Supp Table 1: NSW Refugee Health Service (RHS) screening protocol for refugee arrivals to Sydney, 2013-2014

Age (years)	Routine tests performed	Risk based tests performed*
< 2	No routine blood tests	If indicated from family results or country of birth
≥ 2 and <5	Full blood count Vitamin D Hepatitis B serology Strongyloides serology QuantiFERON-TB Gold**	Ferritin Malarial parasites Schistosomiasis serology
≥ 5 and <15	Full blood count Vitamin D Hepatitis B serology Strongyloides serology	Ferritin Malarial parasites Schistosomiasis serology QuantiFERON-TB Gold
≥ 15	Full blood count Vitamin D Hepatitis B serology Strongyloides serology Syphilis serology	Ferritin Malarial parasites Schistosomiasis serology QuantiFERON-TB Gold Rubella serology Hepatitis C serology HIV serology

*Other tests performed as indicated on clinical or public health grounds

** Latent tuberculosis (TB) infection was tested for in two to five year olds as they are at greatest risk of developing severe TB disease. Although the QuantiFERON-TB Gold test is less validated compared to Mantoux testing in young children, this was a compromise as they were already having venepuncture.

Ngo CC, Maidment C, Atkins L, Eagar S, Smith MM. Blood screen findings in a 2-year cohort of newly arrived refugees to Sydney, Australia. Public Health Res Pract. 2018;28(1):e2811804

Supp Table 2: RHS criteria for risk based testing

Test	Criteria
Ferritin level	Anaemia, history of iron deficiency
Malarial parasites*	Those who have lived or passed through any of the following in the last three months: • Sub-Saharan Africa • Indian subcontinent including India and Bangladesh (but excluding Nepal) • South-East Asia including Thailand and Indonesia (but excluding Malaysia)
Schistosomiasis serology	Recently arrived from Africa or Southeast Asia
QuantiFERON-TB Gold	Those at risk of/from latent TB infection
Rubella serology	Pre-menopausal females
Hepatitis C serology	Those from high risk countries including sub-Saharan Africa, Eastern Europe, Egypt, Vietnam, Pakistan and Burma/Myanmar or anyone with increased risk of blood borne viruses
HIV serology	Those greater than 15 years old from sub-Saharan Africa and Thai-Burma border, all pregnant women, those with other blood borne viruses identified or known/suspected risk factors

*Malaria screening involved both thick and thin blood films and an antigen-based rapid detection test.

Supp Table 3: Number (%) of total patients tested, by age group (n = 3307)

Age (years old)	Number of patients	%
< 2	39	1.2
≥ 2 and < 5	167	5.0
≥5 and <15	678	20.5
≥15 and < 35	1238	37.4
≥35 and <60	955	28.9
≥60	230	7.0

Supp Table 4: Number (%) of total patients tested by gender (n = 3307)

Gender	Number of patients	%
Male	1690	51.1
Female	1617	48.9

Supp Table 5: Vitamin D deficiency by COB

COB	Vitamin D <50nmol/L	
	n/nt	%
Afghanistan + Pakistan	161/235	68.5
Myanmar	53/104	51.0
Iran	109/142	76.8
Iraq	1700/2059	82.6
Syria	232/318	73.0
Tibet + India	124/179	69.3
Middle East (grouped)	1998/2538	78.7 ($p < 0.0001$)[#]

n = number deficient in vitamin D

nt = number tested for vitamin D levels

higher than non ME countries

Supp Table 6: Vitamin D deficiency by gender in the Middle Eastern sub-group

Vitamin D level	All		Male		Female	
	n/nt	%	n/nt	%	n/nt	%
<50nmol/L	2053/2538	80.9	936/1268	73.8[#]	1117/1270	88.0[#]
30-49nmol/L	1124/2538	44.3	648/1268	51.1	476/1270	37.5
12.5-29nmol/L	874/2538	34.4	282/1268	22.2	592/1270	46.6
<12.5nmol/L	55/2538	2.2	6/1268	0.5	491/1270	3.9

n = number deficient in vitamin D

nt = number tested for vitamin D levels

# $p < 0.0001$

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Supp Table 7: Vitamin D deficiency in under 5 year olds by COB

COB	Vitamin D <50nmol/L	
	n/nt	%
All countries	114/201	56.7
Afghanistan + Pakistan	9/12	75
Myanmar	2/8	25
Iran	3/4	75
Iraq	78/139	56.1
Syria	13/21	62
Tibet + India	4/7	57
Middle East (grouped)	94/164	57.3

n = number deficient in vitamin D

nt = number tested for vitamin D levels

Supp Table 8: Isolated positive anti-HBc by COB

COB	Isolated positive anti-HBc	
	n/nt	%
All countries	44/3226	1.4
Afghanistan + Pakistan	5/228	2.2
Myanmar	7/104	6.7
Iran	0/139	0
Iraq	17/2027	0.8
Syria	3/318	0.9
Tibet + India	4/178	2.2
Middle East (grouped)	20/2503	0.8

