Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Reg			Africa						
(1) Country Name	(2) CRA Index	(3) WHO/CRA Index	(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Algeria	D	AfrD	4,085.00	0.012	1.00		0.012	46.98	
ngola	D	AfrD	2,389.00	0.030	0.60		0.018	43.00	WHO 1995
Benin	D	AfrD	1,033.00	0.083	0.60	0.40	0.020	20.58	WHO 1995 ; UNICEF 2001
Botswana	Е	AfrE	241.00	0.007	0.25		0.002	0.39	MI 1998
Burkina Faso	D	AfrD	2,185.00	0.039	0.60	0.40	0.009	20.45	MI 1998 ; WHO 1995 ; UNICEF 2001
Burundi	Е	AfrE	1,154.00	0.012	1.00		0.012	13.27	UNICEF 2001
ameroon	D	AfrD	2,472.00	0.007	0.75		0.005	13.16	WHO 1995; MI 1998; Sibetcheu and Kollo 1999
ape Verde	D	AfrD	60.00	0.032	1.00		0.032	1.92	WHO 1995
central frican Republic	Е	AfrE	563.00	0.012	1.00		0.012	6.47	
had	D	AfrD	1,338.00	0.036	0.75		0.027	36.13	WHO 1995; MI 1998; Anonymous. 2001
omoros	D	AfrD	106.00	0.012	1.00		0.012	1.22	
ongo	Е	AfrE	525.00	0.012	0.25	0.40	0.001	0.60	WHO 1995; UNICEF 2001
ote d'Ivoire	Е	AfrE	2,304.00	0.012	0.60		0.007	15.90	WHO 1995
Democratic Republic of he Congo	Е	AfrE	9,742.00	0.012	1.00		0.012	112.03	UNICEF 2001
Equatorial Suinea	D	AfrD	75.00	0.012	1.00		0.012	0.86	
ritrea	E	AfrE	635.00	0.048	1.00	0.40	0.019	12.19	Haidar and Demissie 1999; UNICEF 2001
thiopia	Е	AfrE	11,032.00	0.048	1.00		0.048	529.54	Haidar and Demissie 1999; Anonymous. 2001; UNICEF 2001
Sabon	D	AfrD	190.00	0.012	1.00		0.012	2.19	
ambia	D	AfrD	205.00	0.012	1.00		0.012	2.36	
Shana	D	AfrD	3,189.00	0.012	1.00	0.40	0.005	14.67	Anonymous. 2001; UNICEF 2001
Suinea	D	AfrD	1,234.00	0.004	1.00	0.40	0.001	1.74	Schemann 1996; UNICEF 2001
Guinea- Bissau	D	AfrD	199.00	0.004	1.00		0.004	0.80	
(enya	Е	AfrE	4,462.00	0.020	1.00		0.020		WHO 1995 ; MI 1998 ; UNICEF 2001
esotho	Е	AfrE	316.00	0.012	1.00		0.012	3.63	
iberia	D	AfrD	475.00	0.012	1.00		0.012	5.46	
1adagascar	D	AfrD	2,706.00	0.012	1.00	0.40	0.005		Anonymous. 2001 ; UNICEF 2001
1alawi	Е	AfrE	1,990.00	0.020	0.60		0.012		WHO 1995; Anonymous. 2001; UNICEF 2001
1ali	D	AfrD	1,997.00	0.065	0.75	0.40	0.020		WHO 1995; Anonymous. 2001; UNICEF 2001
/lauritania	D	AfrD	439.00	0.026	0.60	0.40	0.006	2.74	WHO 1995 ; UNICEF 2001
/lauritius	D	AfrD	94.00	0.000	1.00		0.000	0.00	WHO 1995 ; UNICEF 2001
/lozambique	Е	AfrE	3,414.00	0.007	0.60		0.004	14.34	WHO 1995 ; Fidalgo 1999
lamibia	Е	AfrE	264.00	0.012		0.40	0.005		UNICEF 2001
liger	D	AfrD	2,034.00	0.037	0.60	0.40	0.009		WHO 1995; MI 1998; Anonymous. 2001; UNICEF 2001
ligeria	D	AfrD	17,880.00	0.010	1.00		0.010		WHO 1995 ; UNICEF 2001
Rwanda	Е	AfrE	1,259.00	0.026	0.60	0.40	0.006	7.86	MI 1998 ; WHO 1995 ; Anonymous. 2001 ; UNICEF 2001
Sao Tome and Principe	D	AfrD	27.00	0.012	1.00		0.012	0.31	
enegal	D	AfrD	1,596.00	0.006	0.60		0.004		MI 1998 ; WHO 1995 ; UNICEF 2001
eychelles	D	AfrD	14.00	0.012	1.00		0.012	0.16	
ierra Leone	D	AfrD	831.00	0.012	1.00		0.012	9.56	
outh Africa	E	AfrE	4,909.00	0.016			0.016		MI 1998 ; WHO 1995
waziland	E	AfrE	161.00	0.012	1.00		0.012	1.85	
ogo .	D	AfrD	800.00	0.100	0.60		0.060		WHO 1995
Jganda 	Е	AfrE	4,348.00	0.035	0.60		0.021		WHO 1995 ; Anonymous. 2001
Jnited Republic of anzania	Е	AfrE	5,724.00	0.015	0.60	0.40	0.004	20.61	WHO 1995; Anonymous. 2001; UNICEF 2001
ambia	E	AfrE	1,613.00	0.062	1.00	0.40	0.025	40.00	Luo et al. 1999; WHO 1995; UNICEF 2001
Zimbabwe	Е	AfrE	1,625.00	0.006	0.40		0.002		WHO 1995

Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Region			Eastern I	Mediterra	nean				
(1) Country Name	(2) CRA Index		(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Afghanistan	D	EmrD	4,190.00	0.055	0.75		0.041	172.84	
Bahrain	В	EmrB	61.00						
Cyprus	В	EmrB	56.00						
Djibouti	D	EmrD	98.00	0.010	0.40		0.004	0.39	WHO 1995; UNICEF 2001
Egypt	D	EmrD	8,081.00	0.003	1.00		0.003	25.86	Moussa et al. 1997; El Magid 1997; Anonymous. 2001
Iran, Islamic Republic of	В	EmrB	7,017.00	0.010	0.60		0.006	42.10	Kimiagar 1994 ; UNICEF 2001
Iraq	D	EmrD	3,431.00	0.016	0.25		0.004	13.72	WHO 1995
Jordan	В	EmrB	1,024.00						
Kuwait	В	EmrB	200.00						
Lebanon	В	EmrB	368.00						
Libyan Arab Jamahirya	В	EmrB	724.00						
Morocco	D	EmrD	3,215.00	0.012	1.00	0.40	0.005	14.79	UNICEF 2001
Oman	В	EmrB	395.00	0.012	1.00		0.012	4.54	UNICEF 2001
Pakistan	D	EmrD	23,793.00	0.006	0.40		0.002	57.10	Paracha and Jameel 2000; UNICEF 2001
Qatar	В	EmrB	50.00						
Saudi Arabia	В	EmrB	3,220.00						
Somalia	D	EmrD	1,957.00	0.031	1.00		0.031	60.67	Feldon 1997; Heinonen 1999; UNICEF 2001
Sudan	D	EmrD	4,162.00	0.029	0.60		0.017	72.42	WHO 1995; MI 1998; Nestel et al. 1993; UNICEF 2001
Syrian Arab Republic	В	EmrB	2,183.00						
Tunisia	В	EmrB	924.00						
United Arab Emirates	В	EmrB	212.00						
Yemen	D	EmrD	3,479.00	0.022	0.60		0.013	45.92	Rosen et al. 1996; UNICEF 2001

Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Region South-East Asia									
(1) Country Name	(2) CRA Index	(3) WHO/CRA Index	(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Bangladesh	D	SearD	15,120.00	0.006	1.00		0.006	93.7	4 HKI 1999 ; UNICEF 2001
Bhutan	D	SearD	339.00	0.006	0.60	0.40	0.001	0.5	0 HKI 1999
Democratic People's Republic of Korea	D	SearD	2,386.00						
India	D	SearD	114,976.0 0	0.017	0.90		0.016	1,790.1	8 National Nutrition Monitoring Bureau 2000; Khandait et al. 1999; Rahi et al. 1995; Anonymous. 2001; UNICEF 2001
Indonesia	В	SearB	22,006.00	0.003	1.00		0.003	74.8	2 Muhilal et al. 1994 ; WHO 1995 ; MI 1998 ; Anonymous. 2001 ; UNICEF 2001
Maldives	D	SearD	43.00	0.000	0.00		0.000	0.0	0
Myanmar	D	SearD	4,226.00	0.018	0.60	0.40	0.004	18.2	6 MI 1998 ; WHO 1995 ; UNICEF 2001
Nepal	D	SearD	3,485.00	0.006	1.00		0.006	20.9	1 Anonymous. 1999 ; UNICEF 2001
Sri Lanka	В	SearB	1,597.00	0.016	1.00		0.016	25.5	5 Piyasema et al. 1999
Thailand	В	SearB	4,831.00	0.001	0.40		0.000	2.1	3 Udomkesmalee 1992 ; UNICEF 2001

Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Region		•	Western	Pacific					
(1) Country Name	(2) CRA Index		(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Australia	A	WprA	1,259.00						
Brunei Darussalam	A	WprA	35.00						
Cambodia	В	WprB	1,611.00	0.010	1.00	0.40	0.004	6.44	HKI 2000 ; UNICEF 2001
China	В	WprB	97,793.00	0.002	1.00		0.002	169.18	3 Yan 2001
Cook Islands	В	WprB	2.00	0.006	1.00		0.006	0.01	Schaumberg et al. 1995
iji	В	WprB	84.00						
lapan	A	WprA	6,171.00						
Ciribati	В	WprB	12.00	0.148	1.00		0.148	1.77	Schaumberg et al. 1995; Darnton-Hill 1994
_ao People's Democratic Republic	В	WprB	883.00	0.007	1.00		0.007	6.18	8 Malyavin 1996 ; UNICEF 2001
Malaysia	В	WprB	2,644.00	0.003	0.80		0.003	7.19	Muhilal et al. 1994
/larshall slands	В	WprB	9.00	0.040	1.00		0.040	0.36	5 WHO 1995 ; UNICEF 2001
Micronesia, Federated States of	В	WprB	16.00	0.160	1.00		0.160	2.56	5 Lloyd-Puryear et al. 1991; Centers for Disease Control (CDC) 2001; UNICEF 2001
Mongolia	В	WprB	279.00						
lauru	В	WprB	2.00						
lew Zealand	A	WprA	289.00						
Niue	В	WprB	0.00						
Palau	В	WprB	3.00	0.160	0.40		0.064	0.19	
Papua New Guinea	В	WprB	668.00	0.006	0.25		0.002	1.00) WHO 1995
Philippines	В	WprB	9,800.00	0.001	1.00		0.001	6.86	6 WHO 1995 ; Anonymous. 2001 ; UNICEF 2001
Republic of Korea	В	WprB	3,403.00						
Samoa	В	WprB	24.00						
Singapore	A	WprA	265.00						
Solomon slands	В	WprB	70.00	0.016	1.00		0.016	1.09	WHO 1995 ; Schaumberg et al. 1995
Tonga	В	WprB	12.00						
uvalu	В	WprB	1.00	0.003	1.00		0.003	0.00	Schaumberg et al. 1995; WHO 1995
/anuatu	В	WprB	28.00	0.001	1.00		0.001	0.03	Schaumberg et al. 1995; WHO 1995
/iet Nam	В	WprB	8,454.00	0.002	1.00		0.002	16.91	Khan 2001

Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Reg	ion		Americas	6					
(1) Country Name	(2) CRA Index	(3) WHO/CRA Index	(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Antigua and Barbuda	В	AmrB	7.00						
Argentina	В	AmrB	3,483.00						
Bahamas	В	AmrB	33.00						
Barbados	В	AmrB	17.00						
Belize	В	AmrB	34.00						
Bolivia	D	AmrD	1,200.00						WHO 1995
Brazil	В	AmrB	15,993.00	0.005	0.25		0.001	19.99	9 WHO 1995
Canada	A	AmrA	1,810.00						
Chile	В	AmrB	1,448.00						
Colombia	В	AmrB	4,788.00			0.40			PAHO and PAHO-HPN-DHPP 2001; UNICEF 2001
Costa Rica	В	AmrB	437.00						PAHO and PAHO-HPN-DHPP 2001; UNICEF 2001
Cuba	Α	AmrA	732.00						
Dominica	В	AmrB	7.00						
Dominican Republic	В	AmrB	944.00						
Ecuador	D	AmrD	1,465.00						
El Salvador	В	AmrB	792.00			0.40			WHO 1995; PAHO and PAHO-HPN-DHPP 2001; UNICEF 2001
Grenada	В	AmrB	9.00						
Guatemala	D	AmrD	1,816.00			0.40			UNICEF 2001
Guyana	В	AmrB	87.00						
Haiti	D	AmrD	1,136.00	0.080	0.60		0.048	54.53	3 WHO 1995; PAHO and PAHO-HPN-DHPP 2001; UNICEF 2001
Honduras	В	AmrB	966.00						UNICEF 2001; PAHO and PAHO-HPN-DHPP 2001
Jamaica	В	AmrB	272.00						
Mexico	В	AmrB	11,202.00						UNICEF 2001; PAHO and PAHO-HPN-DHPP 2001
Nicaragua	D	AmrD	804.00						UNICEF 2001; PAHO and PAHO-HPN-DHPP 2001
Panama	В	AmrB	302.00			0.40			UNICEF 2001; PAHO and PAHO-HPN-DHPP 2001
Paraguay	В	AmrB	765.00						
Peru	D	AmrD	2,898.00						PAHO and PAHO-HPN-DHPP 2001; UNICEF 2001
Saint Kitts and Nevis	В	AmrB	4.00						
Saint Lucia	В	AmrB	15.00						
Saint Vincent and	В	AmrB	11.00						
the Grenadines									
Suriname	В	AmrB	40.00						
Trinidad and Tobago	В	AmrB	91.00						
United States of America	A	AmrA	19,344.00						
Uruguay	В	AmrB	283.00						
Venezuela,	В	AmrB	2,791.00						PAHO and PAHO-HPN-DHPP 2001
Bolivarian Republic of	Б	7 1111111	2,771.00						THE MATTHE HINDHIT 2001

Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Reg	ion	ı	Europe						
(1) Country Name	(2) CRA Index	(3) WHO/CRA Index	(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Albania	В	EurB	305.00						
Andorra	A	EurA	4.00						
Armenia	В	EurB	232.00						
Austria	A	EurA	434.00						
Azerbaijan	В	EurB	639.00						
Belarus	С	EurC	505.00						
Belgium	A	EurA	549.00						
Bosnia and Herzegovina	В	EurB	198.00						
Bulgaria	В	EurB	368.00						
Croatia	A	EurA	235.00						
Czech Republic	A	EurA	476.00						
Denmark	A	EurA	324.00						
Estonia	С	EurC	62.00						
Finland	A	EurA	299.00						
France	A	EurA	3,572.00						
Georgia	В	EurB	344.00						
Germany	A	EurA	3,857.00						
Greece	A	EurA	496.00						
Hungary	C	EurC	514.00						
Iceland	A	EurA	22.00						
Ireland	A	EurA	256.00						
Israel	A	EurA	583.00						
Italy	A	EurA	2,620.00						
Kazakhstan	C B	EurC EurB	1,415.00 554.00						
Kyrgystan Latvia	С	EurC	105.00						
Lithuania	C	EurC	193.00						
Luxembourg	A	EurA	26.00						
Malta	A	EurA	25.00						
Monaco	A	EurA	2.00						
Netherlands	A	EurA	925.00						
Norway	A	EurA	293.00						
Poland	В	EurB	2,152.00						
Portugal	A	EurA	525.00						
Republic of Moldova	С	EurC	287.00						
Romania	В	EurB	1,024.00						
Russian Federation	C	EurC	7,006.00						
San Marino	A	EurA	1.00						
Slovakia	В	EurB	298.00						
Slovenia	A	EurA	93.00						
Spain	A	EurA	1,822.00						
Sweden	A	EurA	478.00						
Switzerland	A	EurA	414.00						
Tajikistan	В	EurB	863.00						
The former Yugoslav Republic of Macedonia	В	EurB	152.00						
Turkey	В	EurB	6,659.00						
Turkmenistan	В	EurB	570.00						
Ukraine	С	EurC	2,478.00						
United Kingdom	A	EurA	3,521.00						

Table 2: Global Burden of Xerophthalmia Among Preschool Aged Children By WHO Region

WHO Reg	jion		Europe						
(1) Country Name	(2) CRA Index	(3) WHO/CRA Index	(4) No. Under 5 Years (000's)	(5) Measured Prevalence	(6) National Weight	(7) VA Program Coverage Weight	(8) National Prevalence	(9) Number with Xerophthalmia (000's)	(10) References
Uzbekistan	В	EurB	3,061.00						
Yugoslavia	В	EurB	668.00						

Column Heading Footnotes:

- Country names as listed by WHO, based on the World Health Report 2001, List of Member States by WHO Region and Mortality Stratum, page 168 (WHO 2001).
- Comparative Risk Assessment Index of WHO, with letters assigned to countries based on risks of adult and child mortality: A=very low child, very low adult
 mortality; B=low child, low adult mortality; C=low child, high adult mortality; D=high child, high adult mortality; E=high child, very high adult (mainly due to
 HIV/AIDS) mortality. (WHO 2001A)
- 3. A combined alpha code to facilitate joint classification by both WHO region and CRA index.
- 4. National < 5 year old population (000's), based on the UNICEF 2001 State of the World's Children Report, Table 5: Demographic Indicators, column 3 (UNICEF 2001).
- 5. Combined prevalence of all active symptoms (night blindness, XN) and signs (Biltot's spots (X1B) and corneal disease (X2/X3)) of xerophthalmia as (1) reported by referenced surveys or studies, (2) or, in the case of African and Eastern Mediterranean countries, imputed as a median of 1.15% (proportion of 0.0115, rounded to 0.012 for display) based on national prevalence estimates from 27 countries within the two regions. Data on only one eye sign were accepted as is; prevalence rates for XN and X1B, when reported separately, were summed as [(XN rate x 0.5) + (X1B rate x 1.0). Prevalence rates of X2/X3, when reported, were added to those of milder signs. Conjunctival xerosis (X1A) was not included in any estimate.
- 6. A subjective weight applied to the measured prevalence (col 6 x col 5) to obtain an estimated "national prevalence". A weight of 1.00 was assigned if a measured prevalence was reported or imputed as "national". Weights < 1.00 have been applied to nationally non-representative, or possibly outdated measured prevalence rates in order to estimate the national prevalence based on available data. Weights may differ from those used previously by analysts at WHO (WHO 1995) or the Micronutrient Initiative (MI 1998) due to availability of new data or re-interpretation of previously existing findings.
- 7. A vitamin A program coverage weight of 0.40 was applied to the product of (col 5 x col 6) prior to estimating the national prevalence of vitamin A deficiency if available xerophthalmia prevalence data preceded the startup of a vitamin A supplementation program that achieved a reported coverage of >75% of the child population (assumes 60% effectiveness in reducing xerophthalmia). Prevalence estimates were not adjusted if xerophthalmia prevalence data were collected during or after the start-up of a vitamin A supplementation program or for countries where reported program coverage was < 75%.
- 8. Estimated national prevalence of xerophthalmia (col 5 x col 6 x col 7).
- 9. Estimated number of xerophthalmic children < 5 years of age (000's) (col 4 x col 8).
- 10. See the references in Section 8.

