

# Immunisation and ID issues

In 15 minutes

April 2008

RACP ASM

Georgie Paxton

# Immunisation

- High risk inadequate immunisation
  - Country of origin schedules different
  - Inadequate vaccinations in country of origin
  - Unfunded catch-up vaccinations in Australia
  - Missed opportunities for catch-up vaccination in Australia
  - Service delivery issues

# Country of origin schedules

Australia	Sudan	Iraq	Afghanistan	Former Yugoslavia	Bosnia	Burma	Ethiopia	Somalia	Croatia	Iran
Hep B DTPa <sup>1</sup> IPV Hib 7vPCV Rotavirus MMR MenCCV VZV HPV	BCG Hep B DTwP OPV Hib Measles	BCG DTwP Hep A (part) Hep B IPV/OPV Measles MMR MenAC/MenAC WY PneumoPS (part <sup>2</sup> ) Vit A	BCG DTwP Hib HepB OPV Measles	BCG DTwP Hep B Hib MenAC <sup>3</sup> MMR OPV	BCG DTwP Hib Hep B MMR OPV	BCG DTwP Hep B Measles OPV	BCG DTwP Measles OPV Vit A	BCG DTwP Measles OPV Vit A	BCG DTaP/DTwP Hep B (12y) Hib IPV/OPV MMR	BCG DTwP Hep B MMR OPV
<b>Missing compared to Australian schedule</b>	Mumps Rubella 7vPCV Hib born < 1/2008 Hep B born < 1/06 Rota MenCCV VZV HPV	Hib 7vPCV Rota VZV HPV	Hib born < 9/2007 Mumps Rubella 7vPCV Rota MenCCV VZV HPV	7vPCV Rota VZV HPV MenCCV	7vPCV Rota MenCCV VZV HPV	Hib Mumps Rubella 7vPCV Rota MenCCV VZV HPV	Hib Hep B Mumps Rubella 7vPCV Rota MenCCV VZV HPV	Hib Hep B Mumps Rubella 7vPCV Rota MenCCV VZV HPV	7vPCV Rota MenCCV VZV HPV	Hib 7vPCV Rota MenCCV VZV HPV

<sup>1</sup> For all countries later doses/formulations of tetanus containing vaccines not specified, including Tetanus toxoid doses relating to pregnancy for source countries

<sup>2</sup> Part of the country only

<sup>3</sup> Schedule listed is for Serbia, Montenegro schedule is the same other than MenAC not included

# Australian prevalence data - seroimmunity

Details of study	Adequate Immunity (based on serology)						
	Measles	Mumps	Rubella	Tetanus	Diphtheria	Hepatitis B	Hepatitis A
<b>Australian data</b>							
136 East African children attending Immigrant Health Clinic RCH, Nov. 2000-Jan 2002 <sup>4</sup>	90%		77%	61%	45%	67%	
156 East African children attending Immigrant Health Clinic RCH, Feb 2002-Jan 2003 <sup>5</sup>	88%		74%	62%	46%	34%	
193 African children attending Immigrant Health Clinic RCH, 2005 <sup>6</sup>	80% (59/74)		82% (61/74)	88% (69/78)	69% (54/78)	66% <sup>1</sup> (69/104)	
African refugees attending General Practice clinics, Melbourne, 2005 <sup>7</sup> ,							
129 aged < 15 years	56% (36/64)	60% (37/61)	78% (54/69)	52% (50/96)		26% (23/87)	
129 aged 15 yrs or more	95% (58/61)	84% (47/56)	76/79 (96%)	47% (42/89)		60% (58/96)	
Refugees attending Migrant health Unit WA, predominantly African entrants, 2003-04, 510 females aged > 15 years <sup>8</sup>			87%				
Cross sectional survey Laotian community Melbourne June-July 1998 n=95, (18-82 years) <sup>9</sup>						70% (12% due to vaccination)	
Cross sectional survey Cambodian community, Melbourne, July – August 2002, n=234, 15-92 years <sup>9</sup>						89% (18% due to vaccination)	97%

