

 **MONASH** University  **VIDS**
VICTORIAN INFECTIOUS DISEASES SERVICE  State Government **Victoria** Department of Health

School of Public Health and Preventive Medicine

Promoting awareness of TB and travel-related infections among international students

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Presentation Outline

- **Katherine Gibney: Background to project**
 - Health conditions of interest
 - Key health messages
- **Amanda Brass: Summary of project findings and outputs to date**
 - Stakeholders engaged in the project
 - Sample health promotion materials developed
- **Audience: Questions / Comments / Feedback**

International Students in Victoria

- Many students:
 - Come alone to Victoria
 - Reside with students of similar background
 - Unfamiliar with health systems in Victoria and health problems for which they are at risk
- Vulnerable group
- Don't receive targeted health education and guidance offered to refugees / immigrants

Research Partnership

1. Victorian Government's Department of Health
2. Victorian Infectious Diseases Service, Royal Melbourne Hospital
3. Department of Epidemiology and Preventive Medicine, Monash University




Aim of the Project

Determine the feasibility and acceptability of establishing appropriate educational material and educational interventions targeted at international students and their health care providers

Methods

1. Identify interested parties and collate existing health information
2. Provide health information to students
3. Provide information to community based health care providers

What We Hope to Achieve

1. Identify interested parties
 - Government, educators, student counsellors, student leaders, health insurers, health-care providers.....
 2. Identify existing health information used by international students and delivery methods
 3. Develop new health promotion materials
- 
4. Collaborate to optimise delivery of consistent and targeted health information to international students

Outcomes / Tangible Outputs

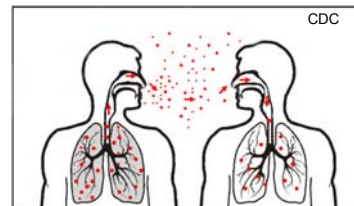
- ✓ 1. Establish database of relevant educational institutions and specific contacts
- ✓ 2. Agree on methods for delivery of pertinent preventive health information
- ✓ 3. Develop and distribute educational material for international students and health care providers
4. Advise DoH of optimal and cost-efficient methods for sustained delivery of health education targeted to international students

