



# Procedures for the management of suspected exposure to Cercopithecine Herpesvirus 1 (B Virus)

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## 1. PURPOSE

The purpose of these procedures is to outline the actions to be taken by staff and students at Monash University, who have potentially been exposed to Cercopethicine herpesvirus 1 (B virus) which occurs sporadically in Macaque monkeys. Exposure could result from bites, scratches, needle stick puncture or eye exposure. This is important as in the past, some minor exposure has resulted in fatality.

## 2. SCOPE

These guidelines apply to all staff and students from the Australian campuses of Monash University and to Victorian Monash controlled entities.

## 3. ABBREVIATIONS

<b>CITES</b>	Convention on International Trade in Endangered Species of Wild Fauna & Flora
<b>EAP</b>	Employee Assistance Program
<b>GP</b>	General Practitioner
<b>LMO</b>	Local Medical Officer
<b>LRH</b>	Latrobe Regional Hospital
<b>MAS</b>	Monash Animal Services
<b>MMC</b>	Monash Medical Centre
<b>OHP</b>	Occupational Health Physician
<b>OH&amp;S</b>	Occupational Health and Safety branch
<b>RMH</b>	Royal Melbourne Hospital
<b>VIDRL</b>	Victorian Infectious Disease Reference Laboratory

## 4. DEFINITIONS

### 4.1 MONASH CONTROLLED ENTITY

Monash controlled entities (eg companies) include entities where Monash can control decision making, directly or indirectly, in relation to the financial and operating policies so as to enable the entity to operate with it in pursuing the objectives of Monash University.

For the remainder of this procedure, a Monash controlled entity will be referred to as a controlled entity.

### 4.2 OCCUPATIONAL HEALTH PHYSICIAN (OHP)

Occupational Health Physician is a highly trained medical specialist and member of the Occupational Health & Safety Branch, who provides a wide range of services relating to the health of staff/students. This may encompass prevention, treatment and rehabilitation.

## 5. SPECIFIC RESPONSIBILITIES

### 5.1 OCCUPATIONAL HEALTH PHYSICIAN (OHP)

The OHP is responsible for the development of the procedures and specialist advice on issues concerning suspected exposure to B virus or any related areas when required.

### 5.2 SUPERVISOR

#### 5.2.1 Supervisors are those who are responsible for overseeing:

- the work program of other staff;
- the study program of honours and postgraduate students; and
- undergraduate students in lectures, tutorial and practical classes and on field trips.

- 5.2.2 The supervisor of staff or students has a particular responsibility for safeguarding the occupational health and safety of those in their charge. The supervisor can delegate the supervision or training of a staff member or student to a suitably qualified and/or experienced person, as appropriate for the task. The supervisor is, however, responsible for ensuring that the staff member or student has received appropriate training and has gained sufficient competence to undertake the task.

### 5.3 VETERINARIAN

Veterinarians are tertiary trained professionals whose specialty is in diagnosing and treating sickness, disease and injury in all types of animals at Monash University. The *veterinarian* is responsible for the care of the monkeys, specimen taking and liaison with VIDRL, OHP and OHS

## 6. EMERGENCY PROCEDURES FOR SUSPECTED EXPOSURE TO CERCOPITHECINE HERPESVIRUS 1 (B VIRUS)

A summarized version of the procedures is available as a checklist -see Section 10.1

### 6.1 FIRST AID

(Applicable to persons exposed, first aiders and trained staff)

Adequate and timely first aid in the first few minutes following exposure is the most CRITICAL for prevention of B Virus infection.

#### Wound:

- massage wound to make bleed
- immediately scrub thoroughly with betadine or chlorhexidine for 15 minutes
- rinse well with water

#### Eye:

- Irrigate with flowing water for 15 minutes

### 6.2 FIRST AID BOX

A dedicated first aid box for use following exposure to macaques should be available in the immediate vicinity. Contents of the first aid box are detailed in Section 11.4

### 6.3 VIRAL SWABS

(Applicable to persons exposed, first aiders and trained staff)

Viral swabs must be collected for further testing following a suspected exposure and stored according to 6.8.2.

