# Cancers with Increasing Incidence Trends in the US: 1999-2008

## Introduction

#### **Data and Methods**

Cancer incidence rates are based on surveillance data from the North American Association of Central Cancer Registries (NAACCR),<sup>6</sup> a compilation of population-based incidence data from the National Cancer Institute's Surveillance, Epidemiology and End Result program and the Centers for Disease Control and Prevention's National Program of Cancer

## **HPV-related Oropharynx**

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Figure 1. Incidence Rates\* by Sex and Age for Cancers with Increasing Trends, 1999-2008.



HPV = human papillomavirus

\*Age adjusted to the 2000 US standard population. Note the scale of the Y axis differs between cancer sites and genders.

Source: North American Association of Central Cancer Registries. Data are collected by cancer registries participating in NCI's SEER program and CDC's National Program of Cancer Registries.

American Cancer Society, Surveillance Research, 2012

## Table 2. Incidence Rates\* for Cancers with Increasing Trends by State and Sex, Ages 15 Years and Older, 2004-2008

	HPV-related oropharynx		Esophageal adenocarcinoma		Pancreas		Liver & intrahepatic bile duct		Thyroid		Kid rena	Kidney & renal pelvis		Melanoma of the skin	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Alabama†	8.6	2.2	6.5	0.6	17.6	12.4	10.2	3.6	5.3	14.2	25.9	13.3	31.5	18.0	
Alaska	7.6	1.2	7.3	1.7	17.2	14.3	14.0	6.0	7.2	22.0	26.4	15.6	14.4	12.9	
Arizona	6.2	1.7	5.9	0.7	14.5	11.2	11.5	3.9	7.6	23.6	23.3	13.2	24.7	14.5	
Arkansas	8.6	2.1	5.6	0.7	16.4	11.8	9.9	3.1	5.1	12.8	27.2	14.3	22.7	13.8	
California	7.0	1.5	5.4	0.7	16.3	13.3	16.2	5.7	6.1	18.2	23.2	11.2	34.3	20.0	
Colorado	6.5	1.3	7.4	0.9	15.0	12.8	10.5	3.8	7.4	21.4	22.5	11.5	32.3	23.5	
Connecticut	7.8	1.5	7.9	1.1	20.6	14.9	13.2	3.6	9.8	29.2	26.4	13.7	37.9	25.8	
Delaware	9.6	1.9	7.6	1.2	18.1	13.8	12.0	3.0	6.9	20.7	25.8	14.8	42.0	22.8	
District of Columbia	8.9	3.3	4.3	0.6	19.7	12.9	17.3	4.7	7.4	15.9	21.9	10.5	15.7	7.2	
Florida	9.7	2.2	6.4	0.8	16.7	12.5	12.3	3.8	6.4	18.9	24.0	12.3	30.3	17.9	
Georgia	8.5	1.8	5.5	0.6	17.2	12.7	11.4	3.5	5.7	17.1	24.7	12.5	35.5	20.5	
Hawaii	7.3	1.3	3.4	0.3	18.0	14.3	19.1	7.2	7.9	24.7	21.8	10.6	34.5	19.1	
Idaho	7.6	1.5	8.1	1.0	16.4	13.5	8.1	2.9	7.9	28.9	22.9	12.8	38.1	23.6	
Illinois	8.0	1.9	8.1	1.1	18.9	14.2	11.6	4.1	7.1	21.0	28.8	15.1	25.0	16.6	
Indiana	8.1	1.8	9.3	1.1	17.0	12.7	9.5	3.4	6.0	18.1	28.3	15.9	26.6	18.1	
lowa	7.1	1.5	9.8	1.2	17.0	12.4	8.6	3.2	7.5	19.8	29.0	14.6	29.7	22.1	
Kansas	6.9	1.2	7.0	0.8	15.9	12.2	8.2	2.9	8.2	24.5	25.4	13.7	31.7	22.7	
Kentucky	8.8	2.1	8.4	1.0	16.6	13.1	9.8	3.7	7.1	2 3	3.73.7				

