

SUPPLEMENTAL APPENDIX A

Published studies quantifying soil-transmitted helminth prevalence in the United States (likely endemic)

Study and year	Study location	Study population description	No. of patients	Hookworm (%)	<i>Trichuris trichiura</i> (%)	<i>Ascaris lumbricoides</i> (%)	<i>Strongyloides stercoralis</i> (%)
Headlee and Cable, 1942 <sup>1</sup>	KY	Prospective college-based	2,393	14.6	7.9	5.1	3.8
Teague, 1945 <sup>2</sup>	KY	Laboratory	7,499	9.6	5.2	14.7	—*
Young, 1955 <sup>3</sup>	TN	Prospective school-based	3,138	19.7	1.5	6.1	0.1
Kelley, 1955 <sup>4</sup>	NE	Prospective community-based	1,096	0.4	—	0.4	—
Atchley and others, 1956 <sup>5</sup>	KY	Prospective community-based (January to March)	843	0.0	24.2	26.8	1.2
Atchley and others, 1956 <sup>5</sup>	KY	Prospective community-based (April to July)	1,800	0.5	14.6	21.3	2.6
Neuman and others, 1956 <sup>6</sup>	NY	Screening in patients with gastrointestinal complaints at outpatient physician	222	1.8	2.7	0.9	1.4
Fournelle and others, 1958 <sup>7</sup>	AK	Prospective community-based convenience sample of Alaska Eskimos	1,680	0.1	0.1	0.0	—
Myers and others, 1959 <sup>8</sup>	PA	Prospective community-based sample of Puerto Rican children of varying birthplace.	170	2.4	22.4	7.1	0.0
Weiner and others, 1959 <sup>9</sup>	PA	School-based, Caucasian children	169	0.0	0.0	0.6	0.0
Weiner and others, 1959 <sup>9</sup>	PA	School-based, African-American children	49	0.0	2.0	0.0	0.0
Ching, 1961 <sup>10</sup>	HI	Laboratory testing of all stool samples submitted to hospitals and physicians	1,380	0.6	2.0	0.9	1.2
Melvin and Brooke, 1962 <sup>11</sup>	MT, SD, NM, AZ, WI	Community-based convenience sample	907	—	0.1	0.0	—
Jeffrey and others, 1963 <sup>12</sup>	SC	Community-based random sample of African-Americans	212	3.8	37.3	63.7	—
Fulmer and Huemphner, 1965 <sup>13</sup>	KY	Prospective school-based, county 1 of 3	366	3.6	55.2	48.6	3.8
Fulmer and Huemphner, 1965 <sup>13</sup>	KY	Prospective school-based, county 2 of 3	120	0.0	6.7	23.3	0.0
Fulmer and Huemphner, 1965 <sup>13</sup>	KY	Prospective school-based, county 3 of 3	125	4.0	40.8	38.4	4.0
Hiller, 1965 <sup>14</sup>	NY	Laboratory	2,055	3.8	12.4	1.2	0.4
Fournelle and others, 1966 <sup>15</sup>	AK	Prospective community-based convenience sample of Alaska Native Americans	389	0.3	0.0	0.3	—
Reiber and McCoy, 1967 <sup>16</sup>	WV	Hospital-based sampling of veterans	200	—	—	—	4.5
Foltz and Harding, 1968 <sup>17</sup>	IL	Laboratory	25,405	0.1	0.5	0.2	0.1
Healy and others, 1969 <sup>18</sup>	NC	Prospective school-based	631	3.0	38.0	49.4	—
DiSalvo and Melonas, 1969 <sup>19</sup>	SC	Laboratory	26,489	2.5	1.9	13.2	—
Gloor and others, 1970 <sup>20</sup>	KY	Prospective school-based	439	14.8	4.8	7.7	—
Carter and others, 1970 <sup>21</sup>	SC	Outpatient physician, African-American children	131	0.0	51.9	48.1	—
Carter and others, 1970 <sup>21</sup>	SC	Outpatient physician, Caucasian children	46	0.0	2.2	2.2	—
Jacobs and others, 1972 <sup>22</sup>	SC	Prospective school-based	5,103	0.2	13.9	16.5	—
Martin, 1972 <sup>23</sup>	GA	Prospective school-based, Caucasian	3,729	4.6	0.5	1.3	—
Martin, 1972 <sup>23</sup>	GA	Prospective school-based, African-American	199	8.0	0.0	0.0	—
Martin, 1972 <sup>24</sup>	GA	Community-based random sample of African-Americans and Caucasians	749	13.6	0.5	4.3	—
Morgan and others, 1972 <sup>25</sup>	LA	Community-based random sample of lowest 25% socioeconomic stratum	1,651	0.4	12.3	5.3	0.3
Sargent and others, 1972 <sup>26</sup>	SC	Prospective school-based, 32% African-American	2,932	1.8	1.1	21.5	—
Yoeli and others, 1972 <sup>27</sup>	NY	Facility-based, intellectually challenged adults	18,709	0.0	2.8	0.0	8.1
Berke and others, 1972 <sup>28</sup>	NY	Hospital-based, veterans	215	7.0	0.9	0.0	0.5
Dudley and Lease, 1972 <sup>29</sup>	SC	Facility-based, intellectually challenged children	2,164	0.7	1.2	4.9	—
Dudley and Lease, 1973 <sup>30</sup>	SC	School-based, after anthelmintic treatment	2,114	2.5	1.5	29.8	—
Pierz and others, 1973 <sup>31</sup>	CT	Outpatient physician, children from Puerto Rico or of African-American descent.	160	5.6	41.9	3.8	—
Hubbard and others, 1974 <sup>32</sup>	LA	Prospective school-based, mostly African-American	887	0.1	5.3	2.3	—
Farhadian and Schneider, 1975 <sup>33</sup>	LA	Community referral to health center	1,078	0.1	14.5	3.9	—
Desowitz and Wiebenga, 1975 <sup>34</sup>	HI	Prospective school-based, foreign born	115	4.3	24.3	9.6	0.9
Desowitz and Wiebenga, 1975 <sup>34</sup>	HI	Prospective school-based, United States born	275	1.1	0.4	0.0	0.0
Eveland and others, 1975 <sup>35</sup>	NY	Laboratory	1,801	2.1	10.2	2.2	1.3