Table: A blank cell indicates that no data, either empirical or imputable, are available for a country and/or the country is not considered to have a measurable population at-risk of vitamin A deficiency.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region Africa	rtegion
Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Country Name	Comments. 1. National Weight, 2. Measured Flevalence, and 3. VA Flogram Coverage Weight
Algeria	 No data available. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5
	year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. 3. No data available.
Angola	 MDIS95 (WHO 1995) assigned a weight of 0.40, but for this report a weight of 0.60 was assigned. A 1973 single province survey reported by MDIS95 (WHO 1995) indicated a prevalence = 0.03 of X1B. No data available.
Benin	 MDIS95 (WHO 1995) assigned a weight of 0.40, but for this report a weight of 0.60 was assigned. A 1989 survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence of 0.083. 1999 SOWC (UNICEF 2001)
Botswana	 MI98 (MI 1998) assigned a weight of 0.25. A 1986 survey reported by MI98 (MI 1998) indicated a prevalence = 0.0065. No data available.
Burkina Faso	 A 1986 survey of 3 northern provinces (MI 1998; WHO 1995) assigned a weight of 0.60. A 1986 survey of 3 northern provinces only reported a xerophthalmia prevalence = 0.0327 (WHO 1995) or 0.039 (MI 1998), but no serum retinol data. The latter estimate was chosen. 1999 SOWC (UNICEF 2001)
Burundi	 No data available. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. 1999 SOWC (UNICEF 2001)
Cameroon	 The MDIS95 (WHO 1995) and MI (MI 1998) reports assigned a weight of 0.40, but taking into account the nearnational aspect of this survey a weight of 0.75 was assigned. A 1992 near-national survey reported by MDIS95 (WHO 1995) and Sight and Life (Sibetcheu and Kollo 1999) indicated a xerophthalmia prevalence = 0.0071. MI reported a prevalence = 0.005, from the same data (MI 1998). The MDIS95 (WHO 1995) estimate of 0.0071 was chosen. No data available.
Cape Verde	 No data available. A 1982 to 1983 survey appeared extensive, so the MDIS95-reported (WHO 1995) (p 69) xerophthalmia prevalence of 0.032 (mean between males and females). No data available.
Central African Republic	 Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. No data available.
Chad	 This is the weight assigned by MDIS95 (WHO 1995) and MI98: 0.75 (MI 1998). A 1986 survey of North and Central Chad reported by MI98 (Table A.2) (MI 1998) indicates a xerophthalmia prevalence = 0.036. MDIS95 (WHO 1995) reported a range of 0.027 to 0.045 for its prevalence estimate. The MI98 estimate was chosen. 1997 DHS (2001)
Comoros	 No data available. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

	region
VHO Region Africa	
Country Nam	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Congo	1. MDIS95 (WHO 1995) assigned a weight of 0.25 for the VAD prevalence data, so this is applied here.
	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. 1999 SOWC (UNICEF 2001)
Cote d'Ivoire	1. MDIS95 (WHO 1995) assigned a weight of 0.60 for the VAD prevalence data, so this is applied here.
	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. No data available.
Democratic Republic	
the Congo	 Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. 1999 SOWC (UNICEF 2001)
Equatorial Guinea	1. No data available.
·	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. No data available.
Eritrea	1. No data available.
	2. The xerophthalmia prevalence for Ethiopia (Haidar and Demissie 1999) was copied for Eritrea.
	3. 1999 SOWC (UNICEF 2001)
Ethiopia	1. No data available.
	2. This estimate of 0.048 was reported in 1999 by (Haidar and Demissie 1999).
	3. 2000 DHS (2001), 1999 SOWC (UNICEF 2001)
Gabon	 No data available. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. No data available.
Gambia	1. No data available.
	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. No data available.
Ghana	 No data available. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. 1998 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001)
Guinea	1. No data available.
	2. A 1995 survey of 2 regions of the country was reported in an abstract by Schemann (Schemann 1996). The reported prevalences of X1B = 0.001 and 0.0005 (mean = 0.00053) and for preschool XN = 0.006 and 0.000 (mean = 0.003). If you add 0.00053 + 0.003, a preschool xerophthalmia prevalence of 0.00353 is derived.
	3. 1999 SOWC (UNICEF 2001)

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region	Africa	
	Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Guir	nea-Bissau	1. No data available.
		2. No data available.
		3. No data available.
Ken	ya	No data available.
		 A 1994 national survey reported by MDIS95 (WHO 1995) and MI98 (MI 1998) indicates a xerophthalmia prevalence = 0.02.
		3. 1999 SOWC (UNICEF 2001)
Lesc	otho	No data available.
		2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
		3. No data available.
Libe	ria	1. No data available.
		2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
		3. No data available.
Mad	lagascar	1. No data available.
	·	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
		3. 1997 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001)
Mala	awi	1. MDIS95 (WHO 1995) assigned a weight of 0.60.
		 Several surveys conducted between 1983 and 1989 were reported by MDIS95 (WHO 1995). The xerophthalmia prevalence calculated from these surveys was 0.02.
		3. 2000 DHS (< 5 year olds) (2001),1999 SOWC (UNICEF 2001)
Mali		1. MDIS95 (WHO 1995) assigned a weight of 0.75.
		 Several surveys conducted between 1986 and 1990 were reported by MDIS95 (WHO 1995). The xerophthalmia prevalence estimate of 0.065 was taken from the MDIS95 report.
		3. 1996 DHS (< 5 year olds) (2001),1999 SOWC (UNICEF 2001)
Mau	ıritania	1. MDIS95 (WHO 1995) assigned a weight of 0.60.
		2. A 1983 USAID survey reported by MDIS95 (WHO 1995) indicated a mean xerophthalmia prevalence = 0.026.
		3. 1999 SOWC (UNICEF 2001)
Mau	ıritius	1. In order to include Mauritius in the estimate of regional xerophthalmia rates, it is assigned a prevalence of 0.00.
		 Since a prevalence of low serum retinol levels of 0.093 exists (WHO 1995), it is assumed that minimal xerophthalmia exists in this country.
		3. 1999 SOWC (UNICEF 2001)
Moz	ambique	1. MDIS95 (WHO 1995) assigned a weight of 0.25, but it was decided to increase the weight to 0.60.
IVIOZ	ambique	 A 1990 survey reported by MDIS95 (WHO 1995) and Fidalgo (Fidalgo 1999) indicated a xerophthalmia prevalence = 0.007.
		3. No data available.
Nam	nihia	No data available.
,		2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
		3. 1999 SOWC (UNICEF 2001)
Nige	er	1. MDIS95 (WHO 1995) assigned a weight of 0.75. Since the prevalence estimate is based on the MI98 report (MI 1998), the MI98 weight of 0.60 is used instead.
		 A 1992 survey reported by MI98 (MI 1998) indicated a xerophthalmia prevalence = 0.037. MDIS95 (WHO 1995) used several surveys conducted from 1986 to 1990 to estimate a prevalence = 0.02, but the more recent estimate was chosen for this analysis.
		3. 1998 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001)

