# HSYP8005

# Infectious Disease Epidemiology

Session 1, Special circumstances 2021

*Medicine, Health and Human Sciences Faculty level units*

# Contents

**Disclaimer**

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

**Notice**

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to timetable viewer. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

# General Information

Unit convenor and teaching staff
Unit Convenor
Janaki Amin
janaki.amin@mq.edu.au
Contact via janaki.amin@mq.edu.au
75 Talavera Road
By appointment only

Credit points
10

Prerequisites
Admission to MPH

Corequisites

Co-badged status

Unit description
In this unit, students gain an understanding of how infectious diseases, from tuberculosis to
COVID-19, have significantly impacted on human populations. You will focus on infectious
disease epidemiology to learn about how diseases spread both locally and globally. You will
explore the concepts of source of infection and immunity, surveillance as a tool for
understanding burden of disease and impact of control strategies, and outbreak investigations
to identify sources and management of disease spread. You will explore these themes
through case studies such as sexually transmissible diseases, HIV/AIDS and vaccine
preventable diseases. You will explore current out-break investigations and infectious disease
surveillance methods; and will learn how key aspects of, and innovations in, infectious disease
management have impacted on public health law, management and policy.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are
available at https://www.mq.edu.au/study/calendar-of-dates

# Learning Outcomes

On successful completion of this unit, you will be able to:

**ULO1:** Describe the principles of infectious disease epidemiology

**ULO2:** Critically review and evaluate surveillance systems for infectious diseases

**ULO3:** Apply the principles of outbreak investigation in the context of containing infectious diseases

**ULO4:** Judge how control of infectious diseases has impacted on public health law and policy

# General Assessment Information

Information concerning Macquarie University's assessment policy is available at https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment. Grade descriptors and other information concerning grading requirements are contained in Schedule 1 of the Macquarie University Assessment Policy.

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes and attempt all assessment tasks.

Further details for each assessment task will be available on iLearn, including marking rubrics.

All final grades in the department of Health Systems and Populations are determined by a grading committee and are not the sole responsibility of the Unit Convenor.

Students will be awarded one of these grades plus a Standardised Numerical Grade (SNG). The SNG is not necessarily a summation of the individual assessment components. The final grade and SNG that are awarded reflect the corresponding grade descriptor in Schedule 1 of the Assessment Policy.

### Extensions for Assessment tasks

Applications for assessment task extensions must be submitted via www.ask.mq.edu.au. For further details please refer to the Disruption to Studies Policy available at https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/disruption-to-studies.

### Late Submission of Work

All assignments which are officially received after the due date, and where no extension has been granted by the course convenor or tutor, will incur a deduction of 5% for the first day including the actual day on which the work is received, and 5% for each subsequent day. Weekends and public holidays are included. Late penalty is capped at 50%. For example:

| Due date | Received | Days late | Deduction | Raw mark | Final mark |
|---|---|---|---|---|---|
| Friday 14th | Saturday 15th | 1 | 5% | 75% | 70% |
| Friday 14th | Monday 17th | 3 | 15% | 75% | 60% |

| Friday 14th | Tuesday 25th | 11 | 50% (capped) | 75% | 25% |
|---|---|---|---|---|---|

# Assessment Tasks

| Name | Weighting | Hurdle | Due |
|---|---|---|---|
| Activity assessment | 20% | No | Ongoing |
| Interpretation of surveillance data | 35% | No | Week 8 |
| Cases studies in infectious disease monitoring and control | 45% | No | Week 13 |
| Unit reflection | 0% | No | Week 15 |

## Activity assessment

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 15 hours
Due: **Ongoing**
Weighting: **20%**

A series of activities (MCQ, short answer, problem solving, engagement) designed to foster engagement with weekly learning materials

On successful completion you will be able to:

- Describe the principles of infectious disease epidemiology
- Critically review and evaluate surveillance systems for infectious diseases
- Apply the principles of outbreak investigation in the context of containing infectious diseases
- Judge how control of infectious diseases has impacted on public health law and policy

## Interpretation of surveillance data

Assessment Type [1]: Case study/analysis
Indicative Time on Task [2]: 35 hours
Due: **Week 8**
Weighting: **35%**

Case study interpreting real world surveillance data

On successful completion you will be able to:

- Describe the principles of infectious disease epidemiology

- Critically review and evaluate surveillance systems for infectious diseases

- Apply the principles of outbreak investigation in the context of containing infectious diseases

# Cases studies in infectious disease monitoring and control

Assessment Type [1]: Case study/analysis
Indicative Time on Task [2]: 40 hours
Due: **Week 13**
Weighting: **45%**

A combination of tasks focused on appraisal and analysis of control of specific infectious diseases

On successful completion you will be able to:

- Describe the principles of infectious disease epidemiology

- Critically review and evaluate surveillance systems for infectious diseases

- Apply the principles of outbreak investigation in the context of containing infectious diseases

- Judge how control of infectious diseases has impacted on public health law and policy

# Unit reflection

Assessment Type [1]: Reflective Writing
Indicative Time on Task [2]: 1 hours
Due: **Week 15**
Weighting: **0%**

Reflection on experience in the unit with consideration of expectations on entry and outcomes at completion of the unit. This reflection may contribute to course based assessment in the Capstone Unit.

On successful completion you will be able to:

- Describe the principles of infectious disease epidemiology

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- Apply the principles of outbreak investigation in the context of containing infectious diseases

- Judge how control of infectious diseases has impacted on public health law and policy

[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment

- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

# Delivery and Resources

**Unit Organisation**

This is a ten credit point unit run over a 13 week session. Further information is available via the HSYP8005 online Learning Management System (LMS) iLearn http://ilearn.mq.edu.

**Readings**

The readings for each week will be listed in ilearn using the Leganto system. Leganto is the reading list management system, which you can access through your iLearn unit. More information on Leganto is available here: http://libguides.mq.edu.au/leganto

Readings marked as 'required' are essential for completion in the marked week. Some readings may be included that are marked as 'recommended' or 'secondary sources', these are additional materials that may be of interest to you. Please use these at your discretion.

**Technology and equipment**

Off-campus

To study optimally when off campus you will need to have access to a reliable internet connection to retrieve unit information and at times to join interactive session (eg zoom) or submit assessment tasks via iLearn.

On-campus

Teaching rooms are equipped with state of art audio-visual and ICT equipment including internet connection, high quality video cameras and multiple LCD screens.

*Please note that this unit has been altered to accommodate our delivery provisions in compliance with current COVID-19 requirements (Special Circumstance delivery). Learning activities (such as tutorials and other small group learning activities) will be offered on-campus while keeping an online version available for those students who choose to continue their studies online (selected via eStudent).*

# Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to

Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

## Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

# Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

## Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides

- Ask a Librarian

## Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

## IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

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Unit information based on version 2021.03 of the Handbook