## Catch-up immunisation

**Table 1: Catch-up Immunisation schedule for newly arrived refugees[1].**

Vaccine type	Age and number of doses	Minimum dosing interval (months)	Notes
MenCCV	> 12 months, 1 dose	-	Funded at 12 months of age if born after 1/1/2002. Disease has bimodal peaks in incidence of < 5 years and 15-24 years, catch-up previously funded to 19 years
DTPa	< 8 years, 4 doses DTPa	1,1,6*	3 doses for primary series then *4th dose at 4 years of age or 6 months after primary course. Combination vaccine available in various jurisdictions, combined with IPV/HiB/Hep B. If combined with hepatitis B, dosing interval changes (2 months between doses 2 and 3)
	≥ 8 years, 3 doses (dTpa, ADT, ADT)	1,1	No safety data on 3 doses of dTpa, therefore recommend dTpa, ADT, ADT, then 10 year and 20 year booster ADT. A single dose of dTpa is funded age 15-17 years
MMR	< 8 years, 2 doses	1	2 <sup>nd</sup> dose due at 4 years if < 4 years at first dose
	≥ 8 years (born ≥ 1966), 2 doses	1	
IPV	Any, 3 doses*	1,1	*4th dose at 4 years if < 4 years for primary course. Different combination vaccines available, combined with DTPa/dTpa/HiB/Hep B
Hepatitis B	< 11 years, 3 doses paediatric formulation*	1,2	Paediatric formulation is 0.5 ml dose. Combination vaccines are available
	11 – 15 years, 2 doses adult formulation**	4	**Adult formulation is 1 ml dose. Alternate regimen is 3 doses paediatric formulation as above
	≥ 16 years, 3 doses***	1,2	***Age 16 – 19 years 3 paediatric doses, ≥ 20 years 3 adult doses
Hib	2 – 11 months, 2 or 3 doses, then booster*	1 or 2*	Not required over 5 years of age. Usually combined with Hepatitis B vaccine. *Refer to handbook for catch up schedule in younger children – different vaccines require different catch-up schedules with different dosing intervals
	12 – 14 months, 1 dose then booster*	varies*	
	15 – 59 months, 1 dose		
7vPCV	2 – 6 months, 3 doses	1,1	Required in children < 2 years of age, consider < 5 years of age. Funded if born after 1/1/2004. People with medical risk factors require extra doses of 7vPCV and 23vPPV
	7 – 17 months, 2 doses	1	
	18 – 23 months, 1 dose	-	
VZV	18 months – 13 years, 1 dose	-	Funded if born after 1/5/2004 (at 18 months) or between 10 – 13 years if no history clinical varicella. VZV is recommended in non immune adolescents ≥ 14 years and adults (no clinical history and negative serology). People ≥ 14 years with a reliable history of varicella should be considered immune; check serology if no history of varicella.
HPV	13 - 26 years (females), 3 doses	2, 4	Catch-up funded until June 30, 2009
BCG	< 16 years*, 1 dose	-	Criteria: <ul style="list-style-type: none"> <li>• *Exposure to active pulmonary TB</li> <li>• Consider if family member with LTBI</li> <li>• Travel to high prevalence area &gt; 6 weeks if aged &lt; 5 yrs, &gt; 3 months aged &gt; 5 years[2]</li> <li>• Only if no record/scar and no evidence TB infection (latent or active) and no other contraindications</li> </ul>

# Unfunded vaccines

- MenCCV not funded for any child > 6 years.
- Hepatitis B
  - 0-8 years free catch-up,
  - 9-11 years wait for high school catch-up in the future.
  - 12 years +
    - should receive high school catch-up, program targeted year 7
    - arrivals year 8 + may miss catch-up unless it is specifically identified as an issue, or a household contact is identified.
  - Adults unfunded unless household contact
- Pertussis
  - > 8 years only one funded dose (15-17 yrs)

# Missed opportunities/service issues

- Secondary migration
  - 82.5% humanitarian entrants shared accommodation initially
  - Old DIAC data: unpublished Longitudinal study of immigrants 1993-1995  
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/2f762f95845417aeca25706c00834efa/e673856b3a04e0acca2570ec0019e1a2!OpenDocument>
- ACIR only < 7 years
- School catch-up - incomplete
- Lack of patient held records

# Missed opportunities

## 150 East African children attending RCH Immigrant health clinic November 2000-January 2002,

- 98% had incomplete/unknown immunisation status,
- children had been resident in Australia up to 4 years.

## 156 children RCH Immigrant health clinic over 2002,

- **no** child was reported as being up to date for schedule vaccines,
- 65% (101/156) reported having **none** of these vaccinations,
- 66% of this group had seen a Maternal and Child health Nurse or GP at least once.

## Community based survey of 70 recently arrived refugee children, Melbourne 2006

- 75% of children had had a post arrival health check and 91% had a family doctor,
- 28.6% had immunisation at a GP and 4.8% at a Community Health Centre.
- For those in Australia < 6 months (n=30), **none** had had immunisations in primary care, although 89.5% of this group had had a post arrival health check at a general practitioner.

## Students attending an Intensive English Centre High School in Western Sydney, June 2003,

- 165 (of 193) students completed a questionnaire, 2/3 of the sample resident > 6 months,
- 30% reported previous MMR immunisation
- 18% reported previous Hepatitis B immunisation.

