

2003 年全国疟疾形势

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2003 年全国疟疾疫情连续第 3 年出现较大幅度的回升, 21 个省(市、区)910 个县有疟疾病例报告, 发病数较 2002 年上升 15.3%。安徽、浙江、云南、福建、海南、湖北等 6 省疟疾发病有不同程度的上升。中部 3 省(安徽、湖北、江苏)和云南、贵州等 5 省 14 县 39 个乡镇约 48 万人口范围内出现疟疾局部爆发, 爆发病例(5 697 例)占发病总数的 14%。

1 疟疾发病报告情况

2003 年全国报告疟疾发病 40 681 例, 发病率为 0.39/万; 报告疑似病人 129 147 例, 死亡 52 例。依据各省(市、区)上报的疟疾发病数、疑似病例数和全球基金项目基线调查推算, 2003 年全国疟疾实际发病数约 74 万例(另文发表)。

发病人数较多的依次有云南、安徽、海南、湖北和河南等 5 个省, 占全国发病总数的 92.5%(37 605/40 681), 病例数均超过 2 000 例。南部高发地区云南、海南两省发病数占全国总病例数的 53.6%(21 788/40 681); 中部疫情不稳定地区安徽、湖北、河南和江苏 4 省占 40.5%(16 455/40 681); 其他省(市、区)共占 5.9%(2 438/40 681)。

全年报告恶性疟 4 727 例, 占疟疾总发病数的 11.6%。当地感染的恶性疟病人 4 106 例, 占恶性疟总病例数的 86.9%, 分布于云南的 64 个县(市)和海南的 14 个县(市), 两省分别占 76.1%和 23.9%。全国 16 省(市、区)107 个县发现输入性恶性疟病例 621 例, 占总恶性疟病例的 13.1%。湖南省报告三日疟患者 1 例。

以县(包括县级市、区)为单位统计, 发病率超过 10/万的疟疾高发区主要分布在云南(17 县)、海南(9 县)、安徽(1 县)、湖北(1 县)和河南(1 县)等 5 省, 共 29 个县 0.09 亿人口地区, 约占全国总人口的 0.8%; 发病率在 1/万~10/万之间的 69 个县 0.38 亿人口地区, 约占总人口的 3.1%; 发病率 1/万以下的 812 个县

5.05 亿人口地区, 约占总人口的 40.8%; 无疟疾病例的 1 960 县 6.86 亿人口地区, 约占总人口的 55.4%。

2 疟疾流行现状

我国南部疟疾高传播地区: 云南和海南两省为历史上疟疾高传播地区, 疟疾流行依然严重, 且有恶性疟流行。两省报告病例数为 21 788 例, 占全国总数的 53.6%, 基线调查结果校正后实际发病人数约 44.4 万例, 占全国发病数的 60%(444 399/740 840), 报告死亡 44 例, 占全国疟疾死亡总数的 84.6%(44/52)。云南省疟疾发病和死亡近 8 年来一直居全国之首, 2003 年报告病例数为 15 431 例, 发病率为 4.24/万, 较上年上升了 26.3%, 其中恶性疟 3 592 例, 境外恶性疟输入占 13.0%, 死亡 43 例, 较上年增加 0.3 倍。全省 16 个地(州)中有 7 地(州)出现疟疾回升, 境外疟疾爆发对云南边境地区疟疾疫情产生影响。海南省报告病例数为 6 357 例, 位居全国第 3, 而发病率(7.94/万)居全国之首, 较上年上升了 19.6%, 其中恶性疟 982 例, 占全省发病总数的 15.4%, 全部为当地感染病例, 死亡 1 例, 报告疑似病例数为 84 457 例, 调查推算实际发病数为 15.9 万例。因铁路、水库等基础设施建设, 外来民工聚集是导致海南省疟疾疫情上升的原因之一。

中部疫情不稳定地区: 安徽、湖北、河南和江苏 4 省疟疾疫情近几年来一直处于不稳定状态, 疫情回升和局部爆发较为突出。2003 年 4 省报告疟疾病例数为 16 455 例, 占全国报告总数的 40.5%, 其中安徽省报告 8 025 例, 疑似病人 18 533 例, 居全国第 2 位, 占全国总发病数的 19.7%, 全省发病数较上年上升 33.8%, 发病率(1.53/万)上升了 59.4%; 湖北省报告 5 344 例, 发病率(1.20/万)比上年上升了 33.3%; 河南和江苏两省分别报告 2 448 和 638 例, 发病率分别比上年下降了 24.1%和 12.7%。值得重视的是, 中华按蚊分布地区疟疾发病回升比例增高, 疟疾爆发流行主要位于河南桐柏山区至江苏的淮河沿岸, 尤以安徽淮北地区发病上升最为明显。