(continued)

SUPPLEMENTAL APPENDIX A

Continued

Study and year	Study location	Study population description	No. of patients	Hookworm (%)	<i>Trichuris trichiura</i> (%)	<i>Ascaris lumbricoides</i> (%)	<i>Strongyloides stercoralis</i> (%)
Andrade and Noda, 1977 <sup>36</sup>	HI	Hospital-based, high percentage of immigrants	200	1.5	2.0	4.0	–
Ruebush and others, 1978 <sup>37</sup>	All	Laboratory	414,820	0.8	2.7	2.3	0.2
Centers for Disease Control and Prevention, 1978 <sup>38</sup>	All	Laboratory	363,567	0.8	2.2	1.8	0.2
Dowda and Moose, 1978 <sup>39</sup>	SC	Laboratory	63,978	0.4	2.1	5.6	0.1
Bruckner and others, 1979 <sup>40</sup>	CA	Hospital-based, facility 1 of 2	1,350	–	3.1	3.9	–
Bruckner and others, 1979 <sup>40</sup>	CA	Hospital-based, facility 2 of 2	493	–	2.6	2.0	–
Centers for Disease Control and Prevention, 1979 <sup>41</sup>	All	Laboratory	332,312	0.6	1.6	1.4	0.2
Lynch and Harmon, 1979 <sup>42</sup>	CA	Community-based, farm workers	134	0.0	0.0	1.5	0.0
Walker and others, 1980 <sup>43</sup>	WV	Outpatient physician	108	0.0	2.8	15.7	0.0
Jones, 1975 <sup>44</sup>	KY	Outpatient physician, rectal exam based	79	2.5	1.3	15.2	1.3
Elliott and others, 1981 <sup>45</sup>	TX	Hospital-based	1,626	0.4	0.3	0.6	0.6
Milder and others, 1981 <sup>46</sup>	KY	Laboratory	3,217	0.2	1.5	1.6	2.5
Walzer and others, 1982 <sup>47</sup>	KY	Laboratory	11,654	0.6	4.8	4.4	0.9
Walzer and others, 1982 <sup>47</sup>	KY	Prospective school-based	561	0.2	12.6	14.4	3.0
Flores and others, 1983 <sup>48</sup>	TX	Prospective outpatient physician	321	0.0	5.0	5.0	–
Adams and Perkin, 1985 <sup>49</sup>	FL	Prospective community-based	65	1.5	13.8	32.3	–
Dover and others, 1986 <sup>50</sup>	SC	Hospital-based laboratory	3,770	0.3	1.0	1.5	0.2
Dove and others, 1986 <sup>50</sup>	SC	Laboratory	27,820	0.3	0.7	1.9	0.1
Berk and others, 1987 <sup>51</sup>	TN	Prospective random sample, hospitalize veterans	229	–	–	–	6.1
Berk and others, 1987 <sup>51</sup>	TN	Prospective random sample, outpatient veterans	346	–	–	–	2.6
Kappus and others, 1994 <sup>52</sup>	All	Laboratory	216,275	1.5	1.2	0.8	0.4
Schupf and others, 1995 <sup>53</sup>	NY	Facility-based, intellectually challenged	3,383	< 0.5†	< 0.5†	< 0.5†	1.2
Amin, 2002 <sup>54</sup>	48 states	Laboratory, patients with gastrointestinal complaint	5,792	0.0	0.0	0.2	0.0
Escobedo and others, 2009 <sup>55</sup>	TX	Community-based, high percentage of children from Mexico included	304	0.0	0.0	0.0	0.0
Cardenas and others, 2010 <sup>56</sup>	TX	Community-based, high percentage from Mexico	388	0.3	0.0	0.3	0.0
Church and others, 2010 <sup>57</sup>	CO, UT, NM, MT	Laboratory	2,604	0.0	0.0	0.0	0.0

\* Denotes that *S. stercoralis* testing was not performed as part of this survey.

† Exact prevalence data was not available.

