



# Zoonotic Disease Breakout Box Kit

## Facilitator Guide

The purpose of this guide is to assist with set-up and facilitation of the breakout experience. **DO NOT** provide this as a handout to participants.

### Objectives

- Gain a deeper understanding of zoonotic diseases and how they can transfer between animals and humans.
- Problem solving through hands-on activities and communication in teams.
- Become change-agents advocating for proper biosecurity practices while working with animals.

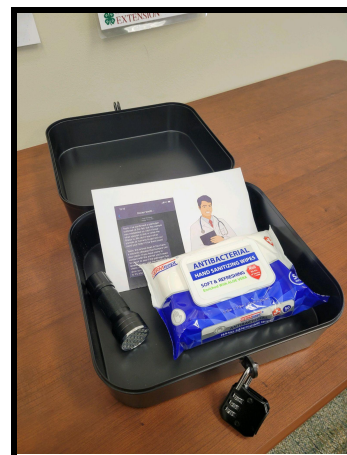
### Set Up Before Event:

- Hang Pathogen Posters on wall (near station 3)
- Tables for 5 stations, spread out throughout the room
- Additional decor as desired
- Space for participants to move about freely
- Cut out Influenza “slide” from transparency if not already. (the shape of a regular microscope slide)
- Locate 2 “hint” cards. Hint cards can be used at any time during the event if they get stuck.
- Ensure all locks are correctly set to the following codes:
  - Three-Digit Lock: **105**
  - Four-Digit Lock: **5175**
  - Five-Digit Directional Lock: → ↓ ← → ↑
  - Five-Digit Letter Lock: **PORKY**

[Read Message 1 from Doctor Smith](#) to signal the start of the activity.

## Station 1:

- Supplies Needed
  - [Message 1 from Doctor Smith](#)
  - Pail
  - Corn
  - Glitter Bug Powder
  - Animal TPR Posters (10)
  - Animal Figures with Temperatures (12)
  - Three-Digit Lock
    - Code for lock: 105**
  - Large Breakout Box Containing:
    - [Message from Doc Smith](#)
    - Disinfectant Wipes
    - UV Light
- Pre-Event Set Up Needed:
  - Hang up animal TPR posters near station 1
  - Pour corn into metal bucket and sprinkle a small amount of glitter bug powder into corn and mix
  - Bury animals in corn bucket
  - Add contents to breakout box, close and secure three-digit lock
- Action Steps for Participants
  - Participants will dig in the corn to find animal figurines labeled with temperatures.
  - Hog has incorrect temp on it.
  - That is the combination to **3 digit lock that opens the box.**
  - Open the box and read the message from Doctor Smith.
  - Use light to look at their hands and check for pathogen contamination (glitter bug).
  - Clean hands using provided wipes before moving to station 2.



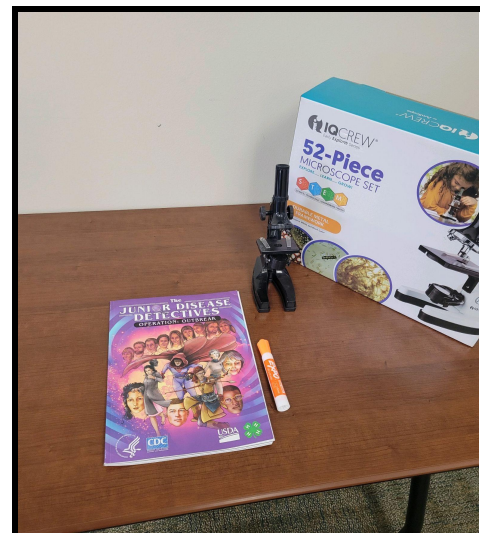
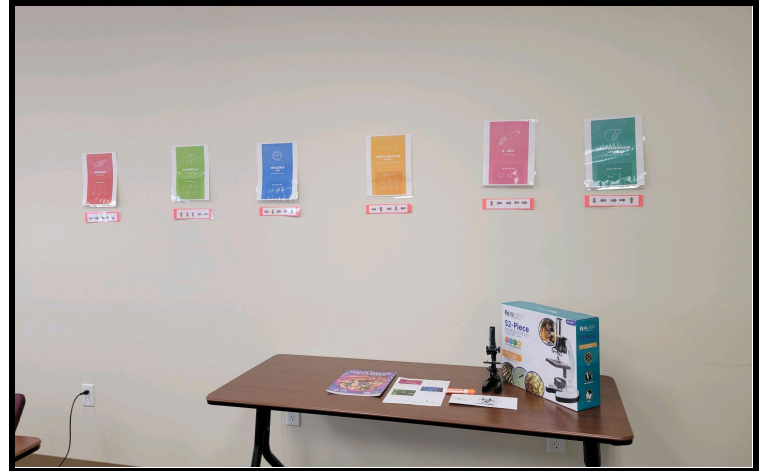
## Station 2:

- Supplies Needed
  - Ear tags with UV reaction pen on back of 51 and 75.
  - Combo to **4 digit lock on hasp on FINAL BOX: 5175**
- Pre-Event set up
  - Lay out ear tags with numbers facing up
- Action Steps for Participants
  - Participants will use UV light (from station 1) to look for obvious marks on ear tags
  - Hint: most ear tags will have smudge marks on them from the glitter bug powder, but the marks will be obviously different than smudge marks (see photo below).



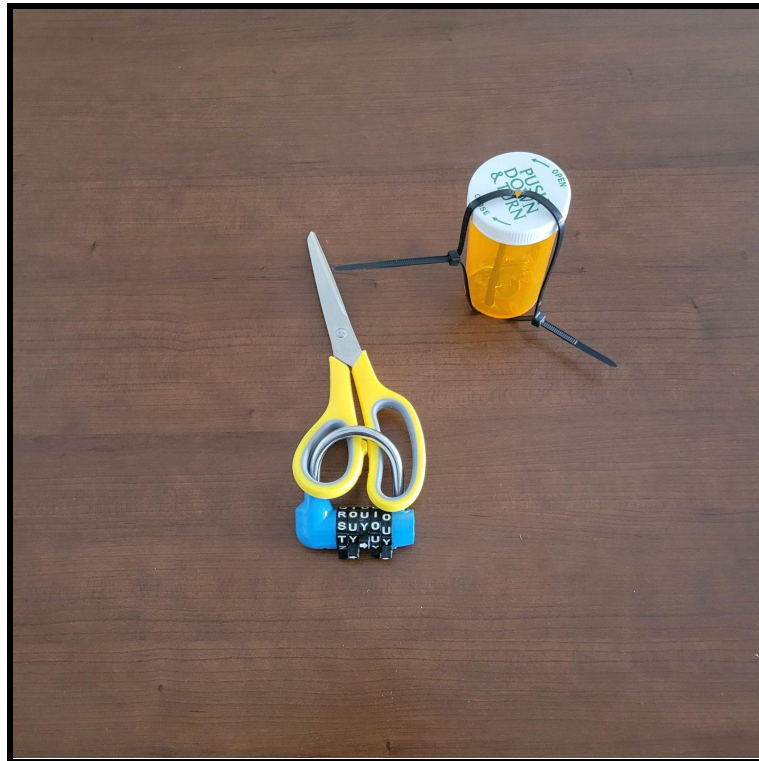
### Station 3:

- Supplies Needed:
  - Influenza slide in envelope
  - Pathogen Posters (6)
  - Directional codes (6)
  - Microscope
  - Word puzzle worksheet
  - Dry erase marker (not provided in kit)
  - Graphic Novel
- Pre-Event Set Up:
  - Hang Up pathogen posters with directional codes underneath each poster
    - Make sure all the directional codes read different directions.
    - Hint: make sure to match the correct directional code under the influenza poster.
  - Place worksheet and envelope into graphic novel
  - Set up microscope
    - Hint: in order to see the slide, participants need to flip the light under the slide deck so the light shines up.
    - Help participants find the small yellow flu germs using the 150x lens.
- Action Steps for Participants
  - Find a worksheet and envelope tucked inside the graphic novel.
    - Use numbers on worksheet to solve word puzzle using dry erase marker.
    - Wordle Puzzle Answer: **PORKY** will be used on **five-digit lock on hasp on FINAL BOX**
  - Use microscope to identify the sample on the slide. Participants will use pathogen posters to identify which zoonotic disease is on the sample.
    - Answer: Influenza
    - Five-digit directional lock: → ↓ ← → ↑
      - This lock goes on the scissors as part of station 4



