Phylodynamics of H5N1 NA | North America outbreak

EPI_SET_261109tg | doi.org/10.55876/gis8.261109tg

A/dairy_cow/Nebraska/024659-008/2025 | 2025-09-08
A/dairy_cow/California/022247-005/2025 | 2025-08-04
A/dairy_cow/California/024771-001/2025 | 2025-09-08
A/dairy_cow/USA/006508-003-R/2025 | 2025
A/dairy_cow/California/022472-002/2025 | 2025-08-05
A/California/150/2024 | 2024-10-09
A/dairy_cow/USA/036203-001-R2/2024 | 2024
A/dairy_cow/California/25_007549-057/2024 | 2024-09-01
A/environment/USA/009619-001/2025 | 2025
A/duck/USA/003062-011/2025 | 2025
A/dairy_cow/USA/24_036368-004/2024 | 2024
A/House_fly/California/MCDC/2024 | 2024-11-13
A/dairy_cow/California/038321-003/2024 | 2024-12-17
A/dairy_cow/California/033852-002/2024 | 2024-11-05
A/environment/USA/010008-009/2025 | 2025
A/dairy_cow/USA/24_033990-002/2024 | 2024
A/House_fly/California/FCDA/2024 | 2024-10-12
A/California/196/2024 | 2024-11-27
A/dairy_cow/USA/037573-003/2024 | 2024 **[V116X]**
A/California/134/2024 | 2024-09-30
A/chicken/USA/24-036832-002/2024 | 2024 **[Y344H]**
A/California/190/2024 | 2024-11-12
A/cat/California/037806-001/2024 | 2024-12-14
A/cat/California/037809-001/2024 | 2024 **[Y155X]**
A/dairy_cow/USA/037420-001/2024 | 2024 **[I106X]**
A/California/180/2024 | 2024-11-07
A/California/227-1/2024 | 2025-01-10
A/California/183/2024 | 2024-11-07
A/Washington/198/2026 | 2026-10-12 **[K432E]**
A/Washington/203/2026 | 2026-10-29 **[K432E]** **(Newly added)**
A/Washington/UW-110701/2026 | 2026-10-29 **[K432E]**
A/dairy_cow/Utah/10434-002/2026 | 2026-07-15
A/mink/Utah/11429-006/2026 | 2026-08-07 **[N329S]**
A/dairy_cow/Idaho/09253-001-tile/2026 | 2026-06-16 **[K432E]**
A/dairy_cow/Utah/10262-001/2026 | 2026-07-15 **[K432E]**
A/dairy_cow/Utah/09421-001-tile/2026 | 2026-06-24
A/dairy_cow/Idaho/08851-001-tile/2026 | 2026-06-08
A/dairy_cow/Idaho/07183-001/2026 | 2026-05-04
A/dairy_cow/USA/015686-005/2025 | 2025-05-12
A/California/151/2024 | 2024-10-09
A/California/147/2024 | 2024-10-07
A/California/193/2024 | 2024-11-18
A/California/152/2024 | 2024-10-10
A/cat/Idaho/24-013710-009/2024 | 2024-05-07
A/environment/USA/037325-011/2024 | 2024 **(Pet food)**
A/environment/Oregon/037325-011/2024 | 2024 **(Raw feline pet food)**
A/environment/USA/037325-013/2024 | 2024 **(Pet food)**
A/dairy_cow/USA/011973-001/2025 | 2025-04-03
A/cat/USA/24-020794-001/2024 | 2024-07-14
A/dairy_cow/USA/24_018334-007/2024 | 2024-06-20
A/Colorado/137/2024 | 2024-07-19
A/Colorado/138/2024 | 2024-07-19
A/Colorado/139/2024 | 2024-07-22
A/Colorado/134/2024 | 2024-07-15
A/Michigan/90/2024 | 2024-05-14
A/red_fox/Michigan/24-013016-003/2024 | 2024-04-24
A/dairy_cow/Ohio/B2408700-PBS-6/2024 | 2024-03-29
A/Missouri/121/2024 | 2024-08-22
A/Texas/37/2024 | 2024-03-28
A/dairy_cow/Texas/24_009110-026/2024 | 2024-03-14
A/cat/New_Mexico/24-012046-001/2024 | 2024-04-17
0.006
A/dairy_cow/USA/037225-062/2024 | 2024-12-06 **[V116I]**