REFERENCES

- Headlee WH, Cable RM, 1942. Intestinal parasitism among students of Berea College, Kentucky. *Am J Trop Med Hyg* 22: 351–360.
- Teague RE, 1945. The common intestinal parasites in Kentucky. Frankfort, KY: Department of Public Health of Kentucky. *Bulletin of the State Department of Health of Kentucky*, 431–439.
- Young MM, 1955. Report of a survey for intestinal parasites in school children in a rural mountain county in Tennessee. *South Med J* 48: 46–53.
- Kelley GW, 1955. Intestinal parasitism in an irrigated community of western Nebraska. *Am J Trop Med Hyg* 4: 901–907.
- Atchley FO, Hemphill EC, Hunt DW, 1956. Current status of intestinal parasitism of man in eastern Kentucky. *J Parasitol* 42: 505–509.
- Neumann E, Matzner MJ, Windwer C, 1956. Intestinal parasitism in ambulatory gastrointestinal patients in Brooklyn, New York. *Gastroenterology* 31: 239–245.
- Fournelle HJ, Wallace IL, Rader V, 1958. A bacteriological and parasitological survey of enteric infections in an Alaskan Eskimo area. *Am J Pub Health* 48: 1989–1997.
- Myers EN, Negron R, Pearlstein H, 1959. Intestinal parasitoses in Puerto Rican preschool children at Philadelphia, Pennsylvania in 1958. *Am J Med Sci* 237: 59–66.
- Weiner D, Brooke MM, Witkow A, 1959. Investigation of parasitic infections in the central area of Philadelphia. *Am J Trop Med Hyg* 8: 625–629.
- Ching HL, 1961. Internal parasites of man in Hawaii with special reference to heterophyid flukes. *Hawaii Med J* 20: 442–445.
- Melvin DM, Brooke MM, 1962. Parasitologic surveys on Indian reservations in Montana, South Dakota, New Mexico, Arizona and Wisconsin. *Am J Trop Med Hyg* 11: 765–772.
- Jeffery GM, Phifer KO, Gatch DE, Harrison AJ, Skinner JC, 1963. Study of intestinal helminth infections in a coastal South Carolina area. *Public Health Rep* 78: 45–55.
- Fulmer HS, Huemphner HR, 1965. Intestinal helminths in eastern Kentucky: a survey in three rural counties. *Am J Trop Med Hyg* 14: 269–275.
- Hiller JM, 1965. Incidence of parasitic diseases in a New York City hospital population. *N Y State J Med* 65: 1108–1109.
- Fournelle HJ, Rader V, Allen C, 1966. A survey of enteric infections among Alaska Indians. *Public Health Rep* 81: 797–803.
- Reiber CD, McCoy JE, 1967. Incidence of *Strongyloides Stercoralis*: A survey of 200 routine admissions to the veterans administration hospital in Beckley, West Virginia. *W V Med J* 63: 42–45.
- Foltz EE, Harding HB, 1968. A continuing survey of parasitism in a Midwestern college community. *Aerosp Med* 39: 74–81.
- Healy GR, Gleason NN, Bokar R, Pond H, Roper M, 1969. Prevalence of ascariasis and amebiasis in Cherokee Indian school children. *Public Health Rep* 84: 907–914.
- DiSalvo AF, Melonas J, 1970. Intestinal parasites in South Carolina, 1969. *J S C Med Assoc* 66: 355–358.
- Gloor RF, Breyley ER, Martinez IG, 1970. Hookworm infection in a rural Kentucky county. *Am J Trop Med Hyg* 19: 1007–1009.
- Carter JP, Vanderzwaag R, Darby WJ, Lease EL, Lauter FH, Dudley BW, High EG, Wright DJ, Murphree T, 1970. Nutrition and parasitism among rural pre-school children in South Carolina. *J Natl Med Assoc* 62: 181–191.

