



PulseNet 2.0 Reference Guide



Allele Codes

Allele codes are automatically assigned once sequences are published to the national database in PulseNet 2.0. Once allele codes are assigned, they are viewable in both local and national views and they should sync to SEDRIC within fifteen minutes. Only sequences with a core percent value of 95% or higher will receive an allele code. **Note: allele codes have not been developed for *Shigella*, non-Shiga toxin producing-*E. coli*, or non-*jejuni* *Campylobacter*.**

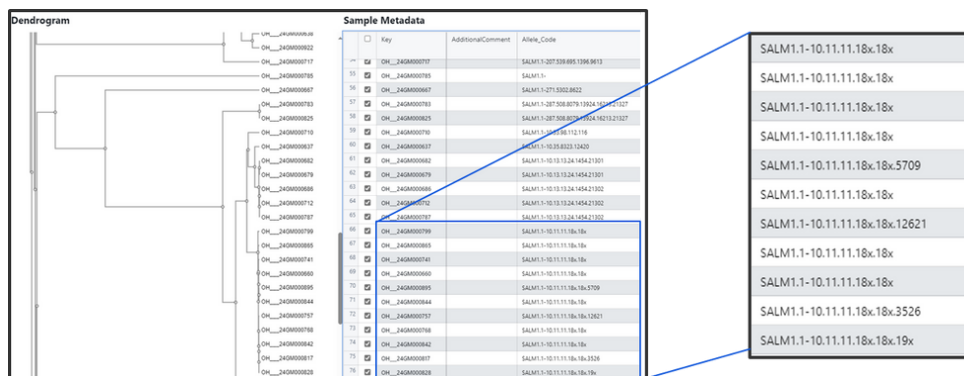
<i>Campylobacter (jejuni only)</i> CAMP1.1 - #. #. #. #. #. Allele difference thresholds: (84, 61, 24, 14, 5, 0) Cluster search at the 4th digit.	<i>Escherichia (STEC only)</i> EC1.1 - #. #. #. #. #. Allele difference thresholds: (77, 51, 16, 6, 0) Cluster search at the 4th digit.
<i>Listeria</i> LMO1.2 - #. #. #. #. #. #. Allele difference thresholds: (71, 51, 36, 19, 7, 0) Cluster search at the 5th digit.	<i>Salmonella</i> SALM1.1 - #. #. #. #. #. #. Allele differences thresholds: (80, 28, 15, 7, 4, 0) Cluster search at the 4th digit.

Updates to Allele Codes in PulseNet 2.0

1. New version (PulseNet 2.0): each digit at a threshold is unique to its clade/group on the single-linkage tree used for allele code naming. Example: if the 5th digit of a code is a number 2, no other non-related code will have a 2 at the 5th digit.

group	Sequence B: 1.3.5.2.2.2	Any code with a number 2 at the 5th digit will be part of the same group/clade and will share the same 1st, 2nd, 3rd, and 4th digits.
	Sequence C: 1.3.5.2.2.3	
	Sequence D: 1.3.5.2.2.4	
	Sequence E: 1.3.5.2.2.5	

2. New version (PulseNet 2.0): X codes may continue past the X with plain numbers or additional numbers with an X, allowing users to detect smaller clusters of closely related sequences within an overall X code.



Reminder: The new version of allele codes has only been assigned to reanalyzed sequences. As of January 1, 2024, data from x-y have been reanalyzed.

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