

情人节温馨提示！注意防范新生儿单纯疱疹，该病病死率超过 60%



2025.05.20，今天又到了一年一度的情人节，有人秀恩爱，也有人在渡劫，秀恩爱的要注意为后代健康负责，比如注意防范**疱疹病毒**。人类常见的疱疹病毒主要包括水痘带状疱疹病毒(VZV)、单纯疱疹病毒(HSV-1、HSV-2)、EB 病毒(EBV)和巨细胞病毒(CMV)等，这些疱疹病毒通常是在在儿童时期获得，其中**新生儿单纯疱疹(Neonatal herpes)**在儿童疱疹里面病死率是最高的，最高可达 60%，该病主要是由感染了 HSV 生殖器感染的母亲通过分娩传给婴儿。

单纯疱疹病毒(HSV-1、HSV-2)是单纯病毒属的双链 DNA 病毒，是母婴传播疾病、中枢神经系统感染等疾病的常见病原体，其中 HSV-2 主要通过性传播引起性生殖器感染，而 HSV-1 能引起口腔感染和生殖器感染，且两种病毒感染是终身性的，生殖器 HSV 感染的发病率在全球很高。据相关数据显示(图 1)，2020 年全球 0-49 岁人群中 有 1.22 亿新发 HSV-1 感染，其中 1680 万是生殖器感染(15-49 岁)，全球约 38 亿人感染了 HSV-1；2020 年全球 15-49 岁人群中 有 2560 万新发 HSV-2 感染，全球约 5.2 亿人感染了 HSV-2。许多 HSV 感染者属于无症状感染者，缺乏典型疼痛性和多发性水疱或溃疡性皮肤病等症状，血清学检测可检测 HSV 无症状感染者，区分 HSV 的分型，可用于确认 HSV，为临床诊断提供有力依据。

Table 2 Global and regional estimates of the number and percentage of the population aged 15–49 years with prevalent HSV-2 infection in 2020, by age and sex