22. Jacobs CF, Teator DM, Jacobs NE, 1972. A survey of intestinal parasites in Charleston County school children. *J S C Med Assoc* 68: 315–319.
23. Martin LK, 1972. Hookworm in Georgia. I. Survey of intestinal helminth infections and anemia in rural school children. *Am J Trop Med Hyg* 21: 919–929.
24. Martin LK, 1972. Hookworm in Georgia. II. Survey of intestinal helminth infections in members of rural households of south-east Georgia. *Am J Trop Med Hyg* 21: 930–943.
25. Morgan PM, Hubbard DW, Willis RA, Unglaub WG, Langham RA, Hedmeg AW, Muldrey JE, 1972. Intestinal parasitism and nutritional status in Louisiana. *J La State Med Soc* 124: 197–203.
26. Sargent RG, Dudley BW, Fox AS, Lease EJ, 1972. Intestinal helminths in children in coastal South Carolina: a problem in south-eastern United States. *South Med J* 65: 294–298.
27. Yoeli M, Most H, Hammond J, Scheinsson GP, 1972. Parasitic infections in a closed community. Results of a 10-year survey in Willowbrook State School. *Trans R Soc Trop Med Hyg* 66: 764–776.
28. Berke R, Wagshol LE, Sullivan G, 1972. Incidence of intestinal parasites in Vietnam veterans. Eosinophilia a guide to diagnosis. *Am J Gastroenterol* 57: 63–67.
29. Dudley BW, Fisher K, 1972. Intestinal parasites and nutritional status. V. Intestinal parasites at certain state-operated institutions in South Carolina. *J S C Med Assoc* 68: 279–284.
30. Dudley BW, Lease EJ, 1973. Intestinal helminths in children in coastal South Carolina: follow-up report. *South Med J* 66: 1100.
31. Pierz JJ, Lau T, Lepow ML, 1973. Prevalence of parasites in Puerto Rican and black children of Hartford, Connecticut. *Conn Med* 37: 291–294.
32. Hubbard DW, Morgan PM, Yaeger RG, Unglaub WG, Hood MW, Willis RA, 1974. Intestinal parasite survey of kindergarten children in New Orleans. *Pediatr Res* 8: 652–658.
33. Farhadian H, Schneider EA, 1975. Trichuriasis in Calcasieu Parish, southwest Louisiana. *J La State Med Soc* 127: 337–340.
34. Desowitz RS, Wiebenga NH, 1975. A survey for intestinal parasites in Oahu schoolchildren. *Hawaii Med J* 34: 21–23.
35. Eveland LK, Kenney M, Yermakov V, 1975. The value of routine screening for intestinal parasites. *Am J Public Health* 65: 1326–1327.
36. Andrade N, Noda K, 1977. The incidence of intestinal parasites in some Hilo Hospital patients. *Hawaii Med J* 36: 172–173.
37. Reubush TK, Juranek DD, Brodsky RE, 1978. Diagnoses of intestinal parasites by state and territorial public health laboratories, 1976. *J Infect Dis* 138: 114–118.
38. Center for Disease Control, 1978. *Intestinal Parasite Surveillance Annual Summary 1977*. Atlanta, GA: Centers for Disease Control and Prevention.
39. Dowda H, Moose J, 1978. Intestinal parasites in South Carolina—a three year study. *J S C Med Assoc* 74: 133–135.
40. Bruckner DA, Garcia LS, Voge M, 1979. Intestinal parasites in Los Angeles, California. *Am J Med Technol* 45: 1020–1022.
41. Center for Disease Control, 1979. *Intestinal Parasite Surveillance Annual Summary 1978*. Centers for Disease Control and Prevention.
42. Lynch MW, Harmon WM, 1979. Human intestinal parasites in a farm community. *West J Med* 131: 336–338.
43. Walker RB, Hough JC, Brough JW, 1980. A survey of intestinal parasites in rural children. *J Fam Pract* 11: 559–561.
44. Jones JE, 1981. Identification of intestinal nematodes using the digital rectal examination. *J Fam Pract* 12: 563–565.
45. Elliott S, Long EG, Truant AL, Smith JH, 1981. Parasitic infections encountered on the Texas Gulf Coast. *Tex Med* 77: 45–46.
46. Milder JE, Walzer PD, Kilgore G, Rutherford I, Klein M, 1981. Clinical features of *Strongyloides stercoralis* infection in an endemic area of the United States. *Gastroenterology* 80: 1481–1488.
47. Walzer PD, Milder JE, Banwell JG, Kilgore G, Klein M, Parker R, 1982. Epidemiologic features of *Strongyloides stercoralis* infection in an endemic area of the United States. *Am J Trop Med Hyg* 31: 313–319.
48. Flores EC, Plumb SC, McNeese MC, 1983. Intestinal parasitosis in an urban pediatric clinic population. *Am J Dis Child* 137: 754–756.
49. Adams RT, Perkin JE, 1985. The prevalence of intestinal parasites in children living in an unincorporated area in rural northern Florida. *J Sch Health* 55: 76–78.
50. Dover C, Holley HP, Jarecki-Black JC, James ER, 1986. A five-year study of intestinal parasites in Charleston, South Carolina. *J S C Med Assoc* 82: 327–332.
51. Berk SL, Verghese A, Alvarez S, Hall K, Smith B, 1987. Clinical and epidemiologic features of strongyloidiasis. A prospective study in rural Tennessee. *Arch Intern Med* 147: 1257–1261.
52. Kappus KD, Lundgren RG, Juranek DD, Roberts JM, Spencer HC, 1994. Intestinal parasitism in the United States: update on a continuing problem. *Am J Trop Med Hyg* 50: 705–713.
53. Schupf N, Ortiz M, Kapell D, Kiely M, Rudelli RD, 1995. Prevalence of intestinal parasite infections among individuals with mental retardation in New York State. *Ment Retard* 33: 84–89.
54. Amin OM, 2002. Seasonal prevalence of intestinal parasites in the United States during 2000. *Am J Trop Med Hyg* 66: 799–803.
55. Escobedo LG, Homedes N, von Alt K, Escobedo MA, 2004. Intestinal parasites in children from three west Texas border communities. *J Sch Health* 74: 411–413.
56. Cardenas VM, Mena KD, Ortiz M, Karri S, Variyam E, Behraves CB, Snowden KF, Flisser A, Bristol JR, Mayberry LF, Ortega YR, Fukuda Y, Campos A, Graham DY, 2010. Hyperendemic *H. pylori* and tapeworm infections in a U.S.–Mexico border population. *Public Health Rep* 125: 441–447.
57. Church C, Neill A, Schotthoefer AM, 2010. Intestinal infections in humans in the Rocky Mountain region, United States. *J Parasitol* 96: 194–196.