## Review ACIR record of refugee children seen over 12m in Newcastle, May 05- April 06

- 35 children aged < 7 yrs all overdue vaccinations, only 2 children received vaccinations **after** their refugee clinic visit, although local area coverage rates are >90% at the time.

# ID issues

- Prevalence data
- TB
- Parasites

ASID <sup>7</sup>	Refugee Health Assessment Tool <sup>8</sup>	Royal Children's Hospital Immigrant Health Clinic <sup>9</sup>
<ul style="list-style-type: none"> <li>• HIV serology</li> <li>• Hepatitis B sAg, sAb, cAb</li> <li>• HCV</li> <li>• Strongyloides serology</li> <li>• Faeces microscopy</li> <li>• FBE</li> <li>• Malaria thick/thin film and <i>Plasmodium falciparum</i> antigen</li> <li>• <i>Schistosoma</i> serology</li> <li>• Syphilis serology</li> <li>• Mantoux test or IGRA</li> <li>• STI screen- <i>Neisseria gonorrhoea</i> and <i>Chlamydia trachomatis</i> screen (urine NAD) if sexually active</li> <li>• <i>Helicobacter pylori</i> screening if history suggestive</li> </ul>	<ul style="list-style-type: none"> <li>• Malaria thick/thin film and rapid test</li> <li>• Mantoux test or IGRA</li> <li>• Hepatitis B sAg, sAb, cAb</li> <li>• HCV</li> <li>• Strongyloides serology</li> <li>• Schistosoma serology</li> <li>• Rubella IgG</li> <li>• FBE</li> <li>• LFT</li> <li>• Ferritin (child or female)</li> <li>• Vitamin D (if risk factors)</li> <li>• Vitamin A (child)</li> <li>• STI screen: HIV, syphilis, <i>Neisseria gonorrhoea</i> and <i>Chlamydia trachomatis</i> screen (urine NAD or swab PCR) if sexually active</li> <li>• Faecal microscopy (child, eosinophilia or symptomatic adult)</li> <li>• Breath test <i>Helicobacter pylori</i> if symptoms</li> <li>• Chronic disease/cancer screen</li> <li>• FWTU (and MSU if abnormal)</li> </ul>	<ul style="list-style-type: none"> <li>• Full blood examination.</li> <li>• Ferritin</li> <li>• Vitamin D</li> <li>• Calcium, phosphate and ALP (PTH and CUE if clinical rickets)</li> <li>• Vitamin A</li> <li>• Malaria screen (thick/thin film and RDT if arrival &lt; 3 months or longer if history non <i>Pl. falciparum</i> malaria or fevers)</li> <li>• Hepatitis B sAg, sAb, cAb</li> <li>• Schistosoma serology</li> <li>• Strongyloides serology</li> <li>• Faecal specimen</li> <li>• Mantoux test</li> <li>• STI and HIV screen in sexually active adolescents</li> <li>• <i>Helicobacter pylori</i> screening if history suggestive</li> <li>• Catch-up vaccination without serology</li> </ul>

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It's pretty ID focused really...

# Australian prevalence data

State	VIC	VIC	VIC	VIC	NSW	WA	VIC	VIC	WA, SA	SA	NSW	TAS	WA
Location	RCH Melbourne <sup>10, 11</sup>	RCH Melbourne <sup>12, 13</sup>	RCH Melbourne <sup>14</sup>	RCH Melbourne <sup>15</sup>	CHW Sydney <sup>16</sup>	Perth <sup>17</sup>	Melbourne <sup>18</sup>	Melbourne General Practice <sup>19, 20</sup>	Detainees Curtin, Port Headland, Woomera <sup>21</sup>	Migrant Health Service Adelaide <sup>22</sup>	Newcastle <sup>23</sup>	Royal Hobart Hospital <sup>24, 25</sup>	Migrant Health Unit Western Australia <sup>26</sup>
Year	2000-02	2000-02	2002-03	2005	2005-06	2005-06	2005	2005	2000-01	2005	2004	2002-03	2003-04
Age group	0-17	0-18	0-18	0-18	0-18	0-18	19+ ≤ 18	Total 0-14 yrs	18% < 18 years	58% < 20 years	Median age 13-17 years by groups	Total < 18 years	40.9% < 14 years
Number in study	238	135	69	193	298	336	42 44	258 129	7000	442	215	216 119	2111 420 1245 57 214
Country of origin	43% Somali, 25% Sudan	Somalia, Sudan, Kenya, Ethiopia, Eritrea	East African	Africa	~80% African 40% South Sudan		Liberia, Sierra Leone	African, mainly Sudanese & Liberian	Iraq, Afghanistan	Sudan, Liberia, Congo	73 Sudan, 57 Central/East, 60 West, 25 unknown	>80% African	Total North Africa Sub Saharan Africa Europe Middle East
Mantoux +		3%	21%	44/70 (63%)	37%			9/41 <sup>A</sup> (25%)	(9.7% inactive TB)				47% 55% 46% 47%
Schistosoma serology		2%		6/127 (5%)	19%			12%		24%	37%	38% 30%	
Schistosoma Faecal/urine										12.5%	13/71 (18%)		3% 7% 0 0
Strongyloides serology		1% + 10% equiv		1/129 (1%)	3%			6/66 (9%)		7/21		8% 3%	
Strongyloides Faecal													2% 2% 0 0
Malaria					5%	9.5%	1/42 4/44	9/86 (9%)	0.5%	5%	10%	10% (film) 10/69 15%	8%, > 25% <sup>B</sup>
Hepatitis B sAg				3/110 (3%)				8%	2.5%	16%	5%	8% 5%	5% 6.8% 6.4% 0 0
Hepatitis C								1/68 (1%)	1%	3%		2% <1%	
Syphilis					1%			4/48 (8%)		1/89	1%	4% <1%	5% 2.9% 6.8% 3.8% 0.9%
HIV									0.03%		<1%	0 0	0.09%
Faecal parasites <sup>C</sup>		17%		Giardia 6/31 (19%)				30/193 16% 30%		24% <sup>P</sup> Giardia 11%	39%	33% 41%	Giardia 14% Giardia 13% Giardia 5% Giardia 4%