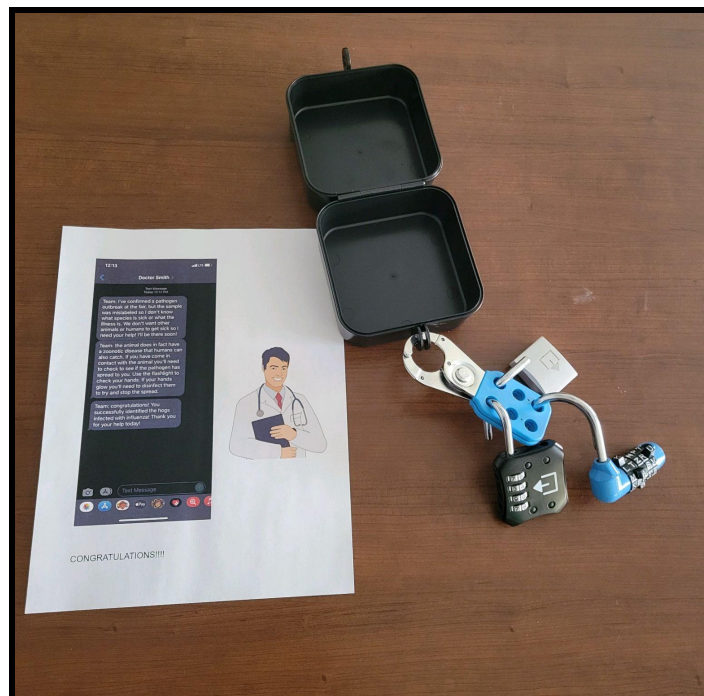
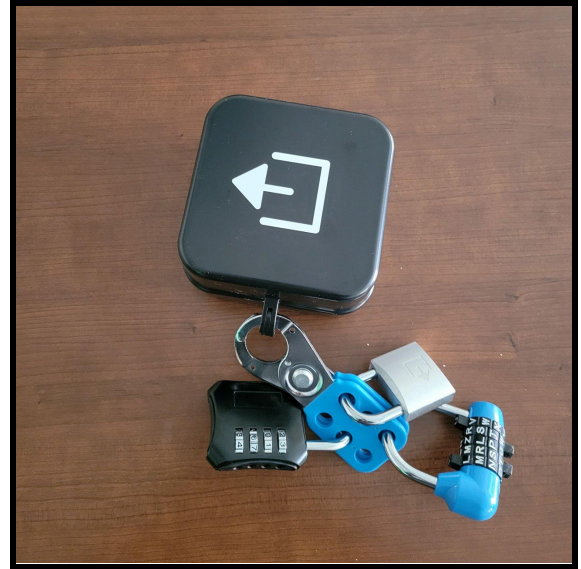
#### Station 4 :

- Supplies Needed
  - Scissors
  - Five-digit directional lock
    - Code for lock:** → ↓ ← → ↑
  - Prescription bottle
  - Two zip ties
  - Key
    - Lock will be **on hasp on FINAL BOX**
- Pre-Event Set Up
  - Secure five-digit directional lock through handles of scissors
  - Place key in prescription bottle and secure bottle closed with two zip ties
- Action Steps for Participants
  - Participants will solve the five-digit directional lock using the arrow code from the pathogen posters (in station 3)
  - Participants will then use the scissors to cut open the zip ties and remove the key from the prescription bottle.



## Station 5:

- Supply List
  - Small break out box
  - Hasp with **THREE locks**
    - Four-Digit Lock: **5175**
    - Five-Digit Letter Lock: **PORKY**
    - Key Lock
  - [Final message from Doctor Smith](#)
- Pre-Event Set Up
  - Place message in box
  - Close box and place hasp on box
  - Secure each lock through a hole on the hasp
- Action Steps for Participants
  - Answers for hasp locks will be gathered throughout all the stations. Theoretically, youth can open the hasp locks at any point during the activity.
  - Participants will open each lock on the hasp, until they can open the box. This will reveal the final message in the box.



## Reflect:

- Reflection Questions:
  - What was the most difficult part of this activity?
  - What is a zoonotic disease?
  - How did this activity make you think in different ways?
  - What was it like working in a group to complete this activity?
  - Name two zoonotic pathogens that can affect swine?
  - What is something new you learned?
  - What does TPR stand for?
  - How can you apply this activity to your everyday life?
- Evaluation
  - Have each participant use the QR code to complete the [evaluation](#). After they complete the evaluation, they can receive a bracelet. (*You may want to print a couple copies for youth who don't have smart devices. You will then need to enter the data in the survey.*)
- Photos from Event
  - Take photos of participants during the event and use the following hashtags:
    - #MN4H
    - #MN4HZoonotics



**Please complete this brief evaluation to receive  
a bracelet!**