SUPPLEMENTAL APPENDIX B

Published studies quantifying soil-transmitted helminth prevalence in the United States (likely imported or population unknown)

Study and year	Study location	Study population description	No. of patients	Hookworm (%)	<i>Trichuris trichiura</i> (%)	<i>Ascaris lumbricoides</i> (%)	<i>Strongyloides stercoralis</i> (%)
Weiner and others, 1959 <sup>1</sup>	PA	School-based, recent immigrants from Puerto Rico	167	21.0	67.7	3.6	0.6
Winsberg and others, 1975 <sup>2</sup>	IL	Community-based, recent immigrants from Puerto Rico	358	6.7	14.0	0.0	1.7
Hargus and others, 1976 <sup>3</sup>	CT	School-based, recent immigrants from Puerto Rico	129	5.4	34.9	3.9	0.8
Goldsmith and others, 1976 <sup>4</sup>	CA	Outpatient physician, children adopted from Vietnam	88	0.0	0.0	8.0	1.1
Holtan and others, 1979 <sup>5</sup>	MN	Immigration clinic, Laotian immigrants	195	12.3	3.6	0.0	0.0
Lindes, 1979 <sup>6</sup>	OH	Immigration clinic, Laotian immigrants	70	61.4	15.7	11.4	4.3
Erickson and Hoang, 1980 <sup>7</sup>	CT	Immigration clinic, Southeast Asian immigrants	138	23.2	11.6	23.9	2.9
Jones and others, 1980 <sup>8</sup>	MN	Immigration clinic, Southeast Asian immigrants	100	16.0	30.0	41.0	1.0
Ortiz, 1980 <sup>9</sup>	MA	Community-based, Puerto Rican migrant workers	377	4.5	26.0	2.1	0.5
Wiesenthal and others, 1980 <sup>10</sup>	IL	Immigration clinic, Laotian immigrants	165	64.2	12.1	8.5	1.8
Arfaa, 1981 <sup>11</sup>	CA	Immigration clinic, Southeast Asian immigrants	186	24.7	22.0	19.9	9.1
Arfaa, 1981 <sup>11</sup>	CA	Immigration clinic, Mexican immigrants	90	2.0	12.0	12.0	1.0
Borhardt and others, 1981 <sup>12</sup>	CA	Immigration clinic, Southeast Asian immigrants	2,226	25.8	16.1	30.4	4.5
Hoffman and others, 1981 <sup>13</sup>	CA	Immigration clinic, Vietnamese immigrants	68	8.8	19.1	76.5	7.4
Hoffman and others, 1981 <sup>13</sup>	CA	Immigration clinic, Southeast Asian immigrants	149	44.3	22.8	16.8	17.4
Catanzaro and Moser, 1982 <sup>14</sup>	CA	Immigration clinic, Southeast Asian immigrants	618	37.5	4.2	7.4	6.1
Lerman and others, 1982 <sup>15</sup>	CA	Immigration clinic, Southeast Asian immigrants	226	19.9	7.1	21.7	4.9
Skeels and others, 1982 <sup>16</sup>	NM	Immigration clinic, Southeast Asian immigrants	776	19.3	22.2	25.4	11.5
Tittle and others, 1982 <sup>17</sup>	CA	Immigration clinic, Southeast Asian immigrants	98	23.5	14.3	12.2	11.2
Sarfaty and others, 1983 <sup>18</sup>	CA	Immigration clinic, children from Mexico/Latin America	96	1.0	22.9	17.7	1.0
Barry and others, 1983 <sup>19</sup>	CT	Immigration clinic, Southeast Asian immigrants	142	22.5	23.9	32.4	–
DeGirolami and Kimber, 1983 <sup>20</sup>	MA	Immigration clinic, Southeast Asian immigrants	1,478	41.7	13.2	12.2	14.1
Sutherland and others, 1983 <sup>21</sup>	MN	Immigration clinic, Southeast Asian immigrants	483	41.2	27.7	25.1	18.0
Goldenring and Castle, 1983 <sup>22</sup>	CA	School-based, Southeast Asian immigrant teenagers	89	5.6	6.7	0.0	3.4
Moore and Buster, 1984 <sup>23</sup>	FL	Immigration clinic, Haitians	97	33.0	52.6	25.8	1.0
Judson and others, 1984 <sup>24</sup>	CO	Immigration clinic, Southeast Asian immigrants	781	42.4	26.1	18.1	11.5
Kramer and others, 1984 <sup>25</sup>	HI	Immigration clinic, Laotian immigrants	447	54.8	28.2	15.4	4.3
Kramer and others, 1984 <sup>25</sup>	HI	Immigration clinic, Vietnamese immigrants	105	13.3	11.4	12.4	4.8
McCaw and DeLay, 1985 <sup>26</sup>	CA	Immigration clinic, Ethiopian immigrants	89	4.5	1.1	0.0	4.5
McCaw and DeLay, 1985 <sup>26</sup>	CA	Immigration clinic, Afghan immigrants	51	0.0	2.0	9.8	0.0
Parish, 1985 <sup>27</sup>	WA	Immigration clinic, Southeast Asian immigrant children	338	20.7	8.0	2.1	9.2
Roberts and others, 1985 <sup>28</sup>	PA	Prenatal care, Southeast Asian immigrant pregnant women	97	37.1	20.6	10.3	10.3
Ungar and others, 1986 <sup>29</sup>	DE, MD, VA	Migrant farmworker women and children from Latin/Central America	339	2.1	9.7	0.9	0.6
Parenti and others, 1986 <sup>30</sup>	MA, DC	Immigration clinic, Ethiopian immigrants	191	3.7	4.2	1.1	4.2
Fitzpatrick and others, 1987 <sup>31</sup>	CA	Immigration clinic, Cambodian immigrant teenagers	46	37.0	0.0	8.7	19.6
Fitzpatrick and others, 1987 <sup>31</sup>	CA	Immigration clinic, Vietnamese immigrant teenagers	23	0.0	17.4	56.5	0.0
Molina and others, 1988 <sup>32</sup>	CA	Immigration clinic, Cambodian immigrants	2,468	14.9	2.0	1.1	4.4
Molina and others, 1988 <sup>32</sup>	CA	Immigration clinic, Hmong immigrant	52	1.9	1.9	1.9	1.9
Nwyanwu and others, 1989 <sup>33</sup>	TX	Immigration clinic, Southeast Asian immigrants	1,271	12.4	12.7	8.6	7.8
Salas and others, 1990 <sup>34</sup>	CA	Immigration clinic, Mexican immigrants	125	4.8	27.2	16.0	–
Salas and others, 1990 <sup>34</sup>	CA	Immigration clinic, Mexican ancestry born in US	91	0.0	1.1	1.1	–
Lurio and others, 1991 <sup>35</sup>	NY	Immigration clinic, Cambodian immigrants	271	56.1	3.7	4.8	28.8
Hostetter and others, 1991 <sup>36</sup>	MN	International adoptees from Asia and Central/South America	279	1.4	2.2	1.1	0.7
Johnson and others, 1992 <sup>37</sup>	MN, MA	International adoptees from Romania	61	0.0	9.8	24.6	14.8
Ciesielski and others, 1992 <sup>38</sup>	NC	Migrant farmworkers from the United States, Central America, and Mexico	265	5.7	5.7	1.1	0.8
Ciesielski and others, 1992 <sup>38</sup>	NC	Migrant farmworkers from the United States, Central America, and Mexico	181	8.8	7.2	1.1	2.2
Buchwald and others, 1995 <sup>39</sup>	WA	Immigration clinic, Southeast Asian immigrants	201	4.5	1.0	0.5	2.5
Meropol, 1995 <sup>40</sup>	NY	International adoptees from Asia and Africa	87	5.7	2.3	9.2	–
Hayes and others, 1998 <sup>41</sup>	ME	International adoptees from Asia, Africa, and Central/South America	87	4.6	18.4	5.7	–
Adair and Nwaneri, 1999 <sup>42</sup>	MN	Immigration clinic, African immigrants	53	0.0	13.2	1.9	0.0
Miller and Hendrie, 2000 <sup>43</sup>	MA	International adoptees from China	169	0.0	0.0	1.2	0.0
Sachs and others, 2000 <sup>44</sup>	MN	Immigration clinic, East African immigrants	51	0.0	5.9	2.0	0.0
Saiman and others, 2001 <sup>45</sup>	NY	International adoptees from Asia, Africa, and Central/South America	504	0.0	0.0	0.2	0.0

