Tess felt this data provided information on another group that could benefit from heat-related outreach. Bruce Alexander noted that men aged 34-64 also had higher rates of heat-related illness in Minnesota.

Tom Hawkinson noted that one county in Wisconsin was similar demographically to a neighboring county but had lower rates of heat-related illness. He asked if there were thoughts on why that might be the case. Tess responded more analysis will be needed to have a better idea, but perhaps outreach occurred more consistently in one county over the other. Eileen Weber asked if there was any way to determine if the heat-related illness was job related. Tess stated attempts were made to look at worker's compensation and survey data but those measures were not always reliable. She felt they did not have a good grasp on the situational details of each case.

Healthy Rural and Urban Kids project

Jessica Nelson and Yuko Ekyalongo, student worker, presented Healthy Rural and Urban Kids updates. Jessica shared information on study participation rates and an update on arsenic and manganese results and follow up conducted for participants with higher than expected levels of these metals. Yuko described preliminary demographic and spatial data for participants. For more information on these topics, please refer to this section in the June 2019 Advisory Panel book.

Discussion

Geary Olsen asked about the delay in recruitment for White Earth Nation children. Jessica responded that completing contracts and finalizing logistics has taken longer than expected. She confirmed that the interest is there but contract deadlines have been an issue. Jessie Shmool confirmed this, adding that inflexible deadlines are a known barrier between government and tribal agencies.

Cathy Villas-Horns inquired about the crop type variables created by Yuko for spatial analysis and asked what year the data represent. Yuko responded that the variables are for 2017. Cathy pointed out that there is a temporal gap between Healthy Kids sample collection in 2018 and crop type estimates for

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2017; it is important to have the timeframes in alignment. Kristie Ellickson asked whether the term “major road” was defined in the participant questionnaire. Both Jessica and Yuko agreed the interpretation was up to the participant. Tom Hawkinson asked how Yuko identified major point sources of pollution. Yuko responded that she conducted a literature review regarding the sources of specific PAHs, metals and pesticides measured in Healthy Kids; explored publicly available data, and spoke with Kristie Ellickson. Tom inquired if MPCA emissions data were used or if the measure was proximity to a polluting source; in his opinion, actual air measurements would be preferable in this case. Yuko responded that she used proximity to point sources in MPCA’s Permitted Facility Air Emission data, and Kristie added that MPCA did not have actual emissions data available. Cathy asked about point sources, and wondered if Superfund and hazardous waste sites were included. If a facility fell into multiple categories, how was it coded? Yuko stated she did not include Superfund sites; however, she acknowledged there might have been some overlap in categories. Kristie added that Yuko was focused on air pollution data and not waste management data, assuming that Superfund and hazardous waste sites would not be a significant source of air pollution exposure. Lisa Yost commented that since not much is known about the participants’ diets, messaging needs to be constructed very carefully.

Considering Jessica’s presentation on elevated cases of arsenic and manganese in Healthy Kids participants, Tom asked if welding happened on the property of elevated cases. He felt it would not be an exposure issue for children otherwise. Cathy asked if the questionnaire included questions on manganese in participants’ diets. Jessica stated the survey did not include those questions. Lisa felt there should be further follow up for the high arsenic cases; she also recommended using a different, preferred biomarker to assess manganese exposure. Kristie commented that there is manganese mining in Emily, MN. She thought it worthwhile to look into the manganese crustal layer in Minnesota. Ruby Nguyen asked if there was any education on arsenic in rice and apple juice in the communities. Jessica responded that she is not aware of this type of ongoing education currently. She added that the goal of MN Biomonitoring is to share the study results with other programs working on these issues and the Healthy Kids results may show the need for this type of education. Marry Manning raised the point that these concerns are culturally relevant, which may make education and change more difficult. Tom reminded everyone that where rice is grown and how it is prepared can affect the level of arsenic. Kristie wondered if homeopathic medicines contain arsenic and/or manganese. Jessica responded that it is possible arsenic is an ingredient; however, she was not sure about manganese. Eileen agreed with Lisa’s previous comment that manganese testing should be done in nails or hair instead of urine.

National Biomonitoring meeting, CDC State-based public health laboratory grant

Carin Huset, MDH Public Health Laboratory, presented on the National Biomonitoring Meeting taking place in St. Paul in October 2019, and on the CDC State-based Public Health Laboratory Biomonitoring Grant for which MDH recently applied. For more information on these topics, please refer to this section in the June 2019 Advisory Panel book.

Discussion

Mary Manning asked if there was any consideration for the EHTB Advisory Panel group to present during the National Biomonitoring Meeting. Carin responded that when California hosted the event, there was an option to attend a California Biomonitoring Advisory Panel meeting, but the timing of meetings does not overlap for October. Jill Heins Nesvold inquired about estimated attendance. Carin stated that the meeting spaces hold approximately 120 people, while previous meetings have had ~120 attendees. Bruce Alexander asked if students could attend or assist at the meeting. Carin said there was no registration fee and it was possible that extra help would be needed.

Panel members responded to the question posed to them: “What ideas does the Panel have for using the National Biomonitoring Meeting as an opportunity to promote biomonitoring and connect with other states?” Various panel members expressed an interest in attending the meeting if schedules permitted. Lisa Yost suggested highlighting our program’s successes and ways in which we are unique. Eileen recommended a focus on public policy impacts/changes from biomonitoring. Kristie suggested an evening town hall event as a possible format to get people to connect and learn more about each others’ work – this has worked well at previous meetings. Jill felt that a good way to engage legislators would be to ask them to be moderators during the conference. It would be very useful for them to hear what is happening in other states.

Jill inquired about the State-based grant and wondered how many states applied. Stefan Saravia said it was rumored that 20 states applied. He said he also heard the funding was going to mostly unfunded states. Bruce asked if the analytes listed in the grant proposal were set. Carin was not sure how flexible they could be now that the proposal had been submitted. Jessica added that the intent of the CDC’s funding opportunity was to align state programs with NHANES methods. Jessica felt that state funds could be used to supplement testing of additional analytes of concern. Eileen Weber wondered if clinicians could send samples to the lab for analysis of these chemicals. Stefan said the lab is transitioning to CLIA compliance so this could be a possibility but there would need to be a discussion of logistics. Cathy Villas-Horns asked what the CDC funding would support. Carin responded the funding would support lab methods, staff time, recruiting and study needs. Stefan clarified that they did not apply for funding to buy new lab instruments.

CDC Funding Opportunity on PFAS health effects

Deanna Scher, MDH Environmental Health, gave an overview of another CDC funding opportunity on PFAS health effects for which MDH recently applied. For more information on this topic, please refer to this section in the June 2019 Advisory Panel book.

Discussion

Eileen Weber mentioned that Lake Elmo and Woodbury are also part of the PFAS plume. She asked if those locations were excluded from the grant proposal. Deanna Scher responded that the grant proposal focused on two locations (Oakdale and Cottage Grove) to prevent the proposed project from becoming too overwhelming. Jessie Shmool asked if risk communication would be an example of a supplemental study. Deanna agreed, stating risk communication was listed as such.

New business

Discussion did not bring forward any new business.

Motion to adjourn

The meeting was adjourned on time.

Minnesota Department of Health
Environmental Health Tracking and Biomonitoring
PO Box 64882
St. Paul, MN 55164-0882
651-201-5900
health.biomonitoring@state.mn.us
www.health.state.mn.us

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