Tuberculosis and Travel-Related Infections

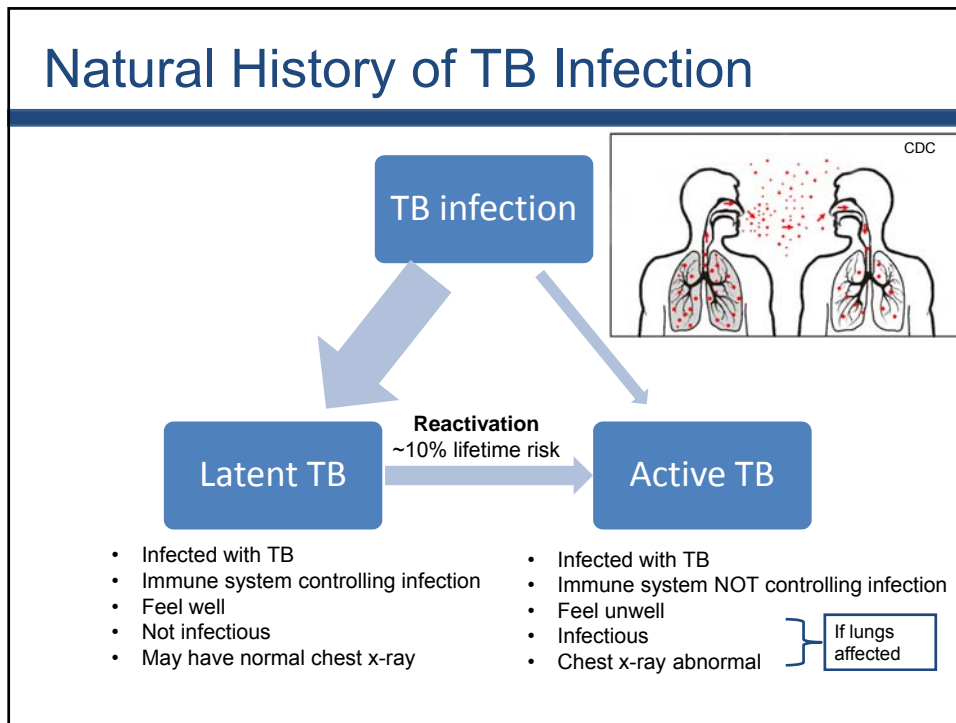
TARGETED HEALTH MESSAGES FOR INTERNATIONAL STUDENTS

Tuberculosis (TB) Infection

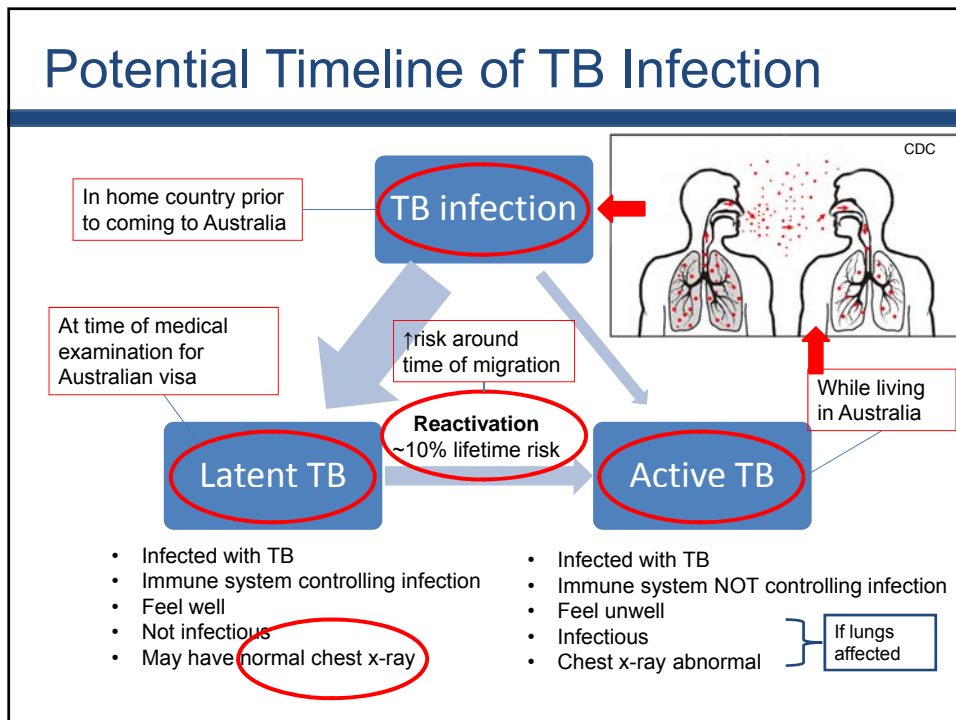
*TB is spread through the
air from person to person*