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# TB

## *Mycobacterium tuberculosis* complex

- 25-40% world infected
- 8.8 million cases/year 2005
  - 7.4 million Asia and sub-Saharan Africa
  - 90 million cases reported 1980-2005
  - Highest burden 15-49 year olds
  - 3-4 million smear positive
  - 1.6 million deaths 2005

– [http://www.who.int/tb/publications/global\\_report/2007/](http://www.who.int/tb/publications/global_report/2007/)

# Australian figures 2006

Overall incidence TB disease 5.8/100,000 (1,201 cases notified)

- 20.7/100,000 for overseas-born
- 0.9/100,000 for the Australian-born population.

In children aged < 15 (62 cases notified)

- 19.8/100,000 overseas born
- 1.6/100,000 Australian born

85% of TB disease notifications were in overseas born people

- 14% of notifications in the overseas group (n=68) refugee/humanitarian entrants.
- Pulmonary TB 78% of Australian born cases 55% of overseas born

Roche PW, Krause V, Konstantinos A, Bastian I, et al, . Tuberculosis notifications in Australia, 2006. Comm Dis Intell 2008;32(1):1-11

# TB

Latent TB infection = Asymptomatic, not infectious

TB disease (active disease)= Symptomatic

- **Primary disease** active disease following recent infection (most common form in kids)
- **Reactivation disease** active disease following latent infection (most common form in adolescents and adults)

Not usually infectious < 12 yrs even if active

# TB

## Of cases

### Adults

- 85% pulmonary

### Kids

- 75% pulmonary
  - anywhere, 50% symptomatic
- More likely to have disseminated/meningitis
  - Nodal (17%)
  - Suspicious if LN >1cm Cx, 1.5cm axillary, 2cm inguinal,
  - No other cause and no change with antistaphylococcal Rx

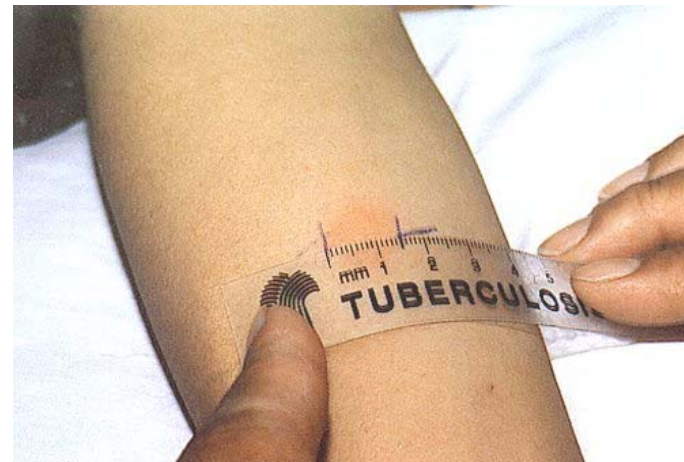
### Immigrants

- More likely to have non-pulmonary

# TB

## TST

- 5 TU PPD, ID injection
- **Changed 2007**
- Measured 48-72 hrs (5d)
  - Transverse axis
  - Induration (not erythema)
  - Pen!
  