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region Africa	
Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Nigeria	1. No data available.
-	2. A 1993 national survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.01.
	3. 1999 SOWC (UNICEF 2001)
Rwanda	1. MI98 (MI 1998) and MDIS95 (WHO 1995) both assigned a weight of 0.60.
	2. A 1987 sub national survey reported by MI98 (MI 1998) indicated a xerophthalmia prevalence = 0.026. MDIS95 (WHO 1995) reports the same survey, but it only reports the prevalence of child X1B (0.013). The MI98 estimate was chosen for this analysis.
	3. 2000 DHS (< 5 year olds) (2001),1999 SOWC (UNICEF 2001)
Sao Tome and Principe	1. No data available.
	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
0	3. No data available.
Senegal	 MI98 (MI 1998) assigned a weight of 0.60. A 1994 survey reported by MI98 (MI 1998) indicated a xerophthalmia prevalence = 0.006. MDIS95 (WHO 1995) reported a prevalence = 0.000, but this was based on older data. Therefore, the MI98 estimate was chosen for this analysis. 1999 SOWC (UNICEF 2001)
Savahallaa	1. No data available.
Seychelles	 2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. 3. No data available.
Sierra Leone	No data available. 1. No data available.
Sierra Leone	 2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. No data available.
South Africa	1. No data available.
	 A 1994 national survey reported by MI98 (MI 1998) indicated a xerophthalmia prevalence = 0.016. Based on earlier data from a small survey, MDIS95 (WHO 1995) reported a prevalence = 0.000. MI98 estimate was chosen for this analysis.
Q	3. No data available.
Swaziland	 No data available. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. No data available.
T	3. No data available.
Togo	 MDIS95 (WHO 1995) assigned a weight of 0.60, most likely due to the fact that this prevalence estimate was found only to be relevant for the northern regions of Togo. A 1992 national survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.10.
	3. No data available.
Uganda	 MDIS95 (WHO 1995) assigned a weight of 0.40, but it was decided to increase the weight to 0.60. A 1991 survey of a Ugandan district (n = 5074) reported by MDIS95 (WHO 1995) indicates a mean xerophthalmia prevalence = 0.035.
	3. 2001 DHS (< 5 year olds) (2001)
United Republic of	1. MDIS95 (WHO 1995) assigned a weight of 0.60.
Tanzania	2. A 1984 survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.015.
	3. 1999 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001)

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region	Africa	
	Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Zar	nbia	1. No data available.
		2. A 1998 national survey reported by Luo (Luo et al. 1999) indicated a xerophthalmia prevalence = 0.062. Older data from 1985 to 1988 and reported by MDIS95 (WHO 1995) indicated a prevalence = 0.014, but the most recent estimate was chosen for this analysis.
		3. 1999 SOWC (UNICEF 2001)
Zim	babwe	1. MDIS95 (WHO 1995) assigned a weight of 0.40.
		2. A 1991 survey (WHO 1995) of 6 districts indicated a xerophthalmia prevalence = 0.006.
		3. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

Region	
WHO Region Eastern N	Mediterranean earlie
Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Afghanistan	Since Afghanistan is now under war conditions, the situation is only getting worse, thus even with this weight it is likely that one is severely underestimating the true prevalence of xerophthalmia.
	 The xerophthalmia prevalence estimate from a survey of school age children was modified to reflect a conservative rate for preschool children.
	3. No data available.
Bahrain	1. No data available.
	2. No data available.
	3. No data available.
Cyprus	1. No data available.
	2. No data available.
	3. No data available.
Djibouti	1. MDIS95 (WHO 1995) assigned a weight of 0.40.
	2. A 1988 national survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.01.
	3. 1999 SOWC (UNICEF 2001)
Egypt	 This mean estimate was considered a national estimate, since it is representative of most of Egypt. The xerophthalmia prevalence for Egypt was a calculated mean of two reported estimates from Upper Egypt/Canal in 1995 (Moussa et al. 1997) and from Lower Egypt (El Magid 1997) in 1996, 0.006 and 0.0004, respectively. Both surveys were among children < 72 months of age, though the Moussa survey had a lower limit of 6 months of age, El Magid did not. The mean xerophthalmia prevalence was 0.0032. 2000 DHS (< 5 year olds)+K-8 (2001)
Iran, Islamic Republic of	1. A weight of 0.60 was assigned since the prevalence estimate is only for poorer regions.
	 2. Kimiagar (Kimiagar 1994) reports X1B in 21% of Kurdistani boys, but notes that clinical signs have been seen in other provinces. While 21% may be inaccurate, it seems that Iran does have a xerophthalmia problem, at least at public health proportions (> 1%), therefore assume a xerophthalmia prevalence = 0.01 in poorer regions. 3. 1999 SOWC (UNICEF 2001)
lasa	· · · · · · · · · · · · · · · · · · ·
Iraq	 MDIS95 (WHO 1995) assigned a weight of 0.25. 1994 UNICEF data reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.016.
	3. No data available.
Jordan	1. No data available.
Joidan	2. No recent data concerning xerophthalmia prevalence are available for Jordan.
	3. No data available.
Kuwait	1. No data available.
	2. No data available.
	3. No data available.
Lebanon	1. No data available.
	2. No data available.
	3. No data available.
Libyan Arab Jamahirya	1. No data available.
	2. No data available.
	3. No data available.
Morocco	1. This national survey estimate was adjusted for VAC program coverage, though there is question of whether
	 xerophthalmia exists in children of this country. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
_	3. 1999 SOWC (UNICEF 2001)
Oman	1. No data available.
	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2. 3 1000 SOWC (INTERPREDICT)
	3. 1999 SOWC (UNICEF 2001)
Pakistan	 No data available. A 1997 survey reported by Paracha et al. (Paracha and Jameel 2000) indicates a xerophthalmia prevalence = 0.006.

3. 1999 SOWC (UNICEF 2001)

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

/HO Region	stern Mediterranean	
Cour	y Name Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage We	Weight
Qatar	1. No data available.	
	2. No data available.	
	3. No data available.	
Saudi Arabia	1. No data available.	
	2. No data available.	
	3. No data available.	
Somalia	1. No data available.	
	2. This is a composite prevalence estimate reported by Feldon (Feldon 1997) (Also see (Heinonen 1999); when xerophthalmia prevalence = 0.025 with 80% NIDS coverage during 1 round. This is not likely to be sustainated.	
	3. 1999 SOWC (UNICEF 2001)	
Sudan	1. A weight of 0.60 was assigned. In contrast to the MDIS95 (WHO 1995) and MI98 (MI 1998) weight of 0.75	5.
	 A survey reported by Nestel (Nestel et al. 1993) indicated a prevalence = 0.029. MDIS95 (WHO 1995) and I (MI 1998) reported a prevalence of 0.016 from a 1986 survey. 	MI98
	3. 1999 SOWC (UNICEF 2001)	
Syrian Arab I	public 1. No data available.	
	2. No data available.	
	3. No data available.	
Tunisia	1. No data available.	
	2. No data available.	
	3. No data available.	
United Arab	irates ^{1.} No data available.	
	2. No data available.	
	3. No data available.	
Yemen	 Western Yemen is said to be the poorest area of the country, though it is not likely to be only area with VAD Therefore, a weight of 0.60 was assigned.).
	 Rosen et al. (Rosen et al. 1996) reported a 1992 survey of Western Yemen, where 3 of countries 12 million p live (25%). The prevalence of xerophthalmia was reported as 0.022. 	people
	3. 1999 SOWC (UNICEF 2001)	