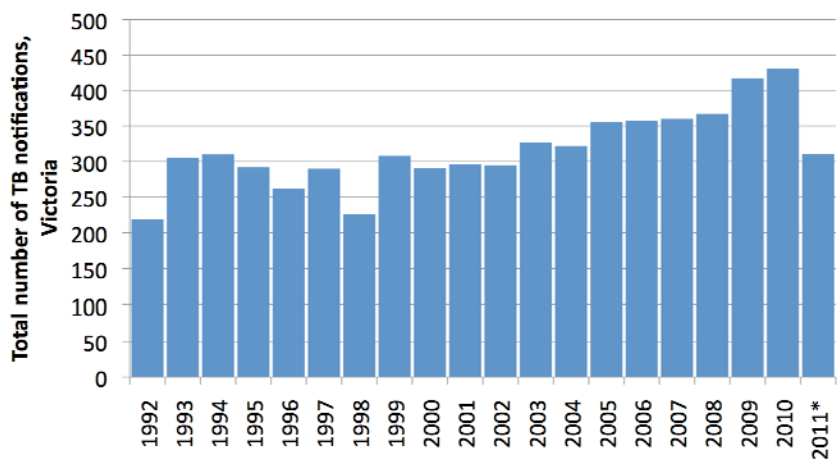
Natural History of TB Infection



Potential Timeline of TB Infection



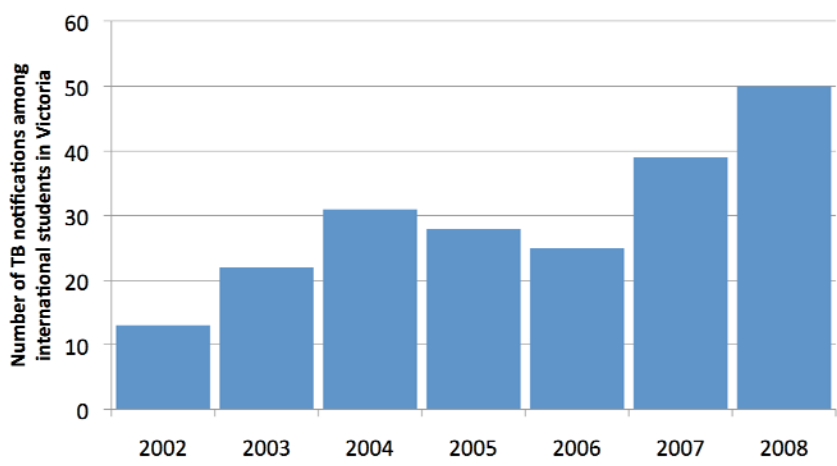
TB Notifications, Victoria 1992–2010



NNDSS - http://www9.health.gov.au/cda/Source/Rpt_4.cfm

* To 23/11/2011

TB Notifications Among International Students, Victoria 2002–2008



Giddings – DoH Victoria, Latrobe University

Active TB Among International Students, Victoria

- Recent increase in number of TB notifications among international students in Victoria
 - >4x ↑ from 2002–2008
- International students 10x more likely to have active TB than Australian-born people
- Most common country of origin for students with TB: India > China, Vietnam, Indonesia

Giddings – DoH Victoria, Latrobe University

Symptoms of Active TB

- Cough lasting more than 2 weeks
- Coughing up blood
- Poor appetite or unexplained weight loss
- Night sweats
- Excessive tiredness
- Fever lasting more than 2 weeks

TB Messages for International Students

- If you have any of these symptoms, you should see your doctor and ask them about TB
- Diagnosis and treatment of TB
 - ✓ Will help you feel better
 - ✓ Is **effective** and **free** in Australia
 - ✓ Will prevent the spread of TB to others

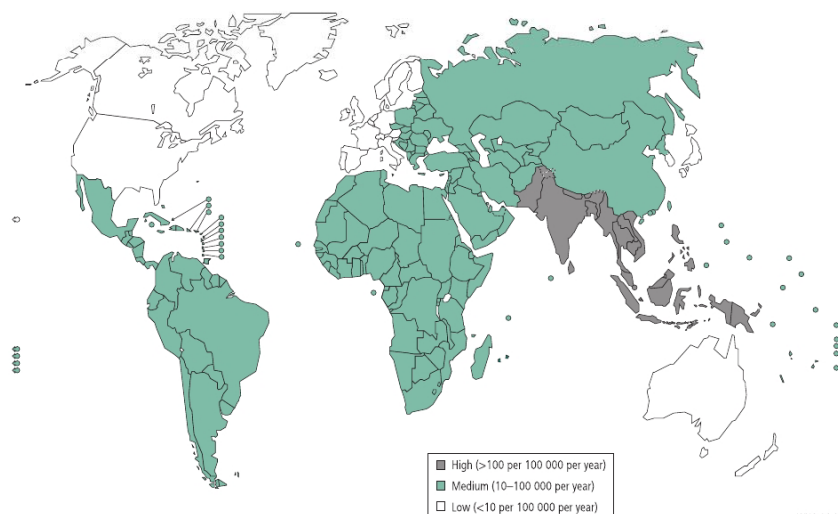
Travel Health: Travelling Home

- When a person leaves their home country, their immune system starts to lose memory
- Within ~6 months they become more susceptible to certain infectious diseases which are common in their home country
- Students travelling home are at risk because:
 1. Changes in immune system
 - Like non-resident, ↑ susceptibility to infections
 2. Behaviour when visiting home
 - Like a local, ↑ exposure to infections

