

From: [LyonCallo, Sarah \(DCH\)](#)
To: [Dykema, Linda D. \(DCH\)](#)
Subject: Fwd: Flint Testing and EBLLs.xlsx
Date: Tuesday, July 28, 2015 10:22:48 AM
Attachments: [Flint Testing and EBLLs CL.xlsx](#)
[ATT00001.htm](#)

Sent from my iPhone

Begin forwarded message:

From: "Larder, Cristin (DCH)" <LarderC@michigan.gov>
Date: July 27, 2015 at 10:00:10 PM EDT
To: "McKane, Patricia (DCH)" <McKaneP@michigan.gov>
Cc: "LyonCallo, Sarah (DCH)" <lyoncallos@michigan.gov>
Subject: RE: Flint Testing and EBLLs.xlsx

Thanks, Patti!

It took me a while to get it right, but I was able to create a p-chart, which is Shewhart's version of a control chart for proportions. I'm not sure if you can read the attachment, but I used the monthly data from 2013-14 to calculate a mean proportion, mean number of kids tested per month, plus upper and lower control limits. I then plotted the 2014-15 data on a p-chart with the mean, LCL, and UCL calculated from the previous year. The chart shows that the 3 months in question are the only ones above the UCL for the year.

Ideally, we would want to use more years of data to establish the control limits. Also, mapping the cases might help figure out if specific pipes were the source of exposure. Sarah also suggested a Poisson regression (factoring in such information as when the water treatment procedure changed to stop the chemical reaction), if the folks upstairs think we should investigate further. We could also test to see if reporting changed at all during the exposure period (e.g. were there more capillary tests or tests in general?).

If it looks okay to you, I'll send it off to Nancy as soon as I get in tomorrow. (She called over here this afternoon asking for it, so I'm sure she's anxious to send it upstairs.)

Good night,

Cristin

From: McKane, Patricia (DCH)
Sent: Monday, July 27, 2015 3:12 PM
To: Peeler, Nancy (DCH)
Cc: Larder, Cristin (DCH); Scott, Robert L. (DCH)
Subject: Re: Flint Testing and EBLLs.xlsx

Thanks Nancy.

I was in a session on Shewart charts for QI. I think this might be a good approach for the needs assessment We can talk more. Hopefully the slides will

be available, because I can't type that much with my thumbs

Sent from my iPhone

On Jul 27, 2015, at 1:14 PM, Peeler, Nancy (DCH) <PeelerN@michigan.gov> wrote:

Hi Cristin and Patti –

This is the CLPPP data for Flint that I had mentioned to you last week. Cristin, can you quickly run any tests to see if the difference in the first graph is statistically significant? Bob is at his desk today, best to connect with him if you have questions about the data. We are hoping to send this up today, so we appreciate anything you can do to get us a response this afternoon, if at all possible. Many thanks!

Nancy