疫情基本控制地区: 南部贵州、广西、四川、广

东、福建、重庆和华东、华中地区的浙江、上海、湖南等省(市、区)疟疾发病基本控制在数百例, 疫情相对稳定并有不同程度的下降。贵州省报告 577 例, 比上年减少了 19.1%, 近半数(272 例)为输入病例; 广西壮族自治区报告 337 例, 较上年减少 14.0%, 多为输入病例; 四川、广东两省分别报告 289 和 246 例, 发病数较上年减少 33.3%和 40.0%; 重庆市、上海市和浙江省疫情与上年基本持平, 分别为 129、128 和 180 例, 各地超过 2/3 为输入病例, 其中上海仅 1 例为当地感染; 湖南省报告 180 例, 除 2 例为当地感染外, 其余全部为输入性病例, 全省发病较上年下降 42.5%。上述 9 省(市、区)报告的疟疾病例数占全国总病例的 5.6%。

其余地区: 山东、江西、辽宁、陕西、山西和甘肃等 6 省均有散在分布病例, 发病均在 100 例以下, 除陕西省比 2002 年有所增加外, 其他各省发病基本持平或下降。

3 疫情分析

2003 年为使用新制定的疫情报表上报疫情的第 2 年, 各省除继续按疟疾诊断标准报告疫情外, 要求上报疑似疟疾病例, 21 省(市、区)报告的疟疾病例和疑似病例共计 169 828 例, 比往年上报仅 3~4 万病例更接近实际疫情。尽管 2003 年我国重要疟区开始实施全球基金疟疾项目, 在一定程度上改善了疫情报告与管理, 但 10 省 43 县进行的项目基线调查结果表明, 疟疾疫情漏报现象仍相当普遍, 平均漏报率高达 93.1%, 报告的疟疾病例与疑似病例总和还远不能反映真实的发病情况。

云南、海南仍是我国疟疾流行最严重的地区和恶性疟灶区, 2003 年两省疟疾发病占全国病例总数的一半以上, 与 2002 年相比疟疾疫情均有较大幅度的上升。云南省疟疾发病和死亡数仍居全国之首, 流行程度有所增加, 发病率超过 10/万的疟疾高发区达 17 县, 恶性疟发病较上年上升了 22.9%, 报告死亡也有所增多。云南疟疾主要流行于西部和南部 25 个边境县, 境外疟疾爆发流行对云南省乃至全国其他省份疟疾疫情产生较大影响, 11 月份缅甸掸邦第一特区果敢县出现疟疾爆发疫情, 对与其比邻的临沧地区镇康县疟疾疫情构成极大威胁, 该县同期也出现了疟疾点状爆发。海南省疟疾发病率为全国最高, 比上年

上升了 19.6%, 均为当地感染病例, 发病率超过 10/万的疟疾高发区达 9 县, 较 2002 年增加了 2 县, 均位于中南部的丛林山区, 当地居民上山住宿感染较为严重。

中部安徽、湖北、河南、江苏等 4 省沿淮河流域疟疾疫情回升较为明显, 是除云南边境地区和海南山区之外的主要疟疾高发地区, 占全国疫情总数的 40.5%。尤其安徽省的疫情不容乐观, 近 3 年疟疾发病成倍增加, 每年发病数位于全国第 2, 并有沿淮河流域向周边省份扩散趋势。值得重视的是, 经过五省疟疾联防达到基本消灭疟疾的地区和部分中华按蚊分布区发病大幅回升, 而这些地区因连续多年发病较低, 疟疾防治工作有所松懈, 基层技术力量和诊治能力不足, 一旦出现疟疾爆发未及时处理将有可能导致严重后果。

尽管贵州、广西、四川和广东等省(市、区)疟疾发病基本控制在数百例, 疫情相对稳定并有不同程度的下降, 但随着经济发展, 流动人口大量增加, 致使输入性疟疾病例增多, 各省半数以上为输入病例。贵州已连续两年出现点状爆发。流动人口的疟疾管理仍然是这些地区的主要问题。

边境地区恶性疟流行不但未得到有效控制, 而且流行范围仍在扩大, 云南省 2002 年较 2001 年增加了 11 个县(市), 2003 年又新增了 22 个县(市), 恶性疟发病也有所增加。由于境外疟疾爆发的影响, 输入性恶性疟比例较上年上升。

