

Subject: OIA 2025/21 - Request for dates recent variants were first detected in wastewater
Date: Thursday, 13 November 2025 at 11:32:50 AM New Zealand Daylight Time
From: McGuinness Institute OIAs
To: PHFScienceEnquiries@phfscience.nz
CC: Wendy McGuinness, [REDACTED]
Attachments: image001.png

Kia ora,

OIA 2025/21 - Request for dates recent variants were first detected in wastewater

The Institute is in the process of producing a third edition of COVID-19 Nation Dates. As part of this process, we are interested in the dates that each significant variant or subvariant was first detected in wastewater and/or clinical samples in New Zealand.

Would you be able to provide:

1. The date that the subvariant XEC was first detected in wastewater and/or clinical samples (approximately September 2024)?
2. The date that the subvariant NB.1.8.1 was first detected in wastewater and/or clinical samples (approximately March 2025)?
3. Are there any other variants/subvariants that have been detected that are not part of either list (including their dates of first detection)?

It would be great if you could present the information in the same format as your response to our previous OIA (our ref [OIA 2024/05](#)) (see image below).

Please do not hesitate to contact me if you have any questions or points of clarification.

Ngā mihi,

Wendy

Wendy McGuinness

Chief Executive

McGuinness Institute Te Hononga Waka

Level 1A, 15 Allen Street, Wellington 6011 | PO Box 24-222 Wellington 6142

[+64 4 499 8888](tel:+6444998888) | www.mcguinnessinstitute.org

The McGuinness Institute is a non-partisan think tank working towards a sustainable future, contributing strategic foresight through evidence-based research and policy analysis.

Disclaimer: This email is intended only to be read or used by the addressee. It is confidential and may contain legally privileged information. If you are not the addressee indicated in this message (or responsible for delivery of the message to such person), you may not copy or deliver this message to anyone, and you should destroy this message and kindly notify the sender by reply email. Confidentiality and legal privilege are not waived or lost by reason of mistaken delivery to you.

Appendix 1: ESR Wastewater Surveillance - Variant detection dates

Alias	lineage designation	First detection in wastewater ¹	Report date ¹	Date received ¹	Date collected ¹
Original	oldest genome		26/02/2020	29/02/2020	27/02/2020
Alpha*	B.1.1.7		30/12/2020	5/01/2021	29/12/2020
Beta*	B.1.351		27/01/2021	27/01/2021	26/01/2021
B.1.1.317	B.1.1.317		Never detected in the community		
Delta*	B.1.617.2		21/06/2021	28/06/2021	20/06/2021
BA.1	B.1.1.529.1		28/12/2021	29/12/2021	27/12/2021
BA.2	B.1.1.529.2	12/02/2023	14/01/2022	16/01/2022	14/01/2022
BA.3	B.1.1.529.3		Never detected in the community		
BA.4	B.1.1.529.4	5/02/2023 [^]	8/05/2022	10/05/2022	9/05/2022
BA.5	B.1.1.529.5	5/02/2023 [^]	17/05/2022	19/05/2022	17/05/2022
BA.2.75	B.1.1.529.2.75	5/02/2023	16/06/2022	16/06/2022	15/06/2022
XBB	XBB	5/02/2023	20/09/2022	22/09/2022	20/09/2022
CH.1.1	B.1.1.529.2.75.3.4.1.1.1.1	5/02/2023	2/10/2022	7/10/2022	5/10/2022
BQ.1.1	B.1.1.529.5.3.1.1.1.1.1.1		4/10/2022	6/10/2022	2/10/2022
XBC	XBC	5/02/2023	14/10/2022	19/10/2022	17/10/2022
XBB.1.5	XBB.1.5		03/12/2022	07/12/2022	05/12/2022
EG.5	XBB.1.9.2.5	16/04/2023	11/05/2023	15/05/2023	11/05/2023
HK.3	XBB.1.9.2.5.1.1.3	9/07/2023	2/08/2023	7/08/2023	1/08/2023
BA.2.86	B.1.1.529.2.86	10/09/2023	25/09/2023	3/10/2023	28/09/2023
JN.1	B.1.1.529.2.86.1.1	10/09/2023	9/10/2023	12/10/2023	9/10/2023

INSTITUTE OF ENVIRONMENTAL SCIENCE AND RESEARCH LIMITED

Kenepuru Science Centre: 34 Kenepuru Drive, Kenepuru, Porirua 5022 | PO Box 50348, Porirua 5240, New Zealand

T:

www.esr.cri.nz

JN.1.4	B.1.1.529.2.86.1.1.4.5	ND	22/10/2023	25/10/2023	22/10/2023
XDK	XDK	ND	7/01/2024	11/01/2024	7/01/2024
JN.1.16	B.1.1.529.2.86.1.1.16	3/12/2023	16/01/2024	18/01/2024	16/01/2024
KP.2	B.1.1.529.2.86.1.1.11.1.2	25/02/2024	12/02/2024	15/02/2024	12/02/2024
KP.3	B.1.1.529.2.86.1.1.11.1.3	5/11/2023	15/03/2024	20/03/2024	14/03/2024
LB.1	B.1.1.529.2.86.1.1.9.2.1	ND	8/04/2024	16/04/2024	7/04/2024

*as historically defined by WHO <https://www.who.int/publications/m/item/historical-working-definitions-of>

was historically defined by WHO <https://www.who.int/publications/m/item/historical-working-definitions-and-cov-2-variants>

^BA4/BA5 not differentiable from each other with ESR's CoVarSeq assay

ND = Those variants are not differentiable from JN.1 with ESR's CoVarSeq assay