Sex	WHO region	Number of people with prevalent HSV-2 infection in millions (population prevalence, %) by age group								All ages	N (95% UI*)	% (95% UI†)
		15–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years	N (%)			
Females	AFR	10.3 (19.3)	16.2 (33.6)	19.2 (45.3)	20.4 (55.0)	20.0 (63.0)	18.0 (69.5)	15.7 (74.9)	119.8 (99.8–141.8)	44.4 (37.0–52.5)		
	AMR	2.5 (7.2)	4.9 (13.4)	7.3 (19.1)	9.1 (24.4)	10.6 (29.4)	11.4 (34.1)	12.0 (38.4)	57.8 (42.2–77.4)	22.6 (16.5–30.2)		
	EMR	0.3 (0.9)	0.5 (1.8)	0.7 (2.6)	0.9 (3.4)	1.0 (4.2)	1.0 (5.0)	1.0 (5.8)	5.5 (1.4–19.1)	3.0 (0.8–10.5)		
	EUR	0.8 (3.3)	1.5 (6.1)	2.5 (8.9)	3.8 (11.6)	4.7 (14.3)	5.4 (16.8)	6.1 (19.3)	24.7 (15.2–39.3)	11.7 (7.2–18.6)		
	SEAR	2.4 (3.1)	4.7 (5.8)	6.6 (8.4)	8.4 (11.0)	9.8 (13.5)	10.4 (15.9)	10.8 (18.3)	53.1 (40.2–69.1)	10.0 (7.6–13.0)		
	WPR	2.0 (4.0)	4.1 (7.5)	6.7 (10.8)	10.9 (14.0)	11.1 (17.2)	12.5 (20.2)	17.1 (23.1)	64.5 (35.8–116.4)	14.0 (7.8–25.3)		
	Overall	18.2 (6.2)	32.0 (11.1)	43.2 (15.0)	53.5 (18.2)	57.1 (21.4)	58.7 (24.2)	62.7 (26.5)	325.5 (284.9–383.0)	17.0 (14.9–20.1)		
Males	AFR	5.8 (10.7)	9.5 (19.5)	11.6 (27.4)	12.7 (34.5)	12.7 (41.0)	11.8 (46.8)	10.6 (52.0)	74.8 (59.0–97.0)	27.7 (21.9–36.0)		
	AMR	1.3 (3.7)	2.7 (7.0)	4.0 (10.2)	4.9 (13.2)	5.7 (16.2)	6.2 (19.0)	6.5 (21.8)	31.3 (22.1–43.3)	12.2 (8.6–16.9)		
	EMR	0.3 (1.1)	0.6 (2.0)	0.9 (3.0)	1.2 (4.0)	1.3 (4.9)	1.3 (5.8)	1.2 (6.8)	7.0 (3.0–16.0)	3.5 (1.5–8.1)		
	EUR	0.4 (1.8)	0.9 (3.4)	1.5 (5.0)	2.2 (6.5)	2.6 (8.0)	3.0 (9.5)	3.4 (11.0)	14.0 (7.6–24.9)	6.5 (3.5–11.6)		
	SEAR	1.4 (1.6)	2.7 (3.1)	3.9 (4.6)	4.8 (6.0)	5.6 (7.4)	5.9 (8.8)	6.2 (10.2)	30.6 (19.7–46.3)	5.4 (3.5–8.2)		
	WPR	1.1 (2.1)	2.4 (3.9)	3.9 (5.7)	6.1 (7.5)	6.2 (9.2)	7.0 (10.9)	9.6 (12.6)	36.5 (13.8–93.3)	7.4 (2.8–18.9)		
	Overall	10.5 (3.3)	18.8 (6.1)	25.8 (8.5)	32.0 (10.4)	34.3 (12.5)	35.3 (14.2)	37.5 (15.6)	194.1 (160.0–260.5)	9.7 (8.0–13.0)		
Both	Global	28.7 (4.7)	50.8 (8.5)	69.0 (11.7)	85.5 (14.2)	91.4 (16.9)	94.0 (19.2)	100.2 (21.0)	519.5 (464.3–611.3)	13.3 (11.9–15.6)		

Numbers (N) are the year 2020 estimated number of people living with HSV-2 infection. Numbers do not always sum exactly to the totals due to rounding.
Prevalences (%) are the percentage of infected people in the age-, sex-, and region-specific population.
Regions are per WHO definitions.
*95% UI of the total number of infected people in millions.
†95% UI of percentage prevalence.
AFR, African Region; AMR, Region of the Americas; EMR, Eastern Mediterranean Region; EUR, European Region; HSV, herpes simplex virus; SEAR, South East Asia Region; UI, uncertainty interval; WPR, Western Pacific Region.

Table 4 Global and regional estimates of the number and percentage of the population aged 15–49 years with prevalent genital HSV-1 infection in 2020, by age and sex