- Don't repeat within 3 m



# Mantoux interpretation

## Interpretation varies with age, BCG, origin

### Guide to interpretation of the TST [4]

	Low Risk No risk factors	Moderate Risk <ul style="list-style-type: none"> <li>• Ethnic origin from high prevalence population</li> <li>• Locally identified high risk populations</li> <li>• Adult HIV patient with CD4 count &gt; 500/mL</li> <li>• Children aged 1-5 years</li> </ul>	High Risk <ul style="list-style-type: none"> <li>• Household contacts of infectious cases</li> <li>• HIV-infected or other immunosuppression (including steroids)</li> <li>• CXR: fibrotic changes suggestive of past TB</li> <li>• Children under 1 year</li> </ul>
0-4 mm	Negative	Negative	Negative
5-9 mm	Negative	Negative	<b>Positive*</b>
10-14 mm	Negative	<b>Positive*</b>	<b>Positive</b>
≥15 mm	<b>Positive</b>	<b>Positive</b>	<b>Positive</b>

\* Negative if BCG in previous 5 years. Consider an Interferon gamma release assay (IGRA) in such circumstances.

# TB screening - IFN $\gamma$ release assays

Not appropriate initial screen in kids < 13y

- High failure rate QFG (17%)
- Negative in 2/3 kids defined as LTBI by TST, including those who were known household contact

Connell T et al, Thorax, Apr 2006; doi:10.1136/thx.2005.048033

Difficult to not Rx 15 mm TST from endemic area

Also not Medicare funded- patients get bills

# Risk of reactivation TB

## Lifetime risk of reactivation TB (%)

Age (yrs)	Non-conversion positive TST	Recent conversion of TST*	Immuno-suppressive therapy^	Old, healed TB	Advanced HIV infection
0-5	13	17	25	66	100
6-15	7	8	14	37	70
16-25	8	13	17	44	83
26-35	7	12	15	39	73
36-45	4	7	8	21	40
46-55	3	6	6	17	32
56-65	3	3	5	13	25
66+	2	2	4	9	18

\*applicable to situations where recent infection is likely, eg. migrants from high incidence country within last 5 yrs

^infliximab; applicable to other long term immunosuppressive medications

*Horsburgh CR. Priorities in the treatment of Latent Tuberculosis Infection in the United States NEJM 2004; 350(20): 2060-67.*

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# LTBI

## Positive Mantoux and exclusion active disease

- Any child with + TST needs:
  - Careful history (repeat) and exam
  - CXR (and CT if symptoms and CXR normal)
- Consider prevention Rx with Isoniazid
  - Protocols vary (and evidence complicated)
  - Discussion re: risk benefit equation
- Counseling, be wary of GP knowledge/telling school

# Health communication

- Double checking
  - Watch those doctors...and the pharmacy...



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# Practical solutions...