#### Wound:

- After cleaning as above, swab the wound for viral culture (3-5ml screw top vial with 1- 2ml transport medium)
- Label vial clearly with: name of patient /date of birth /date and time of sample collection
- Dry and cover with dressing

#### Eye :

- no swab to be taken

#### 6.4 NOTIFICATIONS AND REPORTING

- The injured staff member/student must inform their supervisor who is responsible for carrying out the following notifications and actions:
- Report incident to the Manager, MAS;
- Report incident to *OHP*,
- If neither of the above persons are available notify the Director, OHS,
- Report incident to Biosafety Officer, MAS;
- Report the injury using the University's Incident Reporting System

#### 6.5 BASELINE SERUM SAMPLE- IN WORKING HOURS

(Applicable to treating doctor)

Following the administration of first aid and taking of swabs, the injured staff or students should go immediately to the local hospital or nominated GP or Monash Medical Centre (MMC ) for:

- a) Consultation and counselling
- b) Collection of serum sample – The doctor will arrange for a 5 ml blood sample using a non-heparinised serum collection tube. Blood must be spun, serum removed and sample frozen.

**The staff member or student should take a copy of this procedure with them**

- 6.5.1 **For staff /students taken to the local hospital or nominated GP**, the treating doctor must notify the on-call Infectious Disease Physician at MMC and an appointment arranged within 24 hour period. A 24 hour service is provided by both MMC and the local Hospital .

If for some reason the on-call physician at MMC is unable to contact a senior physician for advice, including particular advice about specimen collection, VIDRL may be contacted through the RMH switch board ( ph 93427000)

It is the staff member's responsibility to maintain follow up contact as advised following initial consultation.

#### 6.6 BLOOD AND VIRAL SPECIMEN COLLECTION - OUT OF HOURS

(Applicable to treating doctor)

- 6.6.1 Where patient specimens have not already been taken, then following the taking of a history and examination the following should be followed:
- a) Collect blood sample from patient- (the 5 ml blood sample in a non heparinised tube used for the 0.5-2ml baseline serum sample). The blood must be spun, serum removed and sample frozen.

- b) The patient should be given instructions to attend the Infectious Diseases Unit for follow up. The frequency of visits may vary depending on individual situation and risk. Repeated tests may be necessary if the patient becomes ill within this period.

## 6.7 POST EXPOSURE COUNSELLING

Counselling of the patient should be offered as soon as is reasonably practicable. The University's Employee Assistance Program is available 24 hours a day on 1300 361 008.

## 6.8 STORAGE AND SUBMISSION OF SAMPLES TO VIDRL

(Applicable to staff taking viral swabs, doctors and the veterinarians)

- 6.8.1 Permits are now required by the Australian Government for exporting of the blood and viral samples overseas. Early contact with VIDRL helps to expedite this process which can take up to 4 weeks.

In most cases Gribbles Pathology will pick up and deliver specimen to VIDRL . If this is not available then:-refer to Section 5.10 Veterinarian on call.

**Note:** VIDRL will contact the selected laboratory directly and confirm details for submission of specimens and apply for permits for the transfer of specimens with the Australian Government.

### 6.8.2 Specimen Storage and transport

- a) Viral swabs from staff member or student should be refrigerated (4C) until ready for dispatch to VIDRL.
- b) Blood sample from staff member should be spun down and serum frozen. Alternatively the serum sample can be refrigerated (2-6C for up to a week). If refrigeration is not available, whole blood can be stored at room temperature for up to 24 hours.
- c) For transport to VIDRL place blood sample and viral swabs in a plastic bag, seal and place in small thermally insulated container together with an ice pack to keep chilled. Samples showing the:
- patient's name
  - date of birth
  - list of specimens being submitted
  - date of collection
  - and be addressed to nominated VIDRL contact and labelled B Virus
- d) Place accompanying paperwork in a separate plastic bag from specimens.
- e) Seal container and attach address label with strong adhesive tape.
- f) Arrange transportation to VIDRL as soon as possible .
- g) Specimens received by VIDRL (human and monkey) will be dispatched as soon as possible to a nominated reference laboratory overseas.
- h) Follow up contact by the University's Occupational Health Physician or the Veterinarians with VIDRL should be maintained to

ensure that any requests for further specimens can be acted upon promptly.

