This document contains the required minimum data fields for viral isolate characterization. The NIAID CEIRS centers must send these data sets to the NIAID public database in the format detailed below. Highlighted in yellow are fields that BHB will generate for the investigator based on the information provided.

**General information about the influenza viral isolate**

1. **What is the strain name of the virus you are submitting data about?**
   Format: Text

2. **Please provide a unique laboratory identifier assigned to this virus by you (the investigator).**
   Format: Text

3. **What type of virus are you submitting data about?**
   Format: Drop down menu

   - Wild-type virus
   - Reverse genetic (rg) virus
   - Reassortant virus (not rg derived)
   - Animal adapted
   - RG animal adapted

   3a. **What is the host animal for adaptation?**
       Format: Text

   3b. **What is the passage history for this virus?**
       Format: Text – follow standards established by CDC

   Go to #4
4. Does this virus contain chimeric genes?
   Format: Yes/No
   Go to #5

4a. Which gene segments are chimeric?
   Format: Pull down menu, can select more than one
   1 PB1
   2 PB2
   3 PA
   4 HA
   5 NP
   6 NA
   7 M
   8 NS
   More than 1 gene segment may be selected

4b. For gene segment _____ what is the Genbank or BHB accession number?
   Format: Text/Not submitted

4c. For gene segment _____ how many source virus strains were used to generate the segment?
   Format: Number

4d. For gene segment _____, what is the first source virus strain name?
   Format: Text

4e. For gene segment _____, what is the Genbank or BHB accession number for this first source virus strain?
   Format: Text/Not submitted/Unknown

4f. For gene segment _____, what are the nucleotide positions for the first source virus?
   Format: Numbers

4g. Is the sequence for these nucleotide positions wild-type or have mutations been introduced?
   Format: Drop down menu:
   Wild-type
   Mutated

   4h. If mutated, describe the nucleotide alteration?
   Format: Text

Repeat Questions 4d through 4h for the number of times identified in question 4c.

Repeat Questions 4b-4h for the next gene segment if more than one was identified in question 4a.
5. For gene segment ________ please answer the following questions:

- **For Wild-type virus Animal adapted**
- **For the following:**
  - Reverse genetic (rg) virus
  - Reassortant virus (not rg derived)
  - RG Animal adapted

5a. **What is the Genbank or BHB accession number?**
   Format: Text/Not sequenced

5b. **What is the source virus strain name?**
   Format: Text

5c. **Is the sequence for these nucleotide positions wild-type or have mutations been introduced?**
   Format: Drop down menu:
   - Wild-type
   - Mutated

5d. **If mutated, describe the nucleotide alteration?**
   Format: Text

5e. **Please provide the Genbank or BHB accession number for the source virus strain (Parent strain).**
   Format: Text

Repeat Question 5 (a-e) for each gene segment

6. **Sample identifier (will allow for the data to link to any epi-data that exists for this virus)**
   Format: Free form text

   NOTE - IRD will fill in Collection date for the sample based off of the sample identifier and will fill out the country in which the original sample was collected.
7. **Influenza A HA subtype**
   Format: Drop down menu
   
   H1  
   H2  
   H3  
   H4  
   H5  
   H6  
   H7  
   H8  
   H9  
   H10 
   H11 
   H12 
   H13 
   H14 
   H15 
   H16 

7a. **Influenza A HA subtype determined by:**  
   Format: Text/Unknown

8. **Influenza A NA subtype**  
   Format: Drop down menu

   N1  
   N2  
   N3  
   N4  
   N5  
   N6  
   N7  
   N8  
   N9

8a. **Influenza A NA subtype determined by:**  
   Format: Text/Unknown

NOTE - IRD will fill in the influenza type based on virus name.

9. **WHO/OIE/FAO Clade (For HPAI H5N1 viruses)**
   Format: Text – BHB will fill in based off of the WHO website. The investigator will have an opportunity to confirm/modify the clade that is designated.

