

## EdU's Risk Matrix

**Please note:** This resource is based on the fictitious EdU scenario and is intended only for the purpose of this risk management training. Please reference your laboratory's policies and procedures for site-specific risks and considerations.

### Risk #1: Incorrect Accessioning of Specimens

LIKELIHOOD CRITERIA →					
Hazard characteristics (to cause exposure, e.g. agent stability)	Administrative controls	Engineering controls	Staff experience and training	Personal protective equipment (PPE)	Total Likelihood Score (H, M, or L)
<p><b>LOW</b></p> <p>H20N20 is a highly stable virus that is likely to remain environmentally viable for 1-2 days. Early reports of H20N20 indicate a relatively low infectious dose is required to cause infection. H20N20 is believed to be easily aerosolized in a laboratory environment, but there have been no reported LAIs with similar influenza viruses.</p>	<p><b>LOW</b></p> <p>Based on the laboratory SOP, H20N20 specimens will be accessioned in an area of the laboratory not used for anything else. Staff training has been provided on the new SOPs for accessioning specimens suspected to be infected with H20N20.</p>	<p><b>LOW</b></p> <p>Engineering controls are in place which separate accessioning and processing routes, and instruments used for testing samples suspected of H20N20 infection from other areas of the laboratory.</p>	<p><b>LOW</b></p> <p>Most staff are new to the laboratory and there is initial training for new staff on the accessioning process. Existing staff members have been refreshed on updates to current policies and procedures.</p>	<p><b>MODERATE</b></p> <p>Although the laboratory does have the correct PPE, the supply is not enough to account of the additional number of staff members brought in to assist with the excess testing volume.</p>	<p><b>LOW-MODERATE</b></p>

CONSEQUENCES CRITERIA →		
Hazard characteristics (to cause infection/disease, e.g. infectivity, lethality)	Availability of vaccines and therapies (to prevent disease and reduce consequences of disease)	Total Consequences Score (H, M, or L)
<p><b>HIGH</b></p> <p>Infection may result in a high morbidity and mortality rate in normal healthy adults.</p>	<p><b>HIGH</b></p> <p>There are no therapies or treatments available yet.</p>	<p><b>HIGH</b></p>

<p><b>Total Risk Score (H, M, or L)</b></p>
<p>(likelihood x consequence = risk)</p>
<p><b>MODERATE</b></p>

Refer to Job Aids disclaimer at [reach.cdc.gov/disclaimers#ui-id-6](https://reach.cdc.gov/disclaimers#ui-id-6). Find additional free laboratory training resources at [reach.cdc.gov](https://reach.cdc.gov).

## Risk #2: Improper use of the BSC

LIKELIHOOD CRITERIA →					
Hazard characteristics (to cause exposure, e.g. agent stability)	Administrative controls	Engineering controls	Staff experience and training	Personal protective equipment (PPE)	Total Likelihood Score (H, M, or L)
<p><b>LOW</b></p> <p>H2ON20 is a highly stable virus that is likely to remain environmentally viable for 1-2 days. Early reports of H2ON20 indicate a relatively low infectious dose is required to cause infection. H2ON20 is believed to be easily aerosolized in a laboratory environment, but there have been no reported LAIs with similar influenza viruses.</p>	<p><b>HIGH</b></p> <p>There are no laboratory specific SOP's for using the BSC and no formal training on the proper use of a BSC exists.</p>	<p><b>HIGH</b></p> <p>Laboratory BSCs have not been certified.</p>	<p><b>HIGH</b></p> <p>There is no formal training on the proper use of a BSC for new or existing staff members.</p>	<p><b>MODERATE</b></p> <p>Although the laboratory does have the correct PPE, the supply is not enough to account of the additional number of staff members brought in to assist with the excess testing volume.</p>	<p><b>HIGH</b></p>