- i) Viral swabs and blood samples from the macaque would normally be submitted to VIDRL by the on-call veterinarian.

## **6.9 ADVICE FOR MMC INFECTIOUS DISEASES PHYSICIAN ON-CALL**

A patient potentially exposed to the B virus is a difficult clinical problem requiring Senior Infectious Diseases Physicians conversant with up-to-date information on the disease. An appointment to be seen within 24 hours of the potential B Virus exposure must be made with the Infectious Diseases Unit Outpatients Clinic. Call MMC (03) 95946666 and ask for the Infectious Diseases on-call Registrar . Arrangements will be made at this time.

## **6.10 VETERINARIAN ON CALL**

The Veterinarian needs to attend as soon as possible to collect samples of blood and buccal swabs from the macaque concerned. Also at this time the macaque is examined for any signs of disease especially oral ulcers or vesicles on any part of the body.

Blood must be spun, serum removed and sample frozen. Viral swabs with transport medium must be kept in stock by the veterinarian. Samples need to be sent to VIDRL in Parkville. For Gippsland campus only, Gribbles in Moe can organize delivery of samples. Hand deliver samples to the Moe office.

For contact with VIDRL in Parkville, phone (03) 9342 2654, or the nominated person in the viral lab, or in polio lab (03) 93422607.

The nominated VIDRL contact will source a CITIES permit and organize World Couriers to transport specimens to national B Virus Resource Laboratory in the Centre for Disease Control at Georgia State University, Atlanta. The process takes 2 weeks to ship the samples and approximately 5 weeks to receive results.

VIDRL are in charge of the transporting and permit gathering. In an unforeseen circumstance eg where there is a hold up in permits, the nominated contact for CITIES permits is the Department of Environment and Water Resources, Wildlife Trade Assessment (ph 02 62741985) should direct contact be needed. The Director of the laboratory in Atlanta is contactable on +404 358 8168

## **7. MEDICAL ALERT CARD**

OHS will provide a medical alert card that should be carried at all times by staff and students with an occupational exposure to macaques. This must be shown to medical staff at the clinic or hospital following any adverse event involving occupational exposure to macaques.

## **8. REVIEW OF DOCUMENTATION**

All procedure documents, information sheets and risk management plans associated with the use of macaques at Monash University must be reviewed annually by a working group composed of staff from MAS and OHS and any other persons as appropriate.

All documentation eg flow charts, emergency contact details and B virus first aid information must be updated by the supervisor at least annually with a the current version or immediately when a change to the documentation takes place.

## 9. RECORDS

**Record to be kept by**

Occupational Health & Safety (in confidential medical files)

**Records**

- *Medical records including test results*

**To be kept for:**

Indefinitely

## **10. REFERENCES**

### **10.1 LEGISLATION**

Occupational Health and Safety Act 2004 (Vic)

### **10.2 MONASH UNIVERSITY OHS DOCUMENTS**

Monash University documents are available from the Occupational Health and Safety web site (<http://www.adm.monash.edu.au/ohse/documents/Docum.htm>).

- Guidelines for the development of safe work instructions
- Occupational Health & Safety policy .
- OHS management at Monash University: Structure, functions, roles and responsibilities.
- OHS Risk Management at Monash University
- Risk Control Program.
- Procedures for first aid.
- Procedures for hazard & incident reporting, investigation & recording .

### **10.3 AUSTRALIAN STANDARDS**

AS/NZS 4801:2001 Occupational Health & Safety Management Systems – specifications with guidance for use.