A/turkey/South_Dakota/23-034174-001/2023 | 2023-11-06
A/Canada_goose/Maryland/23-034924-007/2023 | 2023-11-09
0.01
A/duck/USA/027844-002/2024 | 2024
A/turkey/Minnesota/23-036928-001/2023 | 2023-11-20
A/tundra_swan/Minnesota/23-037501-001/2023 | 2023-11-08
A/pheasant/Iowa/23-034845-002/2023 | 2023-11-09
A/Cackling_Goose/BC/AIVPHL-1427/2023 | 2023-11-20
A/Australasian_Harrier/Wairarapa/W26_01469/2026 | 2026-07-14
0.004
A/Brown_Skua/Western_Australia/AS-26-1348-1/2026 | 2026-06-15
0.005
A/Wandering_Albatross/Marion_Island/WA_05/2024 | 2024-11-08
0.016
A/Duck/Argentina/22052-1/2026 | 2026-04-12
0.004
A/skua/Antarctica/O3592-CL/2025 | 2025-02-28
0.006
A/Striped_Skunk/BC/AIVPHL-1082/2023 | 2023-04-20
0.008
A/red-tailed_hawk/Massachusetts/015884-015/2023 | 2023-03-08
A/chicken/Pennsylvania/012092-004-v/2022 | 2022-04-19
0.007
A/red-tailed_hawk/Massachusetts/015884-020/2023 | 2023-04-07
RG-A/BALD_EAGLE/FLORIDA/W22-134-OP/2022XA/PR/8/34 | 2024-05-12
A/Red_Fox/BC/AIVPHL-1286/2023 | 2023-08-22
A/Turkey/MB/FAV-0228-001/2026 | 2026-09-10
A/turkey/South_Dakota/12570-002/2026 | 2026-09-07
0.005
A/turkey/North_Dakota/12386-002/2026 | 2026-09-01
A/turkey/North_Dakota/12386-001/2026 | 2026-09-01
A/turkey/South_Dakota/12571-001/2026 | 2026-09-04
A/turkey/Minnesota/12654-003/2026 | 2026-09-08
A/turkey/Minnesota/12654-001/2026 | 2026-09-08
A/canada_goose/Minnesota/12585-005/2026 | 2026-09-03
A/canada_goose/New_York/02267-001/2026 | 2026-02-04
A/chicken/Missouri/00063-005/2025 | 2025-12-30
A/snow_goose/Oklahoma/05185-001/2025 | 2025-11-20
0.004
A/owl/California/02790-001/2026 | 2026-02-11
A/canada_goose/California/06505-001/2025 | 2025-12-15
A/american_white_pelican/California/06189-001/2025 | 2025-12-01
A/wild_goose/Texas/00044-001/2025 | 2025-12-30
A/chicken/Kansas/00138-002/2026 | 2026-01-03
A/turkey_vulture/Wyoming/06377-001/2025 | 2025-12-18
A/snow_goose/Missouri/00059-013/2025 | 2025-12-31
0.004
A/duck/Indiana/08996-005/2026 | 2026-06-16
A/chicken/Indiana/08996-001/2026 | 2026-06-16
A/mallard_duck/Maine/00310-055/2025 | 2025-12-15
A/canada_goose/Iowa/00098-005/2025 | 2025-12-30
0.004
A/Wyoming/01/2025 | 2025-02-11
0.004
A/sanderling/USA/008817-002/2025 | 2025
A/herring_gull/USA/004499-003/2025 | 2025
A/goose/Oregon/24-031478-002/2024 | 2024-10-22
A/turkey_vulture/USA/013422-001-R2/2025 | 2025 **[S110F]**
A/green-winged_teal/USA/003927-012/2025 | 2025-01-25 **[S248N]**
A/black_vulture/USA/012888-001/2025 | 2025
A/vulture/USA/012105-001/2025 | 2025
A/snow_goose/Arkansas/AR24-104/2024 | 2024-12-06
A/skunk/USA/009868-001/2025 | 2025
A/chicken/West_Virginia/25-000049-004/2024 | 2024-12-31 **[S248N]**
A/canada_goose/USA/001284-001/2025 | 2025 **[S248N, V116A]**
A/chicken/Oklahoma/24-034639-002/2024 | 2024-11-19
A/Cackling_Goose/BC/AIVPHL-2534/2024 | 2024-10-14
A/Iowa/124/2024 | 2024-12-17
A/bufflehead/USA/003298-006/2025 | 2025-01-19 **[S248N]**