Sex	WHO region	Number of people with prevalent genital HSV-1 infection in millions (population prevalence, %) by age group								All ages	N (95% UI*)	% (95% UI†)
		15–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years	N (%)			
Females	AFR	0.1 (0.2)	0.1 (0.2)	0.1 (0.2)	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.6 (0.0–9.4)	0.3 (0.0–4.4)		
	AMR	1.0 (3.5)	3.5 (9.6)	5.6 (14.6)	7.0 (18.6)	7.9 (22.0)	8.3 (24.7)	8.5 (26.9)	41.7 (27.5–50.6)	17.0 (11.2–20.6)		
	EMR	0.5 (1.9)	1.2 (4.3)	1.6 (5.4)	1.7 (5.9)	1.5 (6.2)	1.3 (6.3)	1.1 (6.4)	8.8 (0.4–22.5)	5.7 (0.3–14.5)		
	EUR	0.7 (3.8)	2.4 (9.9)	4.1 (14.5)	5.9 (18.1)	6.8 (20.8)	7.3 (22.8)	7.7 (24.4)	35.1 (22.8–43.0)	15.9 (10.3–19.5)		
	SEAR	1.8 (2.7)	5.1 (6.5)	6.9 (8.8)	7.8 (10.2)	8.1 (11.1)	7.7 (11.7)	7.2 (12.0)	44.7 (4.4–74.2)	9.3 (0.9–15.4)		
	WPR	1.5 (3.6)	4.8 (8.8)	7.6 (12.2)	11.3 (14.4)	10.4 (15.9)	10.6 (16.9)	13.1 (17.5)	59.3 (35.1–80.1)	12.0 (7.1–16.2)		
	Overall	5.7 (1.9)	17.2 (6.0)	25.9 (9.0)	33.8 (11.5)	34.9 (13.1)	35.3 (14.5)	37.6 (15.9)	190.3 (115.2–249.7)	10.5 (6.4–13.8)		
Males	AFR	0.1 (0.2)	0.1 (0.2)	0.1 (0.2)	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.1 (0.3)	0.6 (0.0–9.2)	0.3 (0.0–4.3)		
	AMR	1.0 (3.3)	3.3 (8.9)	5.2 (13.5)	6.5 (17.2)	7.2 (20.3)	7.4 (22.8)	7.4 (24.8)	38.0 (24.8–45.8)	15.6 (10.2–18.9)		
	EMR	0.5 (1.9)	1.3 (4.3)	1.7 (5.4)	1.8 (5.9)	1.7 (6.2)	1.4 (6.3)	1.2 (6.4)	9.7 (0.6–25.0)	5.8 (0.3–14.9)		
	EUR	0.6 (3.0)	2.0 (7.9)	3.4 (11.5)	4.7 (14.2)	5.3 (16.1)	5.6 (17.6)	5.8 (18.7)	27.5 (16.8–34.0)	12.4 (7.5–15.3)		
	SEAR	2.0 (2.7)	5.6 (6.5)	7.5 (8.8)	8.3 (10.2)	8.5 (11.1)	8.0 (11.7)	7.3 (12.0)	47.3 (3.7–78.6)	9.3 (0.7–15.5)		
	WPR	1.7 (3.6)	5.3 (8.8)	8.3 (12.2)	12.0 (14.4)	10.9 (15.9)	11.0 (16.9)	13.6 (17.5)	62.9 (38.4–84.3)	12.0 (7.3–16.1)		
	Overall	5.9 (1.9)	17.7 (5.8)	26.3 (8.6)	33.4 (10.9)	33.7 (12.3)	33.5 (13.5)	35.4 (14.8)	186.0 (111.4–250.7)	9.9 (5.9–13.4)		
Both	Global	11.6 (1.9)	34.9 (5.9)	52.2 (8.8)	67.2 (11.2)	68.6 (12.7)	68.8 (14.0)	73.0 (15.3)	376.2 (235.6–483.5)	10.2 (6.4–13.1)		

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AFR, African Region; AMR, Region of the Americas; EMR, Eastern Mediterranean Region; EUR, European Region; HSV, herpes simplex virus; SEAR, South East Asia Region; UI, uncertainty interval; WPR, Western Pacific Region.

图 1. 2020 年全球各区域 15-49 岁 HSV 感染者数据(来源文献 1)

据柳叶刀的一份临床调查报告(图 2), 新生儿单纯疱疹(Neonatal herpes)虽然比较罕见的, 检出率普遍不高, 但其死亡率却很高, 全球新生儿单纯疱疹的总体发病率估计约 10 例/10 万活产婴儿, 相当于每年大约有 14000 例, 其中 HSV-1 约为 4000 例, HSV-2 约为 10000 例。非洲的新生儿单纯疱疹病例是最多的, 而在美洲、欧洲和西太平洋地区, HSV-1 导致的病例多于 HSV-2, 美洲拥有全球最高的新生儿单纯疱疹总体发病率, 约 19.9 例/10 万活产婴儿。此外, 全球每年新

