

Table 3 Proportionate morbidity of ARI in patients with respiratory symptoms

Disease	Population at risk (year) (reference)	Study design	Case definition as reported	Proportionate morbidity (age, if available)
<b>Inpatient</b>				
ARI	Erbil city, Iraq Patients attending the only specialized paediatric hospital (2012) (48)	Case control to investigate malnutrition as a risk factor for ARI	Acute URTI	27%
	Oman, national population (2013) (40)		Acute LRTI	41%
			Mixed URTI & LRTI	16%
		Annual statistical health report	Severe ARI out of total ARI episodes	0.9%
Pneumonia	Amman, Jordan Children < 2 y admitted with respiratory symptoms or fever (2010–2012) (33)	Prospective descriptive study	Pneumonia diagnosed in ARI patients	11% (< 2 y)
	Ariana, Tunisia All patients with CAP admitted to ICU (1999–2008) (47)	Retrospective cohort study	Pneumococcal pneumonia (CAP in which <i>Streptococcus pneumoniae</i> was isolated)	48.3% (mean age: 49.5 y ±21.6)
RSV	Riyadh, Saudi Arabia Children aged 1m–3y hospitalized with suspected ARI (2007/08) (49)	Descriptive cross-sectional study	RSV-positive	35% (1m–3 y)
<b>Outpatient</b>				
ARI	Tikrit, Iraq Children < 5y attending outpatient department for treatment of ARI (45)	Prospective observational study	Very severe disease Severe pneumonia Pneumonia Cough and cold ARI	8.8% (20.8% < 2 m) 19.6% (22.2% 2–11 m) 48.2% (66% < 2 m) 23.4% (36.5% 12–60 m) 21.6%
	Sousse, Tunisia Patients of primary health care centres (2002/03) (76)	Cross sectional survey		
RSV	Beirut, Lebanon Children presenting with ILI at hospital (2007/08) (50)	Descriptive cross-sectional study	RSV-positive ILI cases	26%
<b>Surveillance</b>				
Influenza	Morocco Patients presenting with ILI and SARI at clinics and hospitals across country (2007–2009) (57)	Descriptive study of routine influenza sentinel surveillance	Proportion positive for influenza among ILI and SARI cases	3%
			Of those positive for influenza, proportion positive among ILI cases	87%
			Of those positive for influenza, proportion positive among SARI cases	13%
Influenza A	Beirut, Lebanon Children presenting with ILI to the outpatient paediatric clinic, American University Hospital (2008) (50)	Descriptive cross-sectional study	Proportion of ILI cases with influenza A	28%
Influenza B	As above		Proportion of ILI cases with influenza B	10%
SARI	Lebanon, Beirut population (up to week 52, 2013) (87)	ICU-based surveillance	URT I	0%
	Lebanon, north population (2013) (82)	ICU-based surveillance	Influenza LRTI	7% 85%
Acute respiratory distress			7%	
Lebanon, Mount Lebanon population (up to week 24, 2014) (53)	ICU-based surveillance	Influenza LRTI	0% 95%	
		Acute respiratory distress	3%	
Lebanon, Bekaa population (up to week 27, 2014) (up to wk 24, 2014) (52)	ICU-based surveillance	URT I	0%	
		Influenza	0%	
		LRTI	38%	
		LRTI	8%	

ARI = acute respiratory infection; CAP = community-acquired pneumonia; ILI = influenza-like illness; LRTI = lower respiratory tract infection; RSV = respiratory syncytial virus; SARI = severe acute respiratory infection; URTI = upper respiratory tract infection; m = month; y = year