n = number with a combination of detectable anti-HBc, undetectable HBsAg, anti-HBs <10IU/L

nt = number tested

Supp Table 9: Anti-HBs <10 IU/L by COB and age

COB	All ages		<10 yrs old		10-19 yrs old		>19 yrs old	
	n/nt	%	n/nt	%	n/nt	%	n/nt	%
All countries	2127/3169	67.1	151/532	28.4	381/608	62.7	1595/2029	78.6
Afghanistan + Pakistan	148/224	66.1	20/45	44	27/42	64	101/137	73.7
Myanmar	43/92	47	7/17	41	10/14	71	26/61	43
Iran	87/137	63.5	5/13	39	9/19	47	73/105	69.5
Iraq	1476/2016	73.2	84/343	24.5	255/377	67.6	1137/1296	87.7
Syria	170/317	53.6	13/69	19	33/83	40	124/165	75.2
Tibet + India	38/155	24.5	10/19	53	12/29	41	16/107	15.0
Middle East (grouped)	1744/2489	70.1	102/425	24.0	297/482	61.6	1345/1582	85.0

n = number of patients with anti-HBs <10IU/L. Only those with negative HBsAg were included in the calculation. Occasionally, the anti-HBs test was not done by the laboratory despite being requested.
nt = number tested for Hepatitis B serology. Only those with negative HBsAg were included in the calculation.

Supp Table 10: Prevalence of positive and equivocal strongyloides serology by COB

COB	Positive result		Equivocal result	
	n/nt	%	n/nt	%
All countries	133/3241	4.1	72/3241	2.2
Afghanistan + Pakistan	4/232	1.7	5/232	2.2
Myanmar	15/103	14.6	0/103	0
Iran	5/139	3.6	3/139	2.2
Iraq	78/2042	3.8	50/2042	2.4
Syria	8/317	2.5	2/317	0.6
Tibet + India	11/181	6.1	6/181	3.3
Middle East (grouped)	91/2517	3.6[#]	55/2517	2.2

n = number of patients with Assay S/Co ratio range 0.90-1.10 (equivocal) and >1.10 (positive)

nt = number tested for strongyloides serology

lower than non ME countries, p=0.02

Supp Table 11: Rates of syphilis reactivity by COB

COB	Reactive to treponemal antibody	
	n/nt	%
All countries	27/2565	1.1
Afghanistan + Pakistan	0/178	0
Myanmar	2/82	2
Iran	0/125	0
Iraq	18/1646	1.1
Syria	0/200	0
Tibet + India	5/140	3.6
Middle East (grouped)	18/1990	0.9

n = number reactive to treponemal antibody

nt = number tested for syphilis serology

Supp Table 12: Rubella non-immunity rates by COB and gender

COB	Both genders		Male		Female	
	n/nt	%	n/nt	%	n/nt	%
All countries	90/949	9.5	22/211	10.4	68/738	9.2
Afghanistan + Pakistan	4/61	7	0/9	0	4/52	8
Myanmar	4/30	13	0/5	0	4/25	16
Iran	8/37	22	3/10	30	5/27	19
Iraq	53/562	9.4	14/117	12.0	39/445	8.8
Syria	8/135	5.9	2/41	5	6/94	6
Tibet + India	9/57	16	3/11	27	6/46	13
Middle East (grouped)	70/742	9.4 (NS)	19/171	11.1	51/571	8.9

n = number of patients with Rubella IgG <10 IU/ml

nt = number tested for Rubella serology

Table 13: Positive/indeterminate hepatitis C antibody rates by COB

COB	Positive or indeterminate for anti-HCV	
	n/nt	%
All countries	10/842	1.2
Afghanistan + Pakistan	2/60	3
Myanmar	5*/51	10
Iran	0/44	0
Iraq	2/501	0.4
Syria	0/45	0
Tibet + India	0/38	0
Middle East (grouped)	2/594	0.3

n = number positive or indeterminate for anti-HCV

nt = number tested for anti-HCV

* 3 patients were positive and 2 patients were indeterminate

Table 17: HIV test results

COB	HIV positive	
	n/nt	%
All countries	0/236*	0
Middle East (grouped)	0/163**	0

n = number positive for HIV 1/2 antigen antibody

nt = number tested for HIV 1/2 antigen and antibody

* 10 of the 236 were under 15 years old

** 2 of the 181 were under 15 years old

(those greater than 15 years old would also have tested negative at their visa medical assessment).

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Table 14: Rates of latent tuberculosis infection by age

IGRA test result	< 2 yrs old		2-5 yrs old		> 5 yrs old	
	n/nt	%	n/nt	%	n/nt	%
Positive	4/33	12	3/135	2.2	7/87	8
Indeterminate	0/33	0	1/135	0.8	1/87	1

n = number positive/indeterminate for Tuberculosis

nt = number tested for Tuberculosis