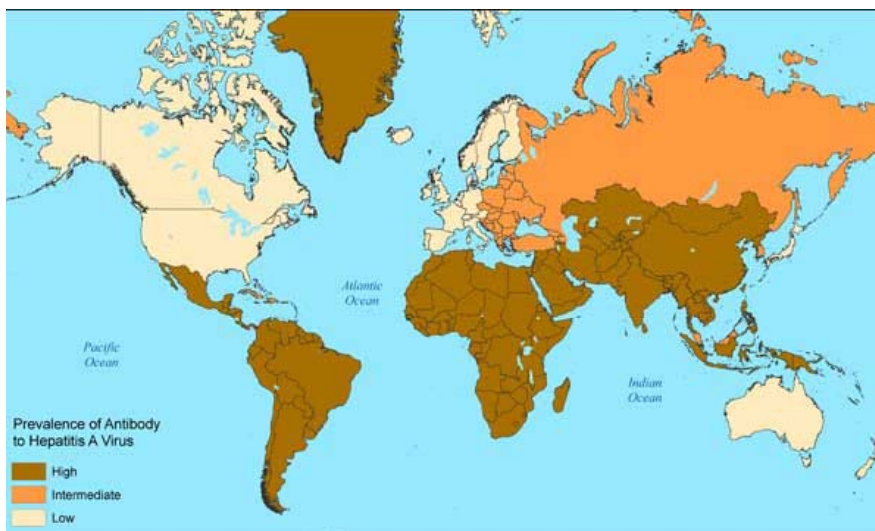
Travel Health Risks for International Students

- Particularly relevant for:
 - Enteric fever (typhoid and paratyphoid)
 - Malaria
 - Hepatitis A
- Might be acquired during travel home but student unwell on return to Australia and diagnosed here
- Potentially preventable
 - Education, vaccination, medication

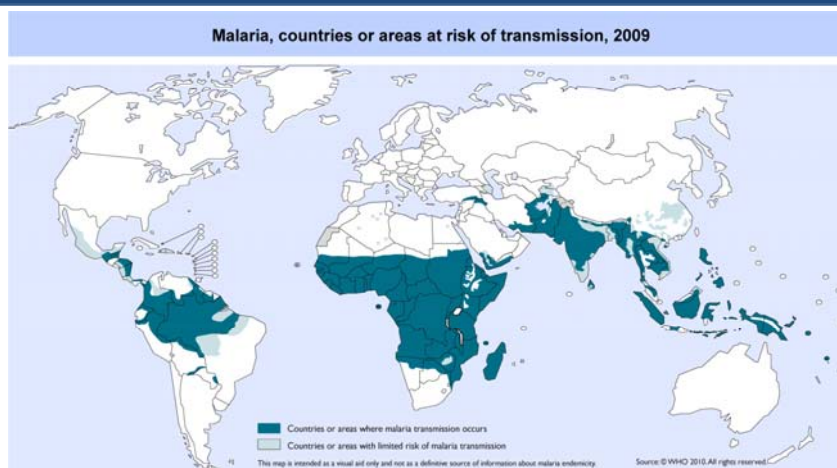
Typhoid



Hepatitis A



Malaria



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization



Healthy Travel Messages: Safe Food and Drink

Food

- Raw food is high risk, avoid
 - Salads, uncooked vegetables
 - Fruit unless it can be peeled
 - Undercooked and raw meat, fish and shellfish
- Eat food that has been cooked and is still hot
- Avoid food from street vendors

Water

- Safe drinks include
 - Drinks made with boiled water, such as tea and coffee
 - Canned or bottled drinks, including bottled water
- Avoid tap water
- Avoid ice
- Avoid brushing teeth with tap water



Vaccines and Antibiotics

- Vaccines
 - Travel-specific vaccines:
 - Hepatitis A, Typhoid
 - Routine vaccines that should be checked / updated pre-travel
 - Influenza, Tetanus, Meningococcus, Polio, Measles/Mumps/Rubella
- Antibiotics for self-treatment of travellers' diarrhoea or sinusitis

Infections Spread by Mosquitoes

- Dengue, malaria and others
- General preventive advice for reducing mosquito bites:
 - Minimise exposure to mosquitoes
 - Cover arms and legs
 - Use insect repellents (DEET)
 - Sleep in screened and /or air-conditioned room
 - Avoid outside activities especially between dusk & dawn
 - Anti-malarial medication