(continued)

SUPPLEMENTAL APPENDIX B

Continued

Study and year	Study location	Study population description	No. of patients	Hookworm (%)	<i>Trichuris trichiura</i> (%)	<i>Ascaris lumbricoides</i> (%)	<i>Strongyloides stercoralis</i> (%)
Lifson and others 2002 <sup>46</sup>	MN	Immigration clinic	2,129	3.0	8.4	1.4	0.8
Geltman and others, 2003 <sup>47</sup>	MA	Immigration clinic, African immigrants	1,254	1.3	9.1	1.6	0.2
Garg and others, 2005 <sup>48</sup>	CA	Immigration clinic	533	2.1	0.4	1.3	1.3
Franco-Paredes and others, 2007 <sup>49</sup>	GA	Immigration clinic, Sudanese immigrants	40	0.0	0.0	0.0	25.0
Posey and others, 2007 <sup>50</sup>	US	Immigration clinic, Sudanese immigrants	462	–	–	–	46.3
Posey and others, 2007 <sup>50</sup>	US	Immigration clinic, Somali Bantu	100	–	–	–	23.0
Varkey and others, 2007 <sup>51</sup>	MN	Immigration clinic, African	1,547	8.9	44.8	8.6	1.7
Varkey and others, 2007 <sup>51</sup>	MN	Immigration clinic, Asian	214	32.2	8.4	28.0	7.0
Varkey and others, 2007 <sup>51</sup>	MN	Immigration clinic, European	207	1.0	13.5	12.6	2.4
Miller and others, 2008 <sup>52</sup>	MA	International adoptees from Ethiopia	32	3.1	18.8	6.3	0.0
Russell and others, 2010 <sup>53</sup>	NC	Migrant farmworkers from Mexico and Central/South America	16	0.0	0.0	0.0	0.0