A/canada_goose/USA/003299-007/2025 | 2025-01-22 **[S248N]**
A/Louisiana/12/2024 | 2024-12-11 **[S248N]**
A/Washington/254/2024 | 2024-10-23 **[S248N]**
A/Washington/239/2024 | 2024-10-18
A/Washington/240/2024 | 2024-10-18
A/canada_goose/USA/012813-001/2025 | 2025-04-10
0.004
A/Washington/252/2024 | 2024-10-24 **[S247N]**
A/Mexico/Dur_Indre_2292/2025 | 2025-03-18
A/dairy_cow/USA/007985-001-R2/2025 | 2025
A/dairy_cow/USA/002645-005/2025 | 2025-01-21
A/Nevada/10/2025 | 2025-02-04
A/chicken/Idaho/25-000074-001/2024 | 2024-12-29 **[S248N]**
A/green-winged_teal/USA/033431-002/2024 | 2024
0.172
0.004
A/British_Columbia/PHL-2032/2024 | 2024-11-09
A/pheasant/Kansas/24-037794-009/2024 | 2024-12-16
A/black_vulture/Georgia/06431-001/2025 | 2025-12-10 **[T438I]**
A/red-tailed_hawk/Iowa/06281-001/2025 | 2025-12-16
A/northern_elephant_seal/California/03370-007/2026 | 2026-02-21
A/northern_elephant_seal/California/03370-019/2026 | 2026-02-21
A/northern_elephant_seal/California/03370-014/2026 | 2026-02-21
A/sea_otter/California/03843-010/2026 | 2026-02-27
A/turkey_vulture/California/06772-002/2025 | 2025-12-18
A/large-billed_crow/Hokkaido/B252/2026 | 2026-01-08
A/large-billed_crow/Hokkaido/B251/2026 | 2026-01-07
0.004
A/northern_pintail/Alaska/03230-005/2025 | 2025-10-02
0.004
A/chicken/Minnesota/25-000082-001/2024 | 2024-12-31
A/goose/Pennsylvania/002965-001/2025 | 2025-01-25
0.004
A/Ohio/06-1/2025 | 2025-02-12
0.006
A/sand_crane/USA/012328-001/2025 | 2025
A/great_horned_owl/USA/000975-004/2025 | 2025-01-07
0.008
A/Eurasian_teal/Netherlands/1/2026 | 2026-01-09
0.011
0.004
A/Tufted_duck/Norway/2026-07-60-3-2/2026 | 2026-01-29
A/England/0480160/2025 | 2025-01
0.006
A/american_crow/Massachusetts/015884-011/2023 | 2023-02-27
0.006
0.005
0.004
A/sanderling/Massachusetts/015884-008/2023 | 2023-02-21
A/bottlenose_dolphin/Florida/038155-004/2023 | 2023-12-31
A/canada_goose/Massachusetts/004865-016/2024 | 2024-02-05
A/turkey/Minnesota/23-032152-002/2023 | 2023-10-19
0.604
0.403
A/red_fox/USA/010726-001/2024 | 2024
1.674
A/canada_goose/Illinois/000616-006/2024 | 2024-12-31
0.604
A/bald_eagle/USA/005188-001/2025 | 2025

Values displayed on red (truncated) branches correspond to the original branch lengths before truncation was applied.

0.00 0.01 0.02 0.03 0.04 0.05

GenoFLU

Virus name A1 Virus name B1.3 Virus name B3.7 Virus name C3.1 Virus name Minor Lineages
Virus name A2 Virus name B3.10 Virus name B3.9 Virus name D1.1 Virus name Notassigned
Virus name A3 Virus name B3.13 Virus name B4.1 Virus name D1.2 Virus name NA
Virus name A5 Virus name B3.2 Virus name C1.1 Virus name D1.3
Virus name A6 Virus name B3.6 Virus name C2.1 Virus name D1.8

Continent

Africa
Antarctica
Asia
Europe
North America
Oceania
South America

Host

Avian
Dairy cow
Human
Other
Other mammals

Branch length

Original
Capped at 90th percentile

updated 09 Nov 2026 UTC
by the GISAID Data Science Initiative