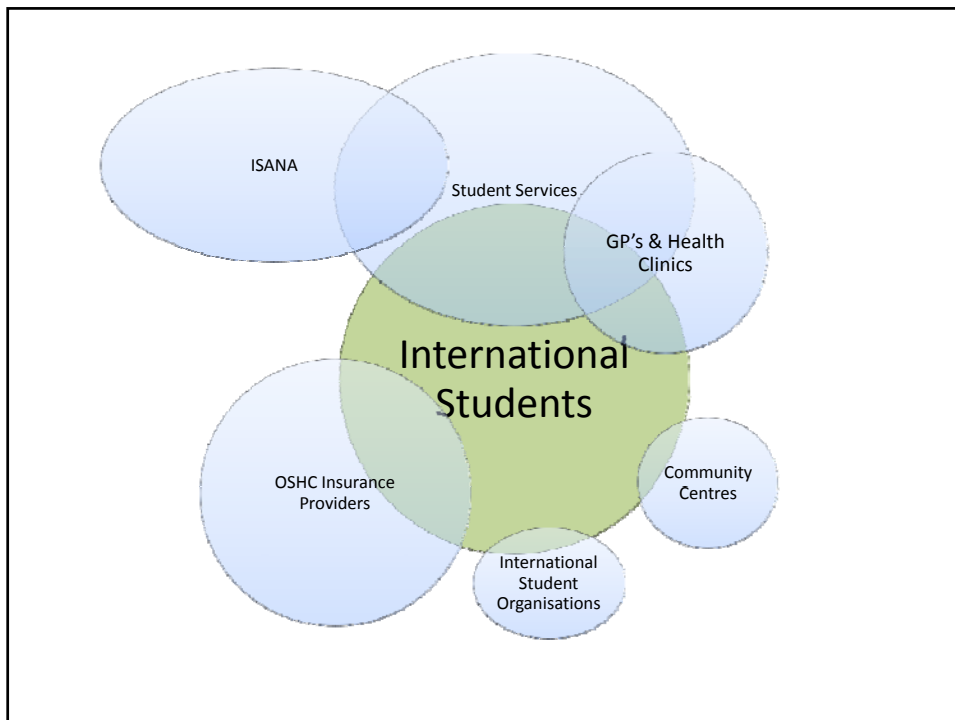
Key Travel Health Messages for International Students

- ✓ Seek pre-travel advice
- ✓ Consider vaccination and preventive medication as recommended by your doctor
- ✓ If sick during travel or on return to Australia
 - See a doctor and tell them that you have recently been overseas

Dr Amanda Brass

SUMMARY OF PROJECT FINDINGS AND OUTPUTS TO DATE

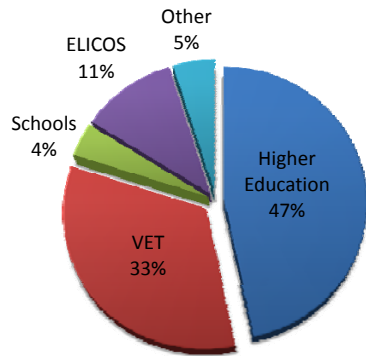
Where we started?



<p>International Student Services</p> <ul style="list-style-type: none"> • Range of support services available within different institutions 	<p>OSHC Provider</p> <ul style="list-style-type: none"> • Good and wide access to international student population
<p>GP's and Health Clinics</p> <ul style="list-style-type: none"> • Direct access to students • Raise awareness of current promotion work • Educational workshop(s) 	<p>Other</p> <ul style="list-style-type: none"> • ISANA • International student organisations • Community centres • Immigration health services