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO	Region

South-East Asia

Country Name Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight Bangladesh 1. No data available. 2. A 1997 to 1998 national survey of Bangladesh (HKI 1999) reported a xerophthalmia prevalence = 0.006. 3. 1999 HKI (HKI 1999), 1999 SOWC (UNICEF 2001) 1. The chosen weight of 0.60 reflects the lower risk of xerophthalmia in comparison to the risk in Bangladesh. **Bhutan** 2. Xerophthalmia prevalence rates from the 1997 to 1998 national survey of Bangladesh (HKI 1999) were applied to Bhutan 3. No data available. Democratic People's 1. No data available Republic of Korea 2. No data concerning xerophthalmia prevalence are available. Therefore it is assumed that minimal xerophthalmia is present. The data will remain in the denominator of region estimates. 3. No data available. India 1. A weight of 0.9 was assigned to allow for non-representation of the data. No further program adjustments are made since all the surveys were conducted during VA program years. 2. A 1996 NNMB 8-state survey (National Nutrition Monitoring Bureau 2000) reported a pooled estimate of the X1B prevalence = 0.011, but the prevalence of XN apparently was not assessed. 5 other state surveys (Khandait et al. 1999; Rahi et al. 1995) show the prevalence of both X1B and XN to be approximately 0.0184. If one assumes 50% of X1B children also had XN, then a weighted-average xerophthalmia rate can be calculated by doing the following: $[(0.011 \times 8) + (0.0276 \times 5)]/13 = 0.0173$. 3. 1999 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001) 1. This 1992 national survey (Muhilal et al. 1994) was conducted after years of high coverage of vitamin A Indonesia supplementation programs had passed. MDIS95 (WHO 1995) assigned a weight of 0.60, but this does not make sense. MI98 (The Micro 2. A 1992 national survey reported by Muhi; al (Muhilal, Tarwotjo, Kodyat, Herman, Permaesih, Karyadi, Wilbur, and Tielsch 1994) indicated a xerophthalmia prevalence = 0.003. 3. 1997 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001) Maldives No data available. 2. No data concerning xerophthalmia prevalences are available. Therefore, it is assumed that no xerophthalmia is present. The data will remain in the denominator of region estimates. 3. No data available. 1. No data available. Myanmar 2. A 1994 survey reported by MI98 (MI 1998) indicated a xerophthalmia prevalence = 0.018. This is close to the earlier estimate of 0.020 reported by MDIS95 (WHO 1995). The former estimate was chosen for this analysis. 3. 1999 SOWC (UNICEF 2001) Nepal 1. No further adjustments were made to the weight, because the survey was conducted while national VA programs were operating. 2. The National Micronutrient Survey of 1998 (Table 6.2) (1999) reports a X1B prevalence = 0.0033 and a XN prevalence = 0.0027 in preschool children, yielding a combine xerophthalmia prevalence = 0.006. 3. 1998 NMS (< 5 year olds) (1999), 1999 SOWC (UNICEF 2001) Sri Lanka 2. This estimate is from a report delivered at the 1999 Durban IVACG meeting (Piyasema et al. 1999). 3. No data available. 1. A weight of 0.40 was assigned. Thailand 2. Udomkesmalee (Udomkesmalee 1992) shows a dry season prevalence of X1B = 0.01, and in the southern 5 provinces a X1B prevalence of 0.0067. Averaging these two estimates gives 0.00835, and if one divides by 2 for seasonal variation a prevalence of 0.00418. Multiply this times 0.25 (weight for percent of the area the country represented), and one obtains a final estimate of 0.0011 for the prevalence of xerophthalmia in preschool children. This is likely an underestimate. 3. 1999 SOWC (UNICEF 2001)

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO
Region

		Region	
WHO Region	Western Pacific		

ion western P	acific
Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Australia	1. No data available.
	2. No data available.
	3. No data available.
Brunei Darussalam	1. No data available.
	2. No data available.
	3. No data available.
Cambodia	1. No data available.
	 A survey reported by HKI (HKI 2000) reported a xerophthalmia prevalence = 0.01. 1999 SOWC (UNICEF 2001), 2000 HKI
China	1. No data available.
	2. A report by Yan (Yan 2001) indicated a xerophthalmia prevalence = 0.002.
	3. No data available.
Cook Islands	1. No data available.
	2. A survey reported by Schaumberg (Schaumberg et al. 1995) indicated a xerophthalmia prevalence = 0.0059.
	3. No data available.
Fiji	1. No data available.
	2. No data available.
	3. No data available.
Japan	1. No data available.
	2. No data available.
	3. No data available.
Kiribati	1. No data available.
	2. A survey reported by Schaumberg (Schaumberg, Linehan, Hawley, O'Connor, Dreyfuss, and Semba 1995) indicated a xerophthalmia prevalence = 0.148. A further report by Darnton-Hill (Darnton-Hill 1994) collaborates these findings.
	3. No data available.
Lao People's Democratic	1. No data available.
Republic	 A national reported at the Guatemala IVACG meeting in 1996 (Malyavin 1996) indicates a xerophthalmia prevalence = 0.007 among 24 to 71 month olds. 1999 SOWC (UNICEF 2001)
Malaysia	1. A weight of 0.80 was assigned, in order to account for greater extent of palm oil consumption in comparison to Indonesia.
	2. Due to lack of population-based data on xerophthalmia prevalence for this country, the median prevalence proportion from a distribution of 27 national estimates obtained for countries, in the absence of vitamin A programs, within the African and Eastern Mediterranean Regions was applied to this country's population of < 5 year old children. The median proportion was 0.0115 (1.15%), which has been used for calculation but rounded to 0.012 for display purposes in Table 2.
	3. No data available.
Marshall Islands	1. No data available.
	 2. A 1991 UNICEF survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.04. 3. 1999 SOWC (UNICEF 2001)
Micronesia, Federated	1. No data available.
States of	2. The results from a John's Hopkins University study on Chuuk (Lloyd-Puryear et al. 1991) and a CDC study in Yap
	(Centers for Disease Control (CDC) 2001) were combined to estimate a composite xerophthalmia prevalence of 0.16 among preschool children. 3. 1999 SOWC (UNICEF 2001)
Mongolia	1. No data available.
	2. No data available.
	3. No data available.
Nauru	No data available.
	2. No data available.
	3. No data available.
New Zealand	1. No data available.
	2. No data available.
	3. No data available.
Niue	1. No data available.
	2. No data available.
	3. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region Western Pacific Country Name Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight		
	 Due to the lack of available national data, the xerophthalmia prevalence estimate for the Federated States of Micronesia was applied to Palau. 	
	3. No data available.	
Papua New Guinea	1. MDIS95 (WHO 1995) assigned a weight of 0.25.	
	2. A 1991 hospital survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.006.	
	3. No data available.	
Philippines	No data available.	
	2. A 1993 national survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence of 0.007.	
	3. 1998 DHS (< 5 year olds) (2001), 1999 SOWC (UNICEF 2001)	
Republic of Korea	1. No data available.	
	2. No data available.	
	3. No data available.	
Samoa	1. No data available.	
	2. No data available.	
	3. No data available.	
Singapore	1. No data available.	
	2. No data available.	
	3. No data available.	
Solomon Islands	 MDIS95 (WHO 1995) assigned a weight of 0.75, but this prevalence estimate was considered nationally representative. Therefore, a weight of 1.00 was assigned. 	
	2. A survey reported by Schaumberg (Schaumberg, Linehan, Hawley, O'Connor, Dreyfuss, and Semba 1995) indicated a xerophthalmia prevalence = 0.0059. MDIS95 (WHO 1995) also reported these data.	
	3. No data available.	
Tonga	1. No data available.	
-	2. No data available.	
	3. No data available.	
Tuvalu	1. No data available.	
	2. A survey reported by Schaumberg (Schaumberg, Linehan, Hawley, O'Connor, Dreyfuss, and Semba 1995) indicated a xerophthalmia prevalence = 0.0028. MDIS95 (WHO 1995) reported that no cases of xerophthalmia were found in 1991 national survey. It was decided to use the Schaumberg estimate.	
	3. No data available.	
Vanuatu	1. No data available.	
	2. A survey reported by Schaumberg (Schaumberg, Linehan, Hawley, O'Connor, Dreyfuss, and Semba 1995) indicated a xerophthalmia prevalence = 0.0011. MDIS95 (WHO 1995) reported a 1991 survey that found a corneal xerosis prevalence of 0.0005, but the Schaumberg estimate was chosen for this analysis.	
	3. No data available.	
Viet Nam	No data available.	
	2. A 1998 survey reported by Khan (Khan 2001) indicated a xerophthalmia prevalence = 0.002.	
	4.37	

3. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

Co	untry Name	
		Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Antigua an	d Barbuda	1. No data available.
· ·		2. No data available.
		3. No data available.
Argentina		1. No data available.
ŭ		2. No data available.
		3. No data available.
Bahamas		1. No data available.
		2. No data available.
		3. No data available.
Barbados		1. No data available.
		2. No data available.
		3. No data available.
Belize		1. No data have been reported, so a weight of 0.00 was assigned.
20,120		2. There have been no national data concerning xerophthalmia prevalence reported for Belize. The Belize under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. No data available.
Bolivia		1. MDIS95 (WHO 1995) assigned a weight of 0.40.
		2. No data available.
		3. No data available.
Brazil		1. MDIS95 (WHO 1995) assigned a weight of 0.25.
		2. A 1983 survey reported by MDIS95 (WHO 1995) indicated a X1B prevalence = 0.005.
		3. No data available.
Canada		1. No data available.
		2. No data available.
		3. No data available.
Chile		1. No data available.
S5		2. No data available.
		3. No data available.
Colombia		1. No data have been reported, so a weight of 0.00 was assigned.
		2. There have been no national data concerning xerophthalmia prevalence reported for Columbia. The Columbian under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 PAHO (6 to 59 month olds) (PAHO and PAHO-HPN-DHPP 2001), 1999 SOWC (UNICEF 2001)
Costa Rica		1. No data have been reported, so a weight of 0.00 was assigned.
		2. There have been no national data concerning xerophthalmia prevalence reported for Costa Rica. The Costa Rican under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 PAHO (12 to 59 month olds) (PAHO and PAHO-HPN-DHPP 2001), 1999 SOWC (UNICEF 2001)
Cuba		1. No data available.
		2. No data available.
		3. No data available.
Dominica		1. No data have been reported, so a weight of 0.00 was assigned.
		2. There have been no national data concerning xerophthalmia prevalence reported for Dominica. Dominica's under 5 population has been included in the denominator of calculations for the Region of the Americas.
		3. No data available.
Dominican	Republic	1. No data have been reported, so a weight of 0.00 was assigned.
		2. There have been no national data concerning xerophthalmia prevalence reported for the Dominican Republic. The Dominican Republic's under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. No data available.
Ecuador		1. No data have been reported, so a weight of 0.00 was assigned.
Louddor		 There have been no national data concerning xerophthalmia prevalence reported for Ecuador. Ecuador's under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. No data available.
El Salvado	r	1. MDIS95 (WHO 1995) assigned a weight of 0.40.
Li Gaivado	•	 There have been no national data concerning xerophthalmia prevalence reported for El Salvador. El Salvador's under-5 population has been included in the denominator of calculations for the Region of the Americas.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

