

North Park Montessori Health Consultation

Michigan Department of Health & Human Services

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Outline

- What is a health consultation
- The data used in the consultation
- Conclusions
- Process of evaluating exposure
- Reconstruction of exposure
- Recommendations



What is a health consultation?

- A health consultation is a report with information that responds to a specific health question or a possible environmental problem
- For North Park Montessori, the Michigan Department of Health and Humans Services (MDHHS) assessed the potential health problems from contact with construction dust



Available soon at:

https://www.accesskent.com/ Health/north_park_montessori



What data was used in the evaluation?

- Construction logs, notes, and pictures as descriptions of construction activities
- MDHHS used testing of the wall plaster from GRPS asbestos contractors, the Department of Environment, Great Lakes and Energy (EGLE, formerly known as MDEQ), and the Michigan Occupational Safety and Health Administration (MIOSHA)
- 27 aggressive air and 4 dust wipe samples taken on February 15, 16, and 17, 2019 by MicroAir were used
- Air and dust samples collected after this date by other contractors were not used



Why are air samples that were collected after February 17 not used?





Components of the health consultation



 At North Park Montessori, we applied this evaluation to asbestos, lead and silica



Important points

- Were people likely exposed to a material of concern?
 - Based on the available data, it is **likely** that construction activities caused asbestos, lead, and silica containing dust to spread into the school. All people who entered the school likely breathed or swallowed at least **some** of the dust
- Are there risks of health effects?
 - Given what we know about the dust and the relatively short period that contact could have occurred, future health problems are not likely to happen but cannot be ruled out



More detail about the conclusions

Were people likely exposed to a material of concern?

Are there risks of health effects?







What were the levels of asbestos detected?

- Asbestos was detected in 2 out of 27 air samples at:
 - 0.0049 fibers/cc
 - 0.015 fibers/cc

Clearance level for all samples in a room is 0.022 fibers/cc (AHERA)

- Asbestos was detected in 2 out of 4 dust wipe samples at:
 - 498 structures per cm²
 - 9960 structures per cm²
- Based on EPA guidance*, MDHHS considers greater than 5000 structures per cm² in dust as above a typical (background) level



* USEPA. (2008). LOWER MANHATTAN TEST AND CLEAN PROGRAM

What about Lead and Silica?

- Lead based paint was found in 2 out of 11 paints sampled
- Quartz (a potential source of silica fibers) was found in nearly all wall plaster samples tested
- There are no tests for lead or silica from the air or dust that can be used to estimate past contact

It is likely that construction activities caused asbestos, lead, and silica containing dust to spread into the school. All people who entered the school likely breathed or swallowed at least some of the dust



More detail about the important points

Were people likely exposed to a material of concern?

Are there risks of health effects?





Health effects from Asbestos, Lead, and Silica

- From what we know about occupational exposure, breathing large amounts of a for a long time is an increased risk for developing lung cancer (asbestos or silica) and mesothelioma (asbestos)
- Swallowing lead-containing dust could result in decreased academic achievement, IQ, and specific cognitive measures; increased incidence of attention-related behaviors and problem behaviors



Amount of material at North Park Montessori



Asbestos was detected

in two air samples at:

- 0.0049 fibers/cc
- 0.015 fibers/cc



Are there other factors that inform risk?

- Occasionally breathing in even a large number of asbestos fibers over a short time is expected to be a low risk for developing disease later in life.
- Frequently breathing in a large number of asbestos fibers over a long time, such as in mining, is linked to a high risk of developing disease later in life.
- Breathing larger asbestos fibers has been shown to result in a higher risk of asbestos-related diseases than breathing smaller fibers. All fibers detected at North Park Montessori were considered small.









Are there potential health effects?

- Relatively short period of time exposure could have occurred = Low risk
- Relatively low amount of detected fibers = Low risk
- Type of fibers detected (short chrysotile fibers) = Low risk

MDHHS concludes that future health problems are not likely to happen but cannot be ruled out.



Can exposure conditions be recreated?

 It is not recommended to use measurements from new cuts to recreate levels that people could have breathed or swallowed in the past

• The most realistic estimate of how much asbestos, lead, and silica was present would have been to thoroughly test the school in an undisturbed state



Can exposure conditions be recreated?

- The Michigan Occupational Safety and Health Administration (MIOSHA) said that cutting into the plaster now, in the same way as used during past construction, would be in violation of asbestos safety laws
- Testing during future construction would give different results because conditions will be changed from past construction practices

Results from additional testing would not change the overall recommendations to protect long-term health made by MDHHS



Summary

- It is likely that construction activities caused asbestos, lead, and silica containing dust to spread into the school. All people who entered the school likely breathed or swallowed **at least some** of the dust
- MDHHS concludes that future health problems are not likely to happen but cannot be ruled out
- Results from additional testing or recreations would not change the overall recommendations to protect long-term health made by MDHHS



What are some next steps that you and your family can take?

Nirali Bora, MD

Medical Director, Kent County Health Department



Live a healthy lifestyle









Children

- No testing or imaging can be done now or in the near future to determine exposure or health risks in children
- Signs of stress in children
 - Feeling anxious or fearful
 - Feeling guilt
 - Difficulty concentrating
 - Poor sleep
- If your child shows these signs, what can you do?



https://www.samhsa.gov/child-trauma/recognizing-and-treating-child-traumatic-stress

Adults

- Talk with your primary care provider if:
 - You have a smoking history
 - Chronic lung conditions
- Signs of stress in adults
 - Feeling anxious, depressed, helpless, or hopeless
 - Eating or sleeping too much or too little
 - Worrying a lot, feeling guilty
 - Unexplained aches and pains
 - Having low or little energy
 - Excessive smoking, drinking, or using drugs



Talk with your primary care provider

- Available on the Access Kent website
- Likely exposure, low risk
- Consider including exposure on health history
- Links to:
 - case studies
 - MDHHS health consultation
 - ATSDR factsheet





Resources

- The following resources are/will be available at AccessKent.com
 - Health consultation (full report)
 - Summary of health consultation
 - Letter for healthcare provider
 - ATSDR fact sheet on asbestos





Contact information

- MDHHS-toll-free phone line
 - > 1-800-648-6942
- Kent County Health Department
 - > (616) 632-7280 please leave a message