综上所述, 2003 年全国疟疾疫情继续回升, 云南、海南两省疟疾流行仍较严重, 恶性疟流行范围进一步扩大, 流行程度受境外疟疾爆发影响有所增加; 中部沿淮河流域省份尤其安徽省疟疾流行形势较严峻, 以中华按蚊为媒介地区或中华按蚊和嗜人按蚊复合媒介地区疟疾发病大幅回升, 局部爆发时有发生, 需加大疟疾防治力度, 以巩固多年来中部五省疟疾联防所取得的成绩和中华按蚊地区基本消灭疟疾的成果。2003 年全球基金项目在上述重要疟区开始实施, 将有力推动我国的疟疾防治工作, 同时, 政府日益重视并加强传染病疫情监测报告系统的建设, 2004 年将实行传染病网络直报制度, 疟疾疫情和爆发将通过网络日报得到及时掌握, 疫情漏报将在一定程度上得以改善。

Malaria Situation in the People's Republic of China in 2003

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[Abstract] Total 40 681 malaria cases and 129 147 suspected cases with 52 deaths were reported by the case reporting system in 910 counties of 21 Provinces/Municipality/Autonomous Region (P/M/A) in 2003, and the annual incidence was 0.39/10 000, an increase of 15.3% than that of the last year, which is the third year that malaria incidence consecutively increased since 2001. Based on a baseline survey in the project funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), the estimated number of malaria cases was about 740 000 in 2003, 18 times more than reported.

Among the 910 counties with reported malaria cases, 29 counties with an incidence more than 10/10 000 distributed in Yunnan (17 counties), Hainan (9), Anhui (1), Hubei (1) and Henan (1). There were 69 counties in which the malaria incidence was between 1/10 000 and 10/10 000.

The number of *Plasmodium falciparum* malaria cases was 4 727, accounting for 11.6% of the total cases, of which 13.1% (621) were imported cases reported in 107 counties/cities of 16 P/M/A. Indigenous *falciparum* malaria was found in 78 counties/cities of Yunnan and Hainan Provinces, of which 64 counties/cities were in Yunnan, increased by 22, 14 counties/cities were in Hainan, decreased by 2 compared to that of 2002.

Yunnan and Hainan are still the relatively high transmission areas. Yunnan has ranked No.1 in the country in terms of the number of cases while Hainan ranked No.1 by malaria incidence in recent years. 21 788 malaria cases were reported from the two provinces in 2003, accounting for 53.6% of the total reported cases in the country. There were 15 431 cases with 43 deaths reported from Yunnan, the incidence was 4.24/10 000, with an increase of 26.3% than that in the last year. Among the reported cases, 3 529 were *falciparum* malaria, increased by 22.9% in comparison to 2002. The number of reported cases in Hainan was 6 357, with an incidence of 7.94/10 000, 19.6% increase than the last year.

In central China, the re-emergence of malaria was considerable in provinces along the Huai River, especially in Anhui Province. It should be stressed that the proportion of malaria cases was increasing in *Anopheles sinensis* transmitted areas where malaria was almost under control in the 1990s. The number of malaria cases in Anhui has been the second largest in the country since 2001. 8 025 malaria cases and 18 533 suspected cases were reported from Anhui in 2003, accounting for 19.7% of the total cases in the country, with an incidence of 1.53/10 000 increased by 59.4% than that in 2002. Hubei Province reported 5 334 malaria cases with an incidence of 1.2/10 000, increased by 33.3%. The number of reported cases in Henan and Jiangsu Provinces was 2 448 and 638 and the incidence decreased by 24.1% and 12.7% respectively. Focal outbreaks occurred in 222 villages of 9 counties in Anhui, Hubei and Jiangsu, where *Anopheles sinensis* is the principal transmission vector. Malaria cases reported from the above 4 provinces accounted for over 40% of the national figure.

Cases reported from other P/M/A in the South and East China occupied about 6% of the total with certain degree of decrease, several hundreds from each of Guizhou, Guangxi, Sichuan, Guangdong, Fujian, Chongqing, Zhejiang, Shanghai and Hunan, more than 50% of which were imported cases. Less than 100 cases were reported from each of Shandong, Jiangxi, Liaoning, Shaanxi, Shanxi and Gansu Provinces in 2003.

In summary, malaria is still an important problem of public health in China, especially in the southern and central parts where the incidence has been increasing since 2001. Yunnan and Hainan still faced critical situation of malaria endemics with a spread of *Plasmodium falciparum*, especially in the 25 border counties in Yunnan. In the central part of the country including Anhui, Hubei, Henan and Jiangsu, where *Anopheles sinensis* was the principal vector, the malaria prevalence was highly unstable with frequent focal outbreaks in areas along the Huai River, which revealed new challenges to the malaria control program in China. Meanwhile, opportunities also exist with the support of the GFATM and the government, the latter paid much closer attention recently to issues in relation to public health.

[Key words] China; Malaria; Reporting case

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