10. **Institution of depositor**  
    Format: Text (Institution, state, province, country)
11. **Is this virus or reagents that you generated for this virus available to the scientific community?**
   Format: Drop down menu
   
   No OR Yes

   11a. **What is the material that is available?**
   Format: Text

   11b. **How can the material be requested (contact information)?**
   Format: Text

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**GENERAL QUESTIONS REGARDING PATHOGENICITY OF VIRAL ISOLATES**

12. **BHB will scan the sequences indicated for known pathogenicity markers including the polybasic HA cleavage site, PB2 E627K and PB2 D701N mutations. Are there other mutations of interest in your virus that effect pathogenicity?**
   Format: Drop down menu:
   
   No OR Unknown OR Yes

   12a. **What is the gene segment, nucleotide number and mutation of interest?**
   Format: Text

13. **Does the virus grow in cells without trypsin?**
   Format: Drop down menu:
   
   No OR Unknown OR Yes

   13a. **Which cell types will the virus grow in without trypsin?**
   Format: Text
14. Are you submitting experimental data for pathogenicity studies?
Format: Drop down menu:

No OR Yes

14a. Experiment #1 – Animal tested
Format: Drop down menu:

Chicken
Duck
Turkey
Quail
Passerine
Raptor
Guinea Pig
Mouse
Ferret
Other

If other specify

14b. Experiment #1 – Animal strain tested
Format: Text

14c. Experiment #1 – Age of animal tested
Format: Text

14d. Experiment #1 – Route of inoculation
Format: Pull down menu: Can select more than one

14e. Experiment 1 – Were the animals sedated for inoculation?
   Format: Pull down menu:
   - No
   - Unknown
   OR
   - Yes

14f. Experiment 1 – What were the animals sedated with?
   Format: Text

14g. Experiment 1 - Is the virus lethal for this animal strain tested?
   Format: Pull down menu
   - Yes
   - No
   - Unknown

14h. Experiment 1 – Total number of animals tested
   Format: Text

14i. Experiment 1 – Total number of animals that died from infection?
   Format: Text

14j. Experiment 1 – Total number of animals that were sick from infection?
   Format: Text

14k. Experiment 1 – What was the virus challenge dose?
   Format: Text

14l. Experiment 1 – Did any of the animals seroconvert?
   Format: Pull down menu
   - No
   - Unknown
   OR
   - Yes

14m. Experiment 1 – At what timepoint after infection/challenge did the animals seroconvert?
   Format: Text

14n. Experiment 1 – Other pathogenicity information?
   Format: Text/None

14o. Experiment 1 – Was this data collected as part of a vaccine study?
   Format: Drop down menu
   - No
   OR
   - Yes
15. Are you submitting experimental data for infectivity studies?
   Format: Drop down menu:
   - No
   - Yes

15a. Experiment #1 – Animal tested
   Format: Drop down menu:
   - Chicken
   - Duck
   - Turkey
   - Quail
   - Passerine
   - Raptor
   - Guinea Pig
   - Mouse
   - Ferret
   - Other
   If other specify

15b. Experiment #1 – Animal strain tested
   Format: Text

15c. Experiment #1 – Age of animal tested
   Format: Text

15d. Experiment #1 – Route of inoculation
   Format: Pull down menu: Can select more than one

***Same list as for pathogenicity studies***
15e. **Experiment 1 – Were the animals sedated for inoculation?**  
Format: Pull down menu:  
- No  
- Unknown  
- Yes

15f. **Experiment 1 – What were the animals sedated with?**  
Format: Text

15g. **Experiment 1 - Is the virus infectious for this animal strain tested?**  
Format: Pull down menu  
- Yes  
- No  
- Unknown

15h. **Experiment 1 – Total number of animals tested**  
Format: Text

15i. **Experiment 1 – Total number of animals that became infected?**  
Format: Text

15j. **Experiment 1 – Infectivity determined by:**  
Format: Pull down menu  
- Serology  
- Virus isolation  
- Other  
- If other specify

15k. **Experiment 1 – What was the virus challenge dose?**  
Format: Text

15l. **Experiment 1 – Did any of the animals seroconvert?**  
Format: Pull down menu  
- No  
- Unknown  
- Yes

15m. **Experiment 1 – At what timepoint after infection/challenge did the animals seroconvert?**  
Format: Text

15n. **Experiment 1 – Other infectivity information?**  
Format: Text
16. Are you submitting experimental data for virus transmission studies?
   Format: Drop down menu: Yes/No
   
   Yes OR No

16a. Experiment #1 – Infected animal tested
   Format: Drop down menu:
   Chicken  Duck  Turkey  Quail  Passerine  Raptor  Guinea Pig  Mouse  Ferret  Other
   
   If other specify
16b. Experiment #1 – Infected animal strain tested
   Format: Text

16c. Experiment #1 – Contact animal tested
   Format: Drop down menu:
   - Chicken
   - Duck
   - Turkey
   - Quail
   - Passerine
   - Raptor
   - Guinea Pig
   - Mouse
   - Ferret
   - Other
   - If other specify