## DOSE INSTRUCTIONS

FOR: \_\_\_\_\_ UR: \_\_\_\_\_

PHARMACIST: \_\_\_\_\_ DATE: \_\_\_\_\_

### RIFAMPICIN:

Give \_\_\_\_\_ ONCE per day on  
an empty stomach



### ISONIAZID:

Give \_\_\_\_\_ ONCE per day on  
an empty stomach



### PYRAZINAMIDE:

Give \_\_\_\_\_ ONCE per day

### ETHAMBUTOL:

Give \_\_\_\_\_ ONCE per day  
on \_\_\_\_\_ days of the week

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# TB disease

Symptoms/exam findings

Screening test usually positive

Radiological changes

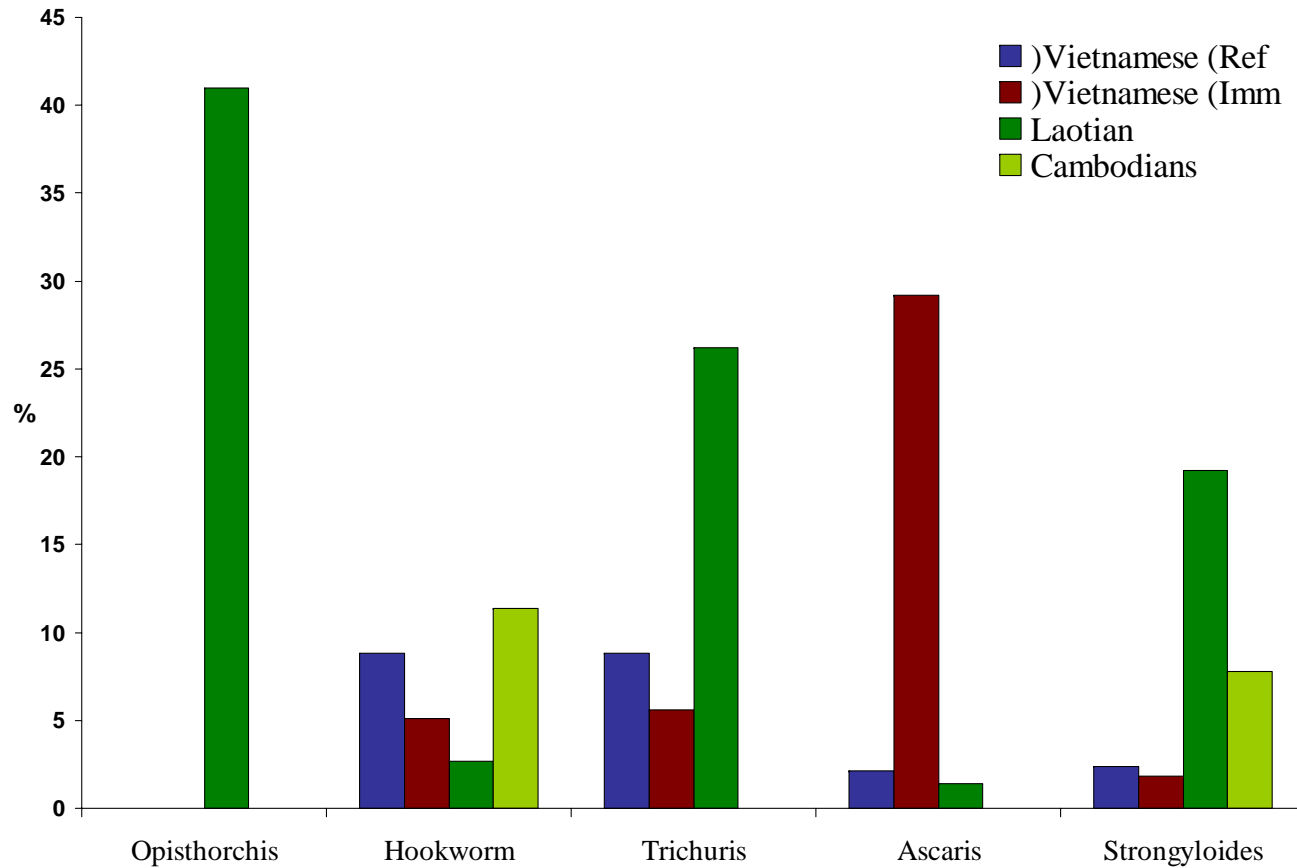
- Aim for microbiological confirmation
- Quadruple therapy
  - Usually 6 month course, Daily or DOTS
- Before starting
  - Check vision if starting Ethambutol
  - Be aware of LFT status, Rx Vitamin D

# Parasite screening

- FBE
- Thick/thin and ICT
- Fixed faecal specimen (protozoa)
- If GIT Sx - 3 faecal specimens
- Schistosoma serology
  - Better S haematobium/mansoni (~90%), not great mekongi/japonicum (~50%)
  - If positive urine and faecal specimens
- Strongyloides serology
- If nothing found and persisting eosinophilia- filarial serology
- Occasional more exotic conditions

# A call for the faecal specimen...

Prevalence of Intestinal Parasites, Ryan N et al. 1987



Fairfield Hospital, Victoria  
Similar studies from US and Canada

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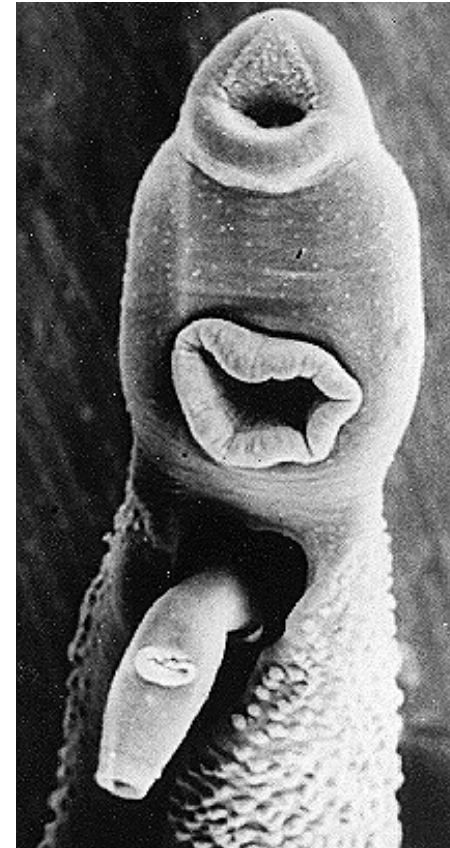
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# Schistosomiasis

- Flukes (Trematodes)
- 200 M cases
  
- >300,000 deaths/year
  - 2/3 Africa
  - If infected:
    - 60% symptoms
    - 10% severe