International Students in Victoria

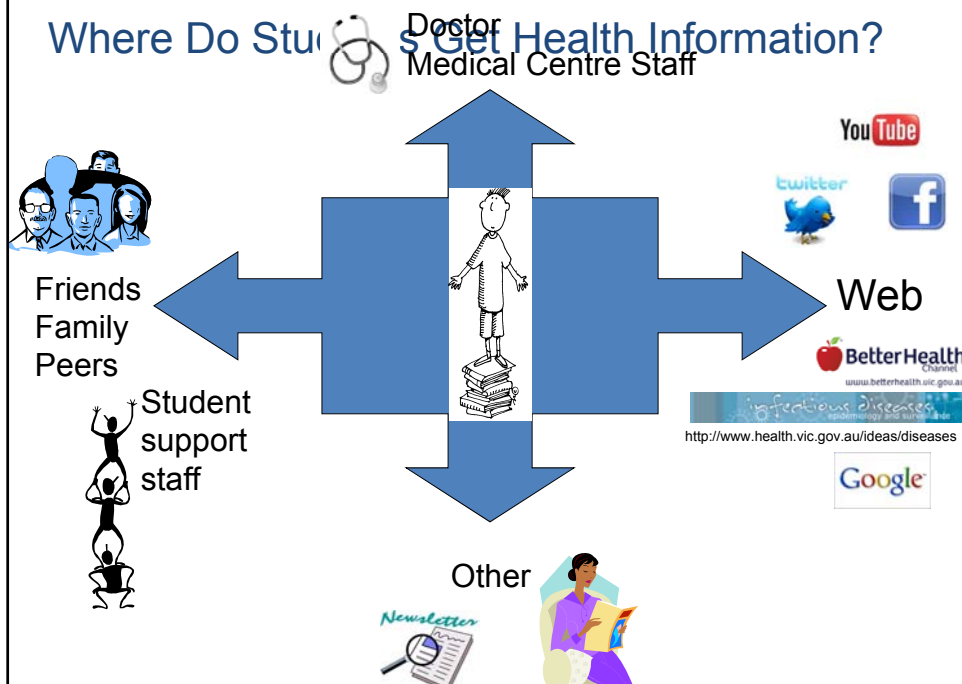
International Student Enrolments in Victoria YTD Sep 2011



- In some of the larger universities international students can make up to ~25% of the total population
- Range of services available including some institutes with medical services on site
- Use of promotional material used in various methods

Data source: AEI, Internationals student enrolment data 2011

Where Do Students Get Health Information?



Method for Dissemination of Information

Face-to-face

- Orientation
- Health education sessions
- GP's, health clinics, student services

Paper

- Posters
- Pamphlets
- Newsletters

Electronic

- Email
- Newsletters
- Social networking (facebook, twitter)
- Webpage links

Sample Pack

Sample text

Postcards

Pamphlets

Posters

PowerPoint slides

Sample Text

- Newsletter
- Facebook
- Links

- Twitter

International students - UR @ risk 4 infections when U travel home. See a Dr b4 U travel. Visit [traveldoctor](#) and [smartraveller](#)

Intl students, have you had cough for >2wks? No appetite & unexplained weight loss? Fevers for >2wks? If yes to any, C ur Dr & visit [BHC](#)

JSYK even if U had a TB screen & vaccine U can still B@ risk of TB. If UR from o/s & had a cough or fever>2wks, U shld C ur Dr or visit [BHC](#)



Have you experienced...

- Cough for more than 2 weeks?
- Poor appetite and unexplained weight loss?
- Night sweats?
- Coughing up blood?
- Fever for more than 2 weeks?

These symptoms can be caused by tuberculosis (TB)

Postcard

Tuberculosis (TB)	
<p>These symptoms can be caused by several conditions, but may be caused by TB. International students are at least 10 times more likely to develop TB than people born in Australia.</p> <p style="text-align: center;">— SO —</p> <p>If you answered YES, you should make a doctor's appointment and ask them about TB.</p> <p style="text-align: center;">Diagnosis and treatment of TB</p> <ul style="list-style-type: none"> ✓ Will help you feel better ✓ Will prevent the spread of TB to others ✓ Is effective and free in Australia 	<p>For further information, visit or call:</p> <p>vids VIDS, Royal Melbourne Hospital: 03 9347 7390</p> <p> http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Tuberculosis_(TB)?open</p> <p> http://ideas.health.vic.gov.au/bluebook/fm/yc0-tb.asp</p> <p style="text-align: right;"> </p>

Stay healthy during your trip home

Health advice for those travelling outside of Australia



Postcard

Health advice for those travelling outside of Australia

Your immune system changes when you spend time away from your home country. Even within a few months, you start losing immune protection to certain infections.

If you were born overseas and are now living in Australia, you may be a risk of getting sick if you go home for a visit.

