



Tikrit University
College of Veterinary Medicine

Lect.9: Practical Virology

Subject name : Transportation of the viral samples

Subject year: Third-year

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Lecturers link

Transportation of the viral samples :

The transportation should be done as soon as possible to the laboratory as the viral competency and replication decrease with the time .

The details about the accurate time and temperature for the transportation should be attached to the container of the viral samples.

Ideally, the samples should be transported to the laboratory within 2- 4 hours .

Also the preferred temperature for transportation should be between 2- 8 C .

Why do we need low temperatures for viral samples?

The reason for keeping the samples in low temperatures is because that the enzymes that responsible for degrading and nucleic acids become less active in low temperatures so we can keep the samples for longer transportation from the farm to the lab.

What are the circumstances required for transportation of the viral samples?

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The circumstances that required vary based on the type of the samples , for example serum and plasma should be frozen during the transportation .

When the samples must be rejected ?

The samples must be rejected in the following cases

- 1- Unlabeled or improperly labeled samples.
- 2- Improperly transported samples or received beyond time

What are the details that must be presented on the container of the sample?

- 1-Number of animal
- 2- Gender
- 3- Date and time of the collection
- 4- Source of the collection
- 5-Name of the collector

Practical Virology

Lecture 9

Viral specimen storaging and processing

Tikrit University

College of Veterinary Medicine

Department of Microbiology

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What are the circumstances required for the samples that required viral culture ?

The samples can be placed in the refrigerator for NOT more than 48 hrs as the activity of the virus start to be decrease after this time which may lead to an improper diagnosis for the causative agent .

What should we do if the viral culture won't happened after 48 hours

If the samples can not be cultured after 48 hrs then the samples must be freezed on(-70) after the collection directly as that the temprature with (-20) will not be enough to keep the infectivity of the virus

What are the essential factors that must be needed for the viral cell culture ?

Two important factors that must be needed for successful culture , these factors are

- 1- Appropriate biosafety levels
- 2- appropriate cabinet

What are the most dangerous type of the virus that we should aware about during the culture?

Any type of viruses that considered very contagious through the airborne routes

How to deal with speciemens that can not be collected again ?
Such as tissues from surgery ?

This type of specimens should be transported under exceptional conditions as these samples has to be done immediately since that the comnection can NOT be happened again

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