Ross et al, NEJM 2002; 346(16):1212-20



# Schistosomiasis

- 5 spp impt
  - Haematobium perivesical
  - Mansoni
  - Intercalatum
  - Japonicum can go to brain
  - Mekongi
- Infection
  - via water- from snails
  - through skin, lungs, liver, gut vessels
  - Eggs-lumen gut/urinary tract-water
  - Humans definitive host



# Schistosoma

- Clinical
  - Migratory phenomena: itch, dermatitis, lung, liver
  - Acute illness immune complex dis 4-8/52 post exp
  - Chronic illness chronic granulomatous disease CMI e.g. hepatic, urinary tract, gut Sx
- Diagnosis
  - urinary spec midday, stool smear
  - Ab assays more sensitive than Ag/ova detection
  - Blood eosinophilia more common in active disease
- Rx
  - Praziquantel 20 mg/kg x 2-3 doses (4H)

# Strongyloides

- Soil transmitted nematode (worm)
- Cycle:
  - Larvae in soil- filariform, infective form
  - Penetrate skin (blood, lungs, upper small intestine)
  - Mature worms 2.2mm- release eggs 4/52 later- -faeces
  - Free living cycle
  - Capable of reinfecting host-
    - penetrate intestine wall/perianal skin
    - survive years in host
    - mechanism **autoinfection**



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# Strongyloides

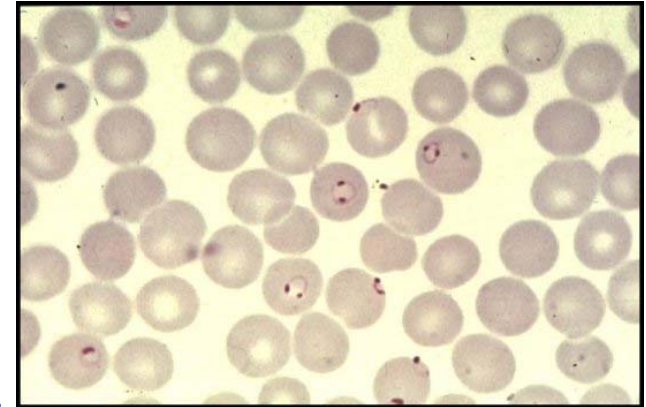
- 1-200M infected
- Endemic areas- 2-20% prevalence
- Clinical:
  - Migratory phenomena: dermatitis, larva currens
  - Abdo pain (often epigastric),
  - V, D (adult worms in upper SI) or alternating diarrhoea and constipation
  - Blood eosinophilia 50-90%
  - Dissemination if immunosuppressed- high CFR



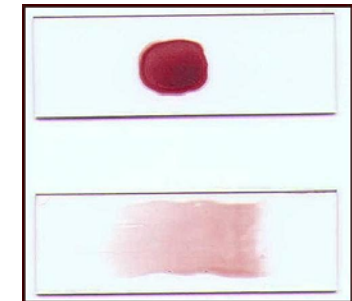
# Strongyloides

- Antibody tests not perfect
- Faecal specimens:
- Rx: Ivermectin (> 5 years old)
  - Ivermectin- cure rates ~90%
  - Albendazole- cure rates ~40%
  - Be wary if Rx albendazole: may lower serology which will then raise again
  - **Never give immunosuppression if Strongyloides**
  - Serology becomes negative in 6m w successful Rx

# Malaria



- Prevalence rates post arrival ~5-10%
  - Higher in some populations e.g. Liberians
  - Unexplained low in Karen
- Essential screen in any febrile person recently arrived from endemic area
  - 3 thick/thin films
  - Rapid antigen testing 84-97% sensitive
    - Plasmodium (false + 2-4 w post Rx)
    - Falciparum (sensitive 90% + in >100/mcl)
  - 98% of symptomatic *Pl. falciparum* present < 3 m
  - 57% of symptomatic non *falciparum* present < 3 m, 96% < 12 m



Griffith K, Lewis L, Mali S, Parise M. Treatment of malaria in the United States. A systematic review. JAMA. 2007;297(20):2264-77.