REFERENCES

- Weiner D, Brooke MM, Witkow A, 1959. Investigation of parasitic infections in the central area of Philadelphia. *Am J Trop Med Hyg* 8: 625–629.
- Winsberg GR, Sonnenschein E, Dyer AR, Schnadig V, Bonilla E, 1975. Prevalence of intestinal parasites in Latino residents of Chicago. *Am J Epidemiol* 102: 526–532.
- Hargus EP, Lepow M, Lau T, Colon AR, 1976. Intestinal parasitosis in childhood populations of Latin origin. Lessons from a survey of 129 such children in Hartford Connecticut. *Clin Pediatr* 15: 927–929.
- Goldsmith R, Stark F, Smith C, Healy G, Donegan E, Juchau V, Stalcup A, 1976. Orphan airlift. Enteric pathogens isolated from Vietnamese children immigrating to the United States. *JAMA* 235: 2114–2116.
- Holtan NR, Corssley KB, Pries CN, 1979. Prevalence of intestinal parasites in a Laotian immigrant community. *Minn Med* 62: 749–752.
- Lindes C, 1979. Intestinal parasites in Laotian refugees. *J Fam Pract* 9: 819–822.
- Erickson RV, Hoang GN, 1980. Health problems among Indochinese refugees. *Am J Public Health* 70: 1003–1006.
- Jones MJ, Thompson JH, Brewer NS, 1980. Infectious diseases of Indochinese refugees. *Mayo Clin Proc* 55: 482–488.
- Ortiz JS, 1980. The prevalence of intestinal parasites in Puerto Rican farm works in western Massachusetts. *Am J Public Health* 70: 1103–1105.
- Wiesenthal AM, Nickels MK, Hashimoto KG, Endo T, Ehrhard HB, 1980. Intestinal parasites in Southeast-Asian refugees. Prevalence in a community of Laotians. *JAMA* 244: 2543–2544.
- Arfaa F, 1981. Intestinal parasites among Indochinese refugees and Mexican immigrants resettled in Contra Costa County, California. *J Fam Pract* 12: 223–226.
- Borchardt KA, Ortega H, Mahood JD, Newman J, Delay PR, Doss J, Hipkins K, Schechter G, Gelber RH, 1981. Intestinal parasites in Southeast Asian refugees. *West J Med* 135: 93–96.
- Hoffman SL, Barrett-Connor E, Norcross W, Nguyen D, 1981. Intestinal parasites in Indochinese immigrants. *Am J Trop Med Hyg* 30: 340–343.
- Catanzaro A, Moser RJ, 1982. Health status of refugees from Vietnam, Laos, and Cambodia. *JAMA* 247: 1303–1308.
- Lerman D, Barrett-Conner E, Norcross W, 1982. Intestinal parasites in asymptomatic adult Southeast Asian immigrants. *J Fam Pract* 15: 443–446.
- Skeels MR, Nims LJ, Mann JM, 1982. Intestinal parasitosis among Southeast Asian immigrants in New Mexico. *Am J Public Health* 72: 57–59.
- Tittle BS, Harris JA, Chase PA, Morrell RE, Jackson RJ, Espinoza SY, 1982. Health screening of Indochinese refugee children. *Am J Dis Child* 136: 697–700.
- Sarfaty M, Rosenberg Z, Siegel J, Levin RM, 1983. Intestinal parasites in immigrant children from Central America. *West J Med* 139: 329–331.
- Barry M, Craft J, Coleman D, Coulter HO, Horwitz R, 1983. Clinical findings in Southeast Asian refugees. *JAMA* 249: 3200–3203.
- DeGirolami PC, Kimber J, 1983. Intestinal parasites among Southeast Asian refugees in Massachusetts. *Am J Clin Pathol* 79: 502–504.
- Sutherland JE, Avant RF, Franz WB, Monzon CM, Stark NM, 1983. Indochinese refugees health assessment and treatment. *J Fam Pract* 16: 61–66.
- Goldenring JM, Castle GF, 1983. Prevalence of disease in Southeast Asian teenagers. Results of screening medical examination at a residential vocational training facility. *J Adolesc Health Care* 4: 266–269.
- Moore JD, Buster SH, 1984. Intestinal parasites in Haitian entrants. *J Infect Dis* 150: 965.
- Judson FN, Lince DM, Anders BJ, Tapy JM, Le Van D, Cohn DL, Kicera TJ, 1984. Health status of Southeast Asian refugees. *West J Med* 141: 183–188.
- Kramer KJ, Ferguson P, McKinny WR, Siddiqui WA, 1984. Parasitic infestations in Southeast Asian refugees. *Hawaii Med J* 43: 12–16.
- McCaw BR, DeLay P, 1985. Demographics and disease prevalence of two new refugee groups in San Francisco. The Ethiopian and Afghan refugees. *West J Med* 143: 271–275.
- Parish RA, 1985. Intestinal parasites in Southeast Asian refugee children. *West J Med* 143: 47–49.
- Roberts NS, Copel JA, Bhutani V, Otis C, Gluckman S, 1985. Intestinal parasites and other infections during pregnancy in Southeast Asian refugees. *J Reprod Med* 30: 720–725.
- Ungar BL, Iscoe E, Cutler J, Bartlett JG, 1986. Intestinal parasites in a migrant farmworker population. *Arch Intern Med* 146: 513–515.
- Parenti DM, Lucas D, Lee A, Hollenkamp RH, 1987. Health status of Ethiopian refugees in the United States. *Am J Public Health* 77: 1542–1543.
- Fitzpatrick S, Johnson J, Sharaq P, Felice ME, 1987. Health care needs of Indochinese refugee teenagers. *Pediatrics* 79: 118–124.
- Molina CD, Molina MM, Molina JM, 1988. Intestinal parasites in Southeast Asian refugees two years after immigration. *West J Med* 149: 422–425.
- Nwyanwu OC, Moore JS, Adams ED, 1989. Parasitic infections in Asian refugees in Fort Worth. *Tex Med* 85: 42–45.
- Salas SD, Heifetz R, Barrett-Conner E, 1990. Intestinal parasites in Central American immigrants in the United States. *Arch Intern Med* 150: 1514–1516.
- Lurio J, Verson H, Karp S, 1991. Intestinal parasites in Cambodians: comparison of diagnostic methods used in screening refugees with implications for treatment of populations with high rates of infestation. *J Am Board Fam Pract* 4: 71–78.