### **10.4 OTHER**

NHMRC - Policy on the care and use of non-human primates for scientific purposes (June 2003)

## 11. RESOURCE DOCUMENTS

### 11.1 CHECKLIST FOR SUSPECTED B VIRUS EXPOSURE

- First aid and wound cleaning – CRITICAL that this is timely and adequate!
- Specimens/Samples taken
  - Human blood sample - collected as close as possible to the time of injury for baseline serum.
  - Macaque blood sample - collected as close as possible to the time of injury for baseline serum.
  - Human viral swab - samples from the wound or exposed area.
  - Macaque viral swab - samples from the buccal cavity, both eyes and genitalia, collected separately in separate media tubes as soon as possible after the injury.
  - Consultation with infectious diseases specialist within 24 hours – contact Monash Medical Centre (MMC) Infectious Diseases Unit physician on-call.
- Notify
  - Supervisor
  - MAS Biosafety Officer;
  - MAS Animal Services Manager;
  - OHP
  - OHS
- Incident report lodged.
- Follow-up and repeat blood tests (serum specimen) in 3 weeks
- Label human specimen of blood and viral swab with:
  - Patient's name;
  - Date of birth;
  - Date of collection;
  - Time
- Send specimens to VIDRL- Gribbles will pick up and deliver
- Take copy of procedures to hospital
- Veterinarians to commence permit process with VIDRL
- Storage of specimens appropriate

## 11.2 EMERGENCY CONTACTS PROFORMA

### **MAS Management**

Director XXXXXXXXXXXX  
Facility manager XXXXXXXXXXXX

### **Veterinarians**

Drs BH XXX XXXX

### **MMC – Infectious Diseases Unit**

Head and ID registrar XXXXXXXXXXXX

### **Local Hospital Emergency Department**

Address 1 XXXXXXXXXXXX  
Address 2

### **VIDRL**

Contact name BH XXX XXXX  
10 Wreckyn St Mobile XXX XXXX  
North Melbourne After hours –RMH switch XXX XXXX

### **OHS Monash University**

Director OHS BH XXX XXXX  
Occupational Health Physician BH XXX XXXX  
OHS&E Consultant MAS BH/AH XXX XXXX

### **LMO at Gippsland /Clayton**

Dr BH XXX XXXX  
Health Centre  
Address 1  
Address 2

### **Laboratories that perform tests for B virus**

Contacts name XXX XXXX  
Laboratory  
Address 1  
Address 2  
[Email](#)