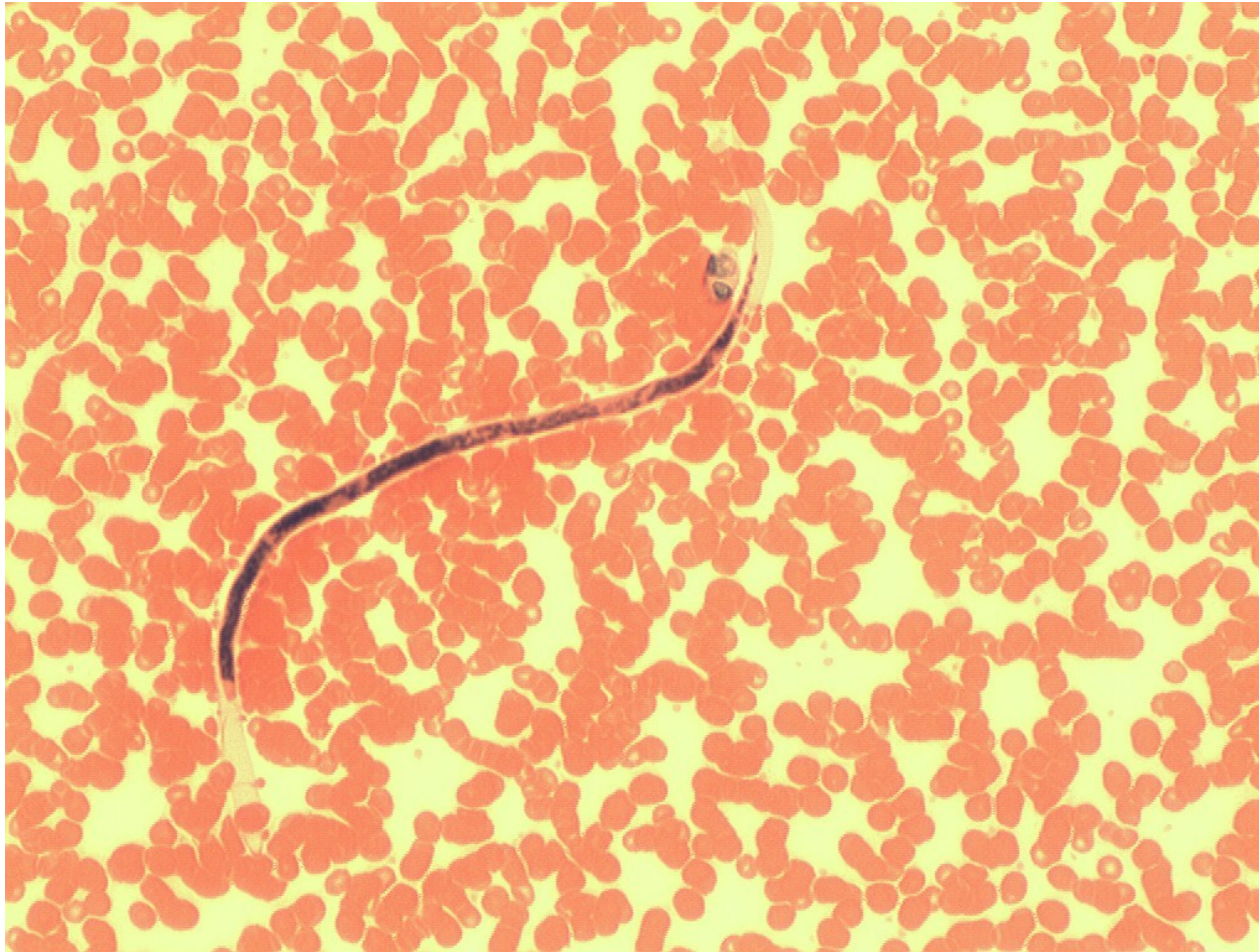
# Malaria- treatment

## Recent change to therapeutic guidelines

- Severe malaria (presume falciparum)
  1. Artesunate then co-artem
  2. Quinine (IV then oral 7d, use w Doxy or Clinda)
- Uncomplicated falciparum
  1. Co-artem (not approved kids Australia, used O/S)
  2. Quinine + doxy or clinda
  3. Malarone
  4. Other options
- Other malaria
  1. Chloroquine and primaquine

exclude G6PD before Rx with quinine, primaquine

And occasionally there are still surprises...



April 2008

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Georgie Paxton

And occasionally there are still surprises...



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# It's a long way...



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Get 12 out of 20 answers right  
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**A SAMPLE OF THE CITIZENSHIP QUESTIONS**

- 1 In what year did Federation take place?
- 2 Which day of the year is Australia Day?
- 3 Who was the first prime minister of Australia?
- 4 What is the first line of Australia's national anthem?
- 5 What is the population of Australia?
- 6 What is the floral emblem of Australia?
- 7 In what city is the Parliament House of the Commonwealth Parliament located?
- 8 Who is the Queen's representative in Australia?
- 9 Who do members of Parliament represent?
- 10 How are members of Parliament chosen?
- 11 After a federal election, who forms the new government?
- 12 What are the colors of the Australian flag?
- 13 What are the three levels of government in Australia?

**1 In what year did Federation take place?**

**2 Which day of the year is Australia Day?**

**3 Who was the first prime minister of Australia?**

**4 What is the first line of Australia's national anthem?**

**5 What is the population of Australia?**

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