CONSEQUENCES CRITERIA →		
Hazard characteristics (to cause infection/disease, e.g. infectivity, lethality)	Availability of vaccines and therapies (to prevent disease and reduce consequences of disease)	Total Consequences Score (H, M, or L)
<p><b>HIGH</b></p> <p>Infection may result in a high morbidity and mortality rate in normal healthy adults.</p>	<p><b>HIGH</b></p> <p>There are no therapies or treatments available yet.</p>	<p><b>HIGH</b></p>

<p><b>Total Risk Score (H, M, or L)</b></p>
<p>(likelihood x consequence = risk)</p>
<p><b>HIGH</b></p>

### Risk #3: Improper and inconsistent use of PPE

LIKELIHOOD CRITERIA →					
Hazard characteristics (to cause exposure, e.g. agent stability)	Administrative controls	Engineering controls	Staff experience and training	Personal protective equipment (PPE)	Total Likelihood Score (H, M, or L)
<p><b>LOW</b></p> <p>H20N20 is a highly stable virus that is likely to remain environmentally viable for 1-2 days. Early reports of H20N20 indicate a relatively low infectious dose is required to cause infection. H20N20 is believed to be easily aerosolized in a laboratory environment, but there have been no reported LAIs with similar influenza viruses.</p>	<p><b>LOW</b></p> <p>The laboratory currently has laboratory specific SOP's for donning/doffing PPE. Staff members are required to don the appropriate PPE before entering into the laboratory.</p>	<p><b>NA</b></p>	<p><b>HIGH</b></p> <p>There is no PPE specific training for new hires or additional staff members.</p>	<p><b>MODERATE</b></p> <p>Although the laboratory does have the correct PPE, the supply is not enough to account of the additional number of staff members brought in to assist with the excess testing volume.</p>	<p><b>MODERATE</b></p>

CONSEQUENCES CRITERIA →		
Hazard characteristics (to cause infection/disease, e.g. infectivity, lethality)	Availability of vaccines and therapies (to prevent disease and reduce consequences of disease)	Total Consequences Score (H, M, or L)
<p><b>HIGH</b></p> <p>Infection may result in a high morbidity and mortality rate in normal healthy adults.</p>	<p><b>HIGH</b></p> <p>There are no therapies or treatments available yet.</p>	<p><b>HIGH</b></p>

<p><b>Total Risk Score (H, M, or L)</b></p>
<p>(likelihood x consequence = risk)</p>
<p><b>MODERATE-HIGH</b></p>

LIKELIHOOD
Hazard Characteristics
Administrative Controls
Engineering Controls
Staff Experience and Training
Personal Protective Equipment

Considerations for Likelihood Criteria		
H20N20 is a highly stable virus that is likely to remain environmentally viable for 1-2 days. Early reports of H20N20 indicate a relatively low infectious dose is required to cause infection. H20N20 is believed to be easily aerosolized in a laboratory environment, but there have been no reported LAIs with similar influenza viruses.		
Based on the laboratory SOP, H20N20 specimens will be accessioned in an area of the laboratory not used for anything else. Staff training has been provided on the new SOPs for accessioning specimens suspected to be infected with H20N20.	There are no laboratory specific SOP's for using the BSC and no formal training on the proper use of a BSC exists.	Laboratory currently has laboratory specific SOP's for donning/doffing PPE. Staff members are required to don the appropriate PPE before entering into the lab.
Engineering controls are in place which separate accessioning and processing routes, and instruments used for testing samples suspected of H20N20 infection from other areas of the laboratory.	Laboratory BSCs have not been certified.	
Most staff are new to the laboratory and there is initial training for new staff on the accessioning process. Existing staff members have been refreshed on updates to current policies and procedures. There is no formal training on the proper use of a BSC and no PPE specific training for new hires or additional staff members.		
Although the laboratory does have the correct types of PPE, the current supply of PPE in the laboratory does not account for the additional number of staff members brought in to assist with the excess testing volume.		

CONSEQUENCE
Hazard Characteristics
Vaccines and Therapy

Considerations for Consequence Criteria
Infection may result in a high morbidity and mortality rate in normal healthy adults.
There are no therapies or treatments available yet.