36. Hostettler MK, Liverson S, Thomas W, McKenzie D, Dole K, Johnson DE, 1991. Medical evaluation of internationally adopted children. *N Engl J Med* 325: 479–485.
37. Johnson DE, Miller LC, Iverson S, Thomas W, Franchino B, Dole K, Kiernan MT, Georgieff MK, Hostetter MK, 1992. The health of children adopted from Romania. *JAMA* 268: 2446–2451.
38. Ciesielski SD, Seed JR, Ortiz JC, Metts J, 1992. Intestinal parasites among North Carolina migrant farmworkers. *Am J Public Health* 82: 1258–1262.
39. Buchwald D, Lam M, Hooton TM, 1995. Prevalence of intestinal parasites and association with symptoms in Southeast Asian refugees. *J Clin Pharm Ther* 20: 271–275.
40. Meropol SB, 1995. Health status of pediatric refugees in Buffalo, NY. *Arch Pediatr Adolesc Med* 149: 887–892.
41. Hayes EB, Talbot SB, Matheson ES, Pressler HM, Hanna AB, McCarthy CA, 1998. Health status of pediatric refugees in Portland, ME. *Arch Pediatr Adolesc Med* 152: 564–568.
42. Adair R, Nwaneri O, 1999. Communicable disease in African immigrants in Minneapolis. *Arch Intern Med* 159: 83–85.
43. Miller LC, Hendrie NW, 2000. Health of children adopted from China. *Pediatrics* 105: E76.
44. Sachs WJ, Adair R, Kirchner V, 2000. Enteric parasites in east African immigrants. Symptoms and duration of U.S. residence are not predictive. *Minn Med* 83: 25–28.
45. Saiman L, Aronson J, Zhou J, Gomez-Duarte C, Gabriel PS, Alonso M, Maloney S, Schulte J, 2001. Prevalence of infectious diseases among internationally adopted children. *Pediatrics* 108: 608–612.
46. Lifson AR, Thai D, O'Fallon A, Mills WA, Hang K, 2002. Prevalence of tuberculosis, hepatitis B virus, and intestinal parasitic infections among refugees to Minnesota. *Public Health Rep* 117: 69–77.
47. Geltman PL, Cochran J, Hedgecock C, 2003. Intestinal parasites among African refugees resettled in Massachusetts and the impact of an overseas pre-departure treatment program. *Am J Trop Med Hyg* 69: 657–662.
48. Garg PK, Perry S, Dorn M, Hardcastle L, Parsonnet J, 2005. Risk of intestinal helminth and protozoan infection in a refugee population. *Am J Trop Med Hyg* 73: 386–391.
49. Franco-Paredes C, Dismukes R, Nicolls D, Hidron A, Workowski K, Rodriguez-Morales A, Wilson M, Jones D, Manyang P, Kozarsky P, 2007. Persistent and untreated tropical infectious diseases among Sudanese refugees in the United States. *Am J Trop Med Hyg* 77: 633–635.
50. Posey DL, Blackburn BG, Weinberg M, Flagg EW, Ortega L, Wilson M, Secor WE, Sanders-Lewis K, Won K, Maguire JH, 2007. High prevalence and presumptive treatment of schistosomiasis and strongyloidiasis among African refugees. *Clin Infect Dis* 45: 1310–1315.
51. Varkey P, Jerath AU, Bagniewski S, Lesnick T, 2007. Intestinal parasitic infections among new refugees to Minnesota, 1996–2001. *Travel Med Infect Dis* 5: 223–229.
52. Miller LC, Tseng B, Tirella LG, Chan W, Feig E, 2008. Health of children adopted from Ethiopia. *Matern Child Health J* 12: 599–605.
53. Russell MD, Correa MT, Stauber CE, Kase JA, 2010. North Carolina Hispanic farmworkers and intestinal parasitism: a pilot study of prevalence and health-related practices, and potential means of foodborne transmission. *J Food Prot* 73: 985–988.