IO Region	Americas	
	Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Gren	ada	No data available.
Oldi	ada	2. No data available.
		3. No data available.
Guet	emala	1. No data have been reported, so a weight of 0.00 was assigned.
Guai	Ciliala	2. There have been no national data concerning xerophthalmia prevalence reported for Guatemala. Guatemala's
		under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 PAHO (12 to 36 months olds), 1999 SOWC (UNICEF 2001)
Guya	ana	No data available.
		2. No data available.
		3. No data available.
Haiti		1. MDIS95 (WHO 1995) assigned a weight of 0.60.
		2. A 1975 national survey reported by MDIS95 (WHO 1995) indicated a xerophthalmia prevalence = 0.08.
		3. 1999 PAHO (12 to 59 month olds) (PAHO and PAHO-HPN-DHPP 2001), 1999 SOWC (UNICEF 2001)
Hono	iuras	1. No data have been reported, so a weight of 0.00 was assigned.
		 There have been no national data concerning xerophthalmia prevalence reported for Honduras. Honduras' under- population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 SOWC (UNICEF 2001), Not reported to PAHO (PAHO and PAHO-HPN-DHPP 2001)
lome	oloo	1. No data available.
Jama	aica	2. No data available.
		3. No data available.
14		
Mexi	CO	1. No data have been reported, so a weight of 0.00 was assigned. 2. There have been reported, so a weight of 0.00 was assigned.
		 There have been no national data concerning xerophthalmia prevalence reported for Mexico. Mexico's under-5 population has been included in the denominator of calculations for the Region of the Americas. 1000 SONYG (ENTITE 2001) Not the American Am
		3. 1999 SOWC (UNICEF 2001), Not reported to PAHO (PAHO and PAHO-HPN-DHPP 2001)
Nica	ragua	1. No data have been reported, so a weight of 0.00 was assigned.
		 There have been no national data concerning xerophthalmia prevalence reported for Nicaragua. Nicaragua's und 5 population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 SOWC (UNICEF 2001), Not reported to PAHO (PAHO and PAHO-HPN-DHPP 2001)
Pana	ama	1. No data have been reported, so a weight of 0.00 was assigned.
		 There have been no national data concerning xerophthalmia prevalence reported for Panama. Panama's under-5 population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 SOWC (UNICEF 2001), Not reported to PAHO (PAHO and PAHO-HPN-DHPP 2001)
Para	guay	1. No data available.
	•	2. No data available.
		3. No data available.
Peru		1. No data have been reported, so a weight of 0.00 was assigned.
		2. There have been no national data concerning xerophthalmia prevalence reported for Peru. Peru's under-5
		population has been included in the denominator of calculations for the Region of the Americas.
		3. 1999 PAHO (12 to 59 month olds) (PAHO and PAHO-HPN-DHPP 2001), 1999 SOWC (UNICEF 2001)
Saint	t Kitts and Nevis	No data available.
		2. No data available.
		3. No data available.
Saint	t Lucia	1. No data available.
-		2. No data available.
		3. No data available.
Saint	t Vincent and the	No data available.
	adines	2. No data available.
2.2		No data available.
0		
Surir	name	1. No data available.
		2. No data available.
		3. No data available.
Trinic	dad and Tobago	No data available.
		2. No data available.
		3. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region	Americas	
	Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Unit	ed States of America	No data available.
		2. No data available.
		3. No data available.
Urug	guay	1. No data available.
•		2. No data available.
		3. No data available.
Ven	ezuela, Bolivarian	1. No data have been reported, so a weight of 0.00 was applied.
	ublic of	2. There have been no national data concerning xerophthalmia prevalence reported for Venezuela. Venezuela's
		under-5 population has been included in the denominator of calculations for the Region of the Americas. 3. 1999 PAHO (12 to 24 month olds) (PAHO and PAHO-HPN-DHPP 2001)

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

HO Region	Europe	
	Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Alba	nia	No data available.
		2. No data available.
		3. No data available.
Ando	orra	1. No data available.
7 11 11 1		2. No data available.
		3. No data available.
Arme	enia	No data available.
74110	onia	2. No data available.
		3. No data available.
Aust	ria	No data available.
Aust	i i a	2. No data available.
		3. No data available.
A-70=	hallan	No data available.
AZei	baijan	2. No data available.
		3. No data available.
Dala		No data available.
Bela	rus	
		2. No data available.
		3. No data available.
Belg	ium	1. No data available.
		2. No data available.
_		3. No data available.
Bosr	nia and Herzegovina	1. No data available.
		2. No data available.
		3. No data available.
Bulg	aria	1. No data available.
		2. No data available.
		3. No data available.
Croa	rtia	1. No data available.
		2. No data available.
		3. No data available.
Czec	ch Republic	1. No data available.
		2. No data available.
		3. No data available.
Denr	mark	1. No data available.
		2. No data available.
		3. No data available.
Esto	nia	1. No data available.
		2. No data available.
		3. No data available.
Finla	ınd	1. No data available.
		2. No data available.
		3. No data available.
Fran	ce	No data available.
i iaii	00	2. No data available.
		3. No data available.
Good	raja	No data available.
Geor	iyia	2. No data available.
		3. No data available.
~ =		
Gern	nany	1. No data available.
		2. No data available.
_		3. No data available.
Gree	есе	1. No data available.
		2. No data available.
		3. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region	Europe	
	Country Name	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Hung	ıary	1. No data available.
	,,	2. No data available.
		3. No data available.
Icela	nd	1. No data available.
		2. No data available.
		3. No data available.
Irelar	nd	1. No data available.
		2. No data available.
		3. No data available.
Israe	I	1. No data available.
		2. No data available.
		3. No data available.
Italy		1. No data available.
•		2. No data available.
		3. No data available.
Kaza	khstan	1. No data available.
		2. No data available.
		3. No data available.
Kvra	ystan	1. No data available.
,	, • • • • • • • • • • • • • • • • • • •	2. No data available.
		3. No data available.
Latvi	а	1. No data available.
Latti	-	2. No data available.
		3. No data available.
Lithu	ania	1. No data available.
	uu	2. No data available.
		3. No data available.
Luxe	mbourg	1. No data available.
20/0	bou.g	2. No data available.
		3. No data available.
Malta	1	1. No data available.
mane	-	2. No data available.
		3. No data available.
Mona	9CO	1. No data available.
		2. No data available.
		3. No data available.
Neth	erlands	1. No data available.
		2. No data available.
		3. No data available.
Norw	<i>t</i> av	1. No data available.
	,	2. No data available.
		3. No data available.
Polai	nd	1. No data available.
		2. No data available.
		3. No data available.
Portu	ıgal	1. No data available.
. 5160		2. No data available.
		3. No data available.
Repu	ıblic of Moldova	1. No data available.
. 1390		2. No data available.
		3. No data available.
Rom	ania	No data available.
	-	2. No data available.

Table 2: Comments: Global Burden of Xerophthalmia Among Preschool Aged Children Table By WHO Region

WHO Region Euro	ppe
Country N	Comments: 1. National Weight; 2. Measured Prevalence; and 3. VA Program Coverage Weight
Russian Federatio	n ^{1.} No data available.
	2. No data available.
	3. No data available.
San Marino	1. No data available.
	2. No data available.
	3. No data available.
Slovakia	1. No data available.
	2. No data available.
	3. No data available.
Slovenia	1. No data available.
	2. No data available.
	3. No data available.
Spain	1. No data available.
	2. No data available.
	3. No data available.
Sweden	1. No data available.
	2. No data available.
	3. No data available.
Switzerland	1. No data available.
	2. No data available.
	3. No data available.
Tajikistan	1. No data available.
	2. No data available.
- , , , , ,	3. No data available.
The former Yugosl Republic of Maced	
Republic of Maced	
	3. No data available.
Turkey	1. No data available.
	2. No data available.
	3. No data available.
Turkmenistan	1. No data available.
	2. No data available.
	3. No data available.
Ukraine	1. No data available.
	2. No data available.
11.4 112	3. No data available.
United Kingdom	 No data available. No data available.
l leb abiatas	3. No data available.1. No data available.
Uzbekistan	2. No data available.
	3. No data available.
Vugaalavia	No data available. 1. No data available.
Yugoslavia	2. No data available.
	3. No data available.
	110 data availaute.

Column Heading Footnotes:

Country name. Country names as listed by WHO, based on the World Health Report 2001, List of Member States by WHO Region and Mortality Stratum,

page 168 (WHO 2001).

Comments. No Note Available

References. See the references in Section 8.