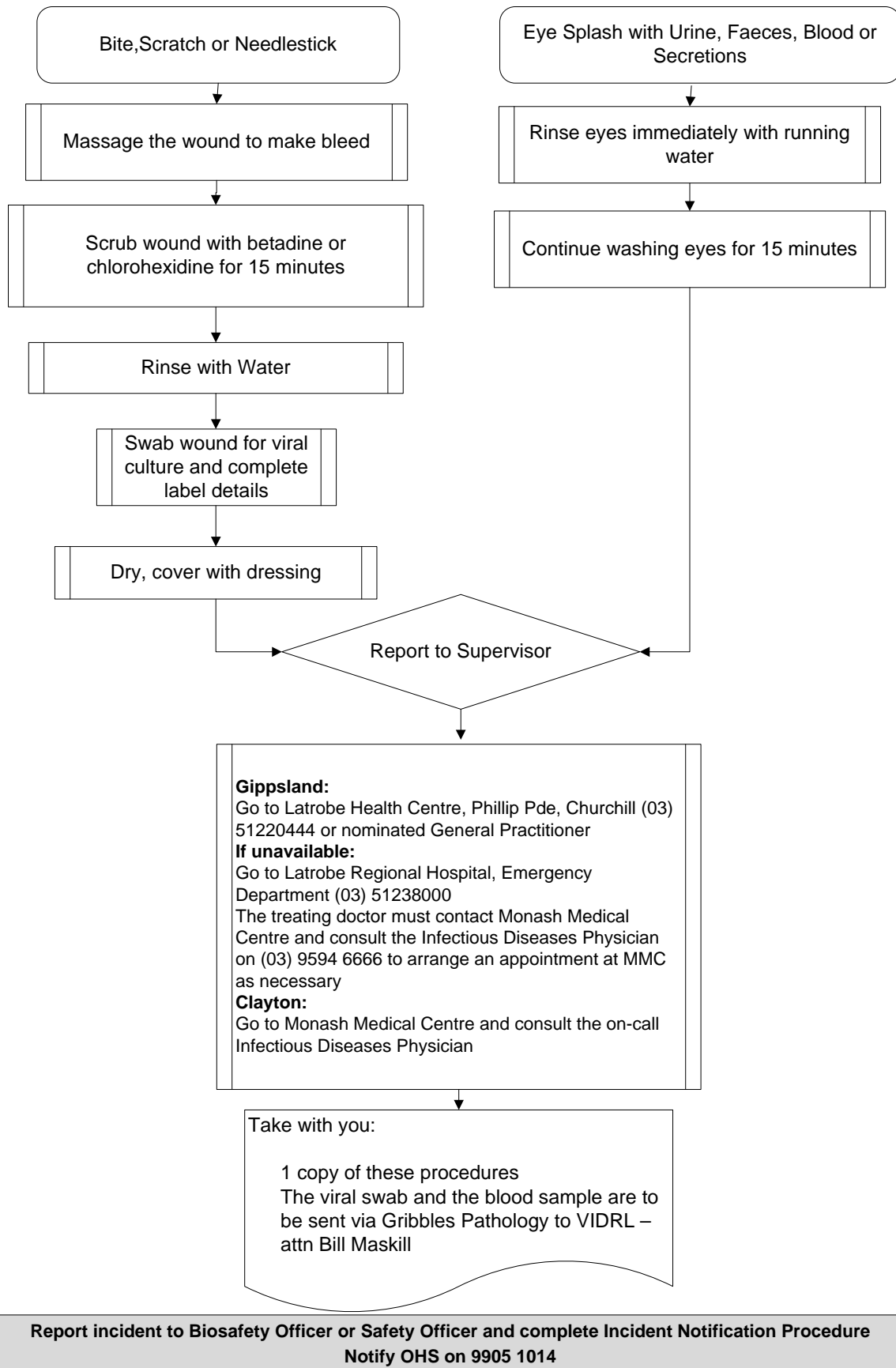
Contacts name XXX XXXX  
Laboratory XXX XXXX  
Address 1  
Address 2  
Address 3  
[Email](#)

**Monash Emergency Counselling Service** XXX XXXX

Date: .....

### 11.3 FIRST AID FLOW CHART

#### MACAQUES



## 11.4 FIRST AID KIT CONTENTS FOR WORKING WITH MACAQUES

Refer to Monash [First Aid Procedures](#)

### Equipment

1. Eye wash facilities to ensure continuous fresh water stream for at least 15 minutes.
2. First Aid box clearly labeled "First Aid Box – following exposure to macaques or marmosets".

### First Aid Box Contents

#### Cleansing materials

1. Clean disposable scrub brush .....2
2. Basin for soaking large wounds .....1
3. Sterile gauze pads (different sizes) for soaking and dressing of wounds.....8
4. Bottle of betadine or chlohexidine .....2
5. Melolin 4 pads - ..... various sizes
6. Micropore tape roll..... 1
7. Bandages .....2
8. Eye-wash bottle (Eyestream) .....2
9. Surgical gloves ..... 8 pairs

### Procedures To Be Kept Inside First Aid Box

1. Laminated first aid procedures ..... 1 copy
2. Information sheet for medical practitioner ..... 2 copies

### Specimen Collection And Culture Materials (Animal House)

1. Sterile cotton or dacron swabs (without metal shafts)
2. Screw-top vials (3-5 ml) containing 1-2 ml of virus transport medium