Visit your doctor or travel clinic at least 4-6 weeks before you leave to talk about:

- ✓ how to reduce your risk of food-borne and water-borne infections
- ✓ immunisation
- ✓ how to avoid mosquitoes
- ✓ anti-malarial medications

Seek medical advice if you become unwell during or after your trip and mention you have been overseas.

For further information, visit or call:

Royal Melbourne Hospital Travel Clinic (VIDS)
Tel: 03 9342 7390

Smarttraveler
www.smarttraveler.gov.au/tips/travelwell.html

The Travel Doctor
www.traveldoctor.com.au
Tel: 1300 658 844



These symptoms can be caused by several conditions, but may be caused by tuberculosis (TB)

If you have any of these symptoms, you should see your doctor and ask them about TB

Diagnosis and treatment of TB

Will help you feel better

Will prevent spread of TB to others

Is effective and free in Australia

Further information

Better Health Channel
http://www.betterhealth.vic.gov.au/bhvc/index.jsp?page=7&tab=tuberculosis_TB

VIDS
Communicable Disease Prevention Control Unit, Department of Health
Telephone: 1300 651 182
www.health.vic.gov.au/tuberculosis

VIDS
VIDS is a Victorian Government initiative

Have you experienced...

- Cough for more than 2 weeks?
- Unexplained weight loss and poor appetite?
- Night sweats?
- Coughing up blood?


Pamphlet

What is tuberculosis (TB)?

TB is a serious disease that usually affects the lungs. TB can also affect other parts of the body. TB can be cured when it is recognized and effectively treated, but can be fatal if left untreated.

Symptoms of TB include:


- cough for more than 2 weeks
- excessive tiredness
- night sweats
- poor appetite and unexplained weight loss
- coughing up blood
- fever for more than 2 weeks




TB and international students

International students are at least 10 times more likely to develop TB than people born in Australia. Particularly if you are from a country in Asia, the Indian sub-continent, Africa, Latin America, the Caribbean, or Eastern Europe you are at high risk for developing TB disease.

How is TB spread?



TB bacteria are spread from person to person through the air. People with active TB disease in their lungs can spread the infection when they cough, sneeze, laugh, speak or sing.



How could I have TB when...

- 1. I was checked for TB before I came to Australia**

The Visa Medical Screen includes a chest x-ray to look for active TB which makes people unwell. People can also have (or latent) TB infection which does not cause any symptoms. Around 10% of people with latent TB infection develop active TB during their lifetime. Many things can trigger this, including moving to a new country.

- 2. I have been vaccinated against TB**

The TB vaccine (BCG) helps protect young children against severe forms of active TB. However, it does not completely prevent TB infection, so even if you were vaccinated you can still develop active disease.

- 3. I don't know anyone with TB**

Around 14 million people have active TB and about one third of the world's population has latent TB infection. You might have been exposed to someone with TB without knowing it.

See a doctor before you travel

Visit a doctor or travel clinic at least four to six weeks before your trip to discuss:

- Vaccines
- Preventive medications
- Avoiding unsafe food and water
- Preventing exposure to mosquitoes

Seek medical advice promptly if you become unwell during or after your trip and mention to your doctor that you have been overseas.

Further information

Travel Clinic
Victorian Infectious Diseases Unit
Royal Melbourne Hospital
Telephone: 03 93427212
Email: vids@mh.org.au

VIDS

Smarttraveller
smarttraveller.gov.au

The Travel Doctor
Telephone: 1300 058 844
Web: www.traveldoctor.com.au

VIDS MONASH UNIVERSITY



Going home for a holiday?

Health advice for those traveling outside of Australia

Pamphlet

How could I be at risk for travel-related infections when I am just going home?

Your immune system changes when you spend time away from your home country. If you were born overseas and are now living in Australia, you may be at risk of getting sick if you go home for a visit.

Even within a few months, you start losing immune protection to certain infections. This puts you at greater risk of some diseases when you visit your home country than when you lived there.

How can I avoid these infections when I travel home?

This depends on where you are. Vaccines can prevent some infections including:

- Typhoid
- Hepatitis A
- Influenza
- Measles
- Meningitis

Medications can prevent some infections such as malaria.


Avoiding unsafe food and water prevent travellers' diarrhea.

