



December 21, 2018

To the PulseNet Laboratory Directors

Preparation for WGS implementation in PulseNet and a modification to the implementation timeline

All,

I would like to provide an update on the WGS implementation progress in PulseNet.

First, thank you for all the hard work you have been putting in implementing WGS so far.

CDC is working on two fronts to make this implementation happen:

1. We are helping the state and local PulseNet participants convert their PFGE databases to BioNumerics v. 7 in preparation of WGS-based surveillance.
2. We are preparing the servers, updating the WGS databases, and testing the system to make sure it works in production at CDC.

We understood that the timeline we have worked under was aggressive and only possible if everything went smoothly with minimal complications. However, that has unfortunately not been the case.

The conversions of the state and local BioNumerics installations have progressed at a slower pace than we had hoped for, with 24 laboratories completed conversion or in the process of being converted by now. In the original timeline, we expected that all 54 sequencing certified laboratories would at least have begun the process of upgrading their BioNumerics databases. Realistically, the conversions cannot be completed before March 2019.

Adding to the delays with the BioNumerics upgrades, we have also experienced some delays outside our control in updating the WGS databases in our test systems at CDC. However, we are now getting back on track and will soon be able to install and test them in our production system and believe they will be functional and available to PulseNet participants who have completed their BioNumerics migrations before March 15.

With this in mind, we expect to be able to change the primary subtyping method for both *E. coli*/STEC/ *Shigella* and *Salmonella* in PulseNet on March 15, 2019.

Thus, this is the new target date. We hope that the WGS implementation will not be delayed any further so this exciting development that we together have been working on for 5 years will become routine in PulseNet. We appreciate your patience and understanding.

As mentioned above we need your help to ensure that your BioNumerics installations are upgraded to v 7.6 on time:

Those of you, who have not upgraded yet, should do the following:

1. Please, clean up your current BioNumerics database now!
If your database is not clean, you may lose data and your conversion will slow down, potentially also delaying the conversions in the laboratories that comes after you. Your laboratory will receive an email from our database team with more details about the cleaning process and the timing of the BioNumerics conversion of your laboratory along with that of all

the other remaining PulseNet laboratories. Please, email PulseNet@cdc.gov immediately if you have any questions related to cleaning.

2. Please, make sure your local IT support will be available to assist with the conversion when it is time to do so.
3. Please, email pulsenet@cdc.gov as soon as possible if you will not be ready to do the conversion in the allotted time. No matter what, please, also alert PulseNet@cdc.gov when you are done cleaning your database and have made arrangements with your local IT support.
4. Finally, PulseNet laboratorians will need to complete the WGS analysis certification process before they can get login credentials to the WGS databases. Wet lab certification is a prior requirements for the analysis certification.

If you have any questions feel free to contact us:

General questions: Peter Gerner-Smidt (plg5@cdc.gov), Heather Carleton (wvt2@cdc.gov), Eija Trees (eih9@cdc.gov), Kelley Hise (kpb6@cdc.gov)

Database, MLST tools: pulsenet@cdc.gov

Salmonella serotyping and characterization: Salmonella@cdc.gov

Campylobacter E. coli/Shigella/STEC characterization: entericreferencelab@cdc.gov

Looking forward to a new era of next generation PulseNet in 2019 and Happy Holidays

Sincerely,



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