生儿单纯疱疹导致的死亡数约 8554 名，死亡率超过 60%，在资源匮乏地区，新生儿单纯疱疹死亡率可能还被严重低估。

	Maternal age group (years)							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Any neonatal herpes								
Americas	484 (3%)	864 (6%)	818 (6%)	565 (4%)	278 (2%)	72 (1%)	10 (<1%)	3091 (22%)
Africa	934 (7%)	1521 (11%)	1282 (9%)	847 (6%)	460 (3%)	168 (1%)	59 (<1%)	5270 (37%)
Eastern Mediterranean	152 (1%)	307 (2%)	269 (2%)	161 (1%)	78 (1%)	26 (<1%)	6 (<1%)	1000 (7%)
Europe	79 (1%)	256 (2%)	312 (2%)	232 (2%)	99 (1%)	20 (<1%)	1 (<1%)	999 (7%)
Southeast Asia	103 (1%)	459 (3%)	402 (3%)	212 (1%)	96 (1%)	30 (<1%)	10 (<1%)	1313 (9%)
Western Pacific	131 (1%)	1123 (8%)	848 (6%)	319 (2%)	119 (1%)	37 (<1%)	6 (<1%)	2583 (18%)
Global total	1884 (13%)	4530 (32%)	3930 (28%)	2336 (16%)	1131 (8%)	353 (2%)	92 (1%)	14257 (100%)
Neonatal herpes due to a maternal HSV-1 infection								
Americas	358 (8%)	587 (14%)	507 (12%)	320 (7%)	143 (3%)	34 (1%)	4 (<1%)	1954 (45%)
Africa	11 (<1%)	4 (<1%)	2 (<1%)	1 (<1%)	1 (<1%)	0	0	19 (<1%)
Eastern Mediterranean	74 (2%)	113 (3%)	76 (2%)	38 (1%)	17 (<1%)	5 (<1%)	1 (<1%)	325 (7%)
Europe	62 (1%)	174 (4%)	179 (4%)	113 (3%)	42 (1%)	8 (<1%)	0	577 (13%)
Southeast Asia	18 (<1%)	20 (<1%)	8 (<1%)	3 (<1%)	1 (<1%)	0	0	51 (1%)
Western Pacific	99 (2%)	706 (16%)	430 (10%)	131 (3%)	41 (1%)	11 (<1%)	2 (<1%)	1420 (33%)
Global total	622 (14%)	1604 (37%)	1202 (28%)	606 (14%)	246 (6%)	59 (1%)	8 (<1%)	4346 (100%)
Neonatal herpes due to a maternal HSV-2 infection								
Americas	126 (1%)	277 (3%)	310 (3%)	245 (2%)	134 (1%)	38 (<1%)	6 (<1%)	1137 (11%)
Africa	924 (9%)	1517 (15%)	1280 (13%)	846 (9%)	460 (5%)	167 (2%)	59 (1%)	5252 (53%)
Eastern Mediterranean	78 (1%)	194 (2%)	193 (2%)	123 (1%)	61 (1%)	21 (<1%)	5 (<1%)	675 (7%)
Europe	17 (<1%)	82 (1%)	133 (1%)	119 (1%)	57 (1%)	12 (<1%)	1 (<1%)	422 (4%)
Southeast Asia	86 (1%)	439 (4%)	394 (4%)	209 (2%)	95 (1%)	30 (<1%)	10 (<1%)	1262 (13%)
Western Pacific	32 (<1%)	417 (4%)	418 (4%)	188 (2%)	78 (1%)	26 (<1%)	4 (<1%)	1163 (12%)
Global total	1262 (13%)	2927 (30%)	2729 (28%)	1730 (17%)	885 (9%)	294 (3%)	84 (1%)	9911 (100%)

Totals might vary due to rounding. Numbers of cases are given to the nearest integer. It should be noted that all numbers are model estimates. Measurement resolution should not be interpreted as indicative of precision. HSV=herpes simplex virus.