Avoiding mosquito bites is important to prevent certain infections, such as dengue.

than other travellers

Compared to Australian-born individuals, international students are significantly more likely to develop:

- Typhoid
- Hepatitis A
- Malaria



PowerPoint

Tuberculosis (TB):


Important information for international students and others born overseas

Have you experienced.....

- Cough for more than 2 weeks?
- Poor appetite and unexplained weight loss?
- Night sweats?
- Fever for more than 2 weeks?
- Coughing up blood?




Diagnosis and treatment of TB

- ✓ Will help you feel better
- ✓ Will prevent the spread of TB to others
- ✓ Is effective and free in Australia



If you are from a country in Asia / the Indian subcontinent, Africa, Latin America, the Caribbean, or Eastern Europe, you may be at high risk of developing active TB disease

For information visit www.betterhealth.vic.gov.au or call VIDS, Royal Melbourne Hospital 03 9342 7212

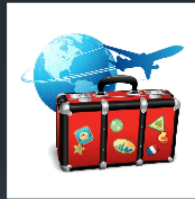




PowerPoint

International Students: Stay Healthy During Your Trip Home

See your doctor before you travel

- Your immune system changes when you spend time away from your home country
- Even within a few months, you start losing immune protection to certain infections
- If you were born overseas and are now living in Australia, you may be at risk of getting sick if you go home for a visit



Things to discuss include:

- ✓ Immunisations
- ✓ Medication to prevent malaria
- ✓ Avoiding food-borne and water-borne infections
- ✓ Avoiding mosquito bites

Also, see a doctor if you are unwell during or after your trip

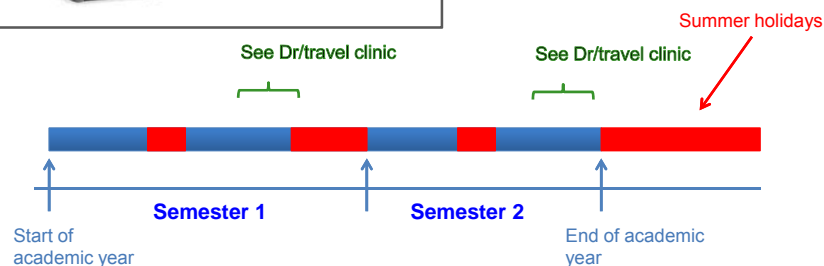
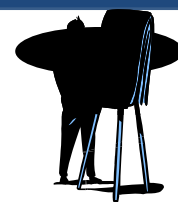
For information visit or call: www.traveldoctor.com.au; www.smarttraveller.gov.au; Royal Melbourne Hospital Travel Clinic 03 9342 7390



Stay healthy during your trip home



Presentations



Where to Go for Further Information

Travel Clinics



- VIDS; Royal Melbourne Hospital Travel Clinic
Tel: 03 9342 7390
Email: vids@mh.org.au



- Travel Doctor
Tel: 1300 658844
Web: www.traveldoctor.com.au

Medical Centres

- William Angliss Health Centre
555 LaTrobe St
Tel: 03 9606 2208
Web: www.angliss.edu.au/Health-Centre
- La Trobe St Medical Centre
152/211 LaTrobe St
Tel: 03 9650 0023
- Swanston St Medical Centre
393 Swanston St
Tel: 03 9654 2722
- Metropolitan Medical Centre Carlton
380 Lygon St
Tel: 03 9347 7711
Web: www.metromed.com.au

Distribution of Sample Packs

Academic Institutions

- Universities (10)
- VET & ELICOS (22)


GP's & Medical centres

- On-campus (4)
- Off-campus (16)
- Medical organisations (4)

other

- OSHC insurance groups
- Immigration health services

Next Steps....

- 
- Gather feedback on the sample pack and its contents
 - Determine the types and amount of material each institute/ medical centre would use
 - Discuss uptake of material /hits on links
 - Write up report for DoH on optimal and cost-efficient methods for sustained delivery of health education targeted to international students

How You Can Help

- Please **contact us** if you have:
 - Examples of health promotion materials targeted to international students
 - Additional ideas / suggestions about our health-promotion messages
 - Other thoughts on how to disseminate these messages
 - Capacity to assist with dissemination
 - e.g. as part of your usual communication with international students

Contact Details

- Amanda.Brass@monash.edu 03 9903 0184
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- Karin.Leder@monash.edu 03 9903 0577

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