16d. Experiment #1 – Contact animal strain tested
   Format: Text

16e. Experiment #1 – Age of infected animals tested
   Format: Text

16f. Experiment #1 – Age of contact animals tested
   Format: Text

16g. Experiment #1 – Route of inoculation
   Format: Pull down menu: Can select more than one

***Same list as for pathogenicity studies

16h. Experiment 1 – Were the animals sedated for inoculation?
   Format: Pull down menu:
   - No
   - Unknown
   - Yes

16i. Experiment 1 – What were the animals sedated with?
   Format: Text

16j. Experiment 1 – Does the virus transmit for this animal strain tested?
   Format: Pull down menu:
   - Yes
   - No
   - Unknown

16k. Experiment 1 – Total number of animals infected
   Format: Text

16l. Experiment 1 – Total number of contact animals?
   Format: Text
16m. **Experiment 1 – Total number of contact animals that became infected?**
   Format: Text

16n. **Experiment 1 – Infectivity of contact animals determined by:**
   Format: Pull down menu
   - Serology
   - Virus isolation
   - Other

16o. **Experiment 1 – What was the virus challenge dose for the infected animals?**
   Format: Text

16p. **Experiment 1 – What was the type of transmission?**
   Format: Drop down menu; Can select more than one
   - Aerosol
   - Contact
   - Other
   - No transmission

16q. **Experiment 1 – Did any of the animals seroconvert?**
   Format: Pull down menu
   - No
   - Unknown
   - Yes

16r. **Experiment 1 – At what timepoint after infection/challenge did the animals seroconvert?**
   Format: Text

16s. **Experiment 1 – Other viral transmission information?**
   Format: Text

16t. **Experiment 1 – Was this data collected as part of a vaccine study?**
   Format: Pull down menu
   - No
   - Yes
16u. **Experiment 1 – Is this experimental data reported in a publication?**
   Format: Pull down menu

   - No
   - Pending
   OR
   - Yes

   Repeat Questions 16a-16w

   16v. **Experiment 1 – Please list the PubMed ID of the publication**
   Format: Text

   16w. **Would you like to submit data for another viral transmission experiment?**
   Format: Pull down menu

   - Yes
   OR
   - No

   Go to Question 17
17. **Would you like to submit data on the antiviral resistance of this virus?**
   Format: Drop down menu:
   - No
   - Yes
   OR

17a. **Name of the antiviral drug that you are submitting information about**
   Format: Pull down menu
   - Amantadine
   - Oseltamivir
   - Peramivir
   - Rimantadine
   - Zanamivir
   - Other

   Go to #18

   If other specify name and type of drug

*17 b. NOTE – IRD will determine the type of antiviral drug

17c. **Is the virus sensitive or resistant to this antiviral drug?**
   Format: Drop down menu
   - Sensitive
   - Resistant

17d. **Antiviral susceptibility/resistance determined by?**
   Format: Drop down menu; Can select more than one
   - Phenotypic test
   - Previous report
   - Sequence

17e. **Are there links to publications for the previous reports?**
   Format: Drop down menu:
   - No
   - Yes

17f. **What is the Pubmed ID for the publication?**
   Format: Text

17g. **What mutations are present that indicate resistance/sensitivity?**
   Format: Text
17h. **Is this data reported in a publication?**
Format: Pull down menu

- No
- Pending
- Yes

OR

17i. **Please list the PubMed ID of the publication**
Format: Text

17j. **Would you like to submit information for another antiviral drug?**
Format: Pull down menu

- Yes
- No

OR

Go to Question 18
18. Was a microarray done using this virus?
   Format: Pull down menu:
   
   No  OR  Yes

18a. **Experiment 1** - What is the host for this microarray?
     Format: Text

18b. **Experiment 1** - How many microarrays have been done?
     Format: Text

18c. **Experiment 1** - If the microarray data is currently deposited in a public database, please list a link to where the data is located.
     Format: Text

18d. **Experiment 1** – Is this data reported in a publication?
     Format: Text

     No  OR  Pending  OR  Yes

18e. **Please list the PubMed ID of the publication**
     Format: Text

18f. **Would you like to submit information for another antiviral drug?**
     Format: Pull down menu

     Yes  OR  No

   Repeat Questions 18a-18f

   Thank you for your submission!!
   You get a free T-shirt 😊