Table 2: Global and regional estimates of the annual number of cases of neonatal herpes during 2010-15, by HSV type and maternal age group

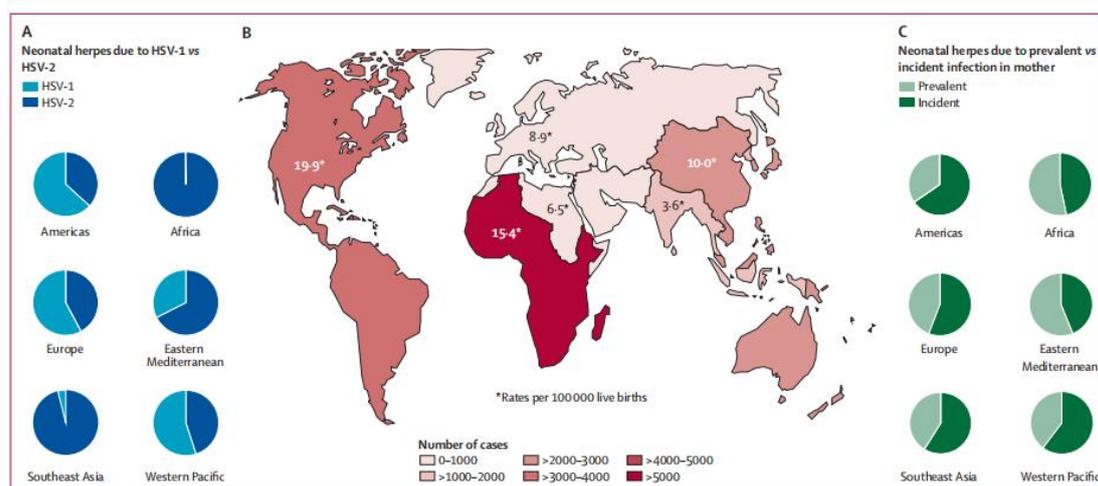


Figure 2: Estimates of the annual number of cases and rate per 100 000 livebirths of neonatal herpes during 2010-15 (B), and relative contribution of HSV-1 versus HSV-2 (A) and prevalent versus incident HSV infection in the mother (C) to the numbers of cases, by WHO region

图 2. 2010-2015 年全球新生儿单纯疱疹病例估计数(来源文献 2)

参考文献:

1. Estimated global and regional incidence and prevalence of herpes simplex virus infections and genital ulcer disease in 2020: mathematical modelling analyses [J]. *Sex Transm Infect*, 2025, 101: 214-223.
2. First estimates of the global and regional incidence of neonatal herpes infection [J]. *Lancet Glob Health*, 2017, 5: e300-09.



德国维润赛润单纯疱疹病毒相关原料清单

病原体	产品名称	类别	应用	单位	货号
单纯疱疹病毒(HSV)	Herpes Simplex Virus 1 (HSV-1) 单纯疱疹病毒 (1型) 抗原	天然抗原	免疫测定	mg	BA1051VS
	Herpes Simplex Virus 1 (HSV-1) Glycoprotein G 单纯疱疹病毒 (1型) 糖蛋白G	重组抗原	免疫测定	mg	BA1051RVS-G
	Herpes Simplex Virus 2 (HSV-2) 单纯疱疹病毒 (2型) 抗原	天然抗原	免疫测定	mg	BA1052VS
	Herpes Simplex Virus 2 (HSV-2) Glycoprotein G 单纯疱疹病毒 (2型) 糖蛋白G	重组抗原	免疫测定	mg	BA1052RVS-G
	Anti-Herpes Simplex Virus 1/2 (HSV-1/2) 单纯疱疹病毒 (1+2型) 单克隆抗体	人源化单抗 IgM	质控品 校准品	mL	MAB105.001