See 14 - 21 -**\_**  $= \mathcal{X}_1 \cdot \mathcal{Y}_1 = \mathcal{Y}_2 \cdot \mathcal{Y}_1 = \mathcal{Y}_2 \cdot \mathcal{Y}_1 \cdot \mathcal{Y}_2 \cdot \mathcal{Y}_1 = \mathcal{Y}_1 \cdot \mathcal{Y}_1$ =  $(-1)^{-1}$   $(-1)^{-1}$   $(-1)^{-1}$   $(-1)^{-1}$ л. 1999-2008, <u>с</u>. , <u></u>  $(\underline{\ }, \underline{\ },$ \_\_\_\_\_\_\_ 55 .\_\_\_\_\_

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A , (5.4%) , (2.7%) , (2.4%) , (1.999)2008 ( 1). I , (2.7%) , (2.7%) , (2.7%) , (1.999)2008 ( 1). I , (1.9%) , (2.7%) , (1.99)

(1.6% , 1992-1995 2.5% , 2001-2007)

, \_ · · , / · \_ · · , / · · · ).<sup>39</sup> B, ( HB, \_ · HC, - the the transformed and the second se  $(---)^{\Lambda_1} + \cdots + (--)^{\Lambda_1} + \cdots + (-)$ • \_ \$, · \_\_\_\_ان ار المنظر المعالية المالية \_\_\_\_\_ المالية \_\_\_\_\_ المالية المالية المالية المالية المالية المالية الم , HB, \_\_\_ HC, \_\_\_ \ \ \ \ \ \ \ \  $\int \left[ -\frac{1}{2} - \frac{1}{2} \right] \cdot \left[ -\frac{1}{2} - \frac{1}{2} \right] = \left[ -\frac{1}{2} - \frac{1}{2} + \frac{1}{2} \right] \cdot \left[ -\frac{1}{2} - \frac{1}{2} \right] \cdot \left[ -\frac{1}{2} - \frac{1}{2} \right] = \left[ -\frac{1}{2} - \frac{1}{2} \right] \cdot \left[ -\frac{1}{2} - \frac{1}{2} - \frac{1}{2} \right] \cdot \left[ -\frac{1}{2} - \frac{1}{2} - \frac{1}{2} \right] \cdot \left[ -\frac{1}{2} - \frac{1}{2} - \frac{1}{2} \right] \cdot \left[ -$ , HB, ,  $-\gamma_{1} = -\gamma_{1} = = \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum$ К НВ, −, НС, − к \_ (, ) \_ к , коло к , , , \_ \_ J-0 \_ , J-0 \_ , J-0 , . . -10(, )-8(, )-56 -40(\_)-2 ,

¥ ¥  $\mathbf{F}_{\mathbf{r}} = \left\{ \begin{array}{c} \mathbf{r}_{\mathbf{r}} \\ \mathbf{r}_{$ is a special special of a set of a set of a set of the  $\cdots = (1, 1, 2, \dots, 3, 2, \dots, 3, 2, \dots, 1, 2, \dots, 3, 1, \dots, 2, 1, \dots, 3, 1, \dots, 2, \dots, 2, 1, \dots, 2, \dots,$ 7.6 (100,000), 1999 (12.2, 2008 (1, F), 1, F\_\_\_2,F). Нула, 1999 у 1 2008, . و الملاح المالية المراجع و المراجع و المالية المراجع و المالية المراجع و المالية المراجع و المراجع و 1 - -الا من المراجع \_\_\_\_ ( 100,000) \_ \_ 2004-2008 \_\_\_ \_ \_ \_ \_ \_ \_\_\_\_ (26.2) (13.6), **\_\_**\_\_ (13.6), **\_\_**\_\_ A, \_ A, \_ \_ \_ A, \_ \_ I \_ \_ , A\_/\_N\_, (28.5 <u>\_\_\_\_</u>29.4, . . . , <u>`\_\_\_</u>), . <u>\_\_\_</u>, <u>`\_\_\_</u>, <u>`\_\_\_</u>  $(-\underline{\mathbf{x}}, \mathbf{x}) = (\mathbf{x} - \mathbf{x}) + (\mathbf{x} - \mathbf$ the second s ۱۹۹۵- ۱۹۹۵- ۱۹۹۵- ۱۹۹۵- ۱۹۹۵- ۱۹۹۵- ۱۹۹۵-

17. C<sub>1</sub>, / MB, C<sub>1</sub>, H, D, H, D, O, J, C<sub>1</sub>, C<sub></sub> \_, , , \_\_\_ , , , , , , , , , , , 1977-2005. Br J Cancer · 1-, 11 2009;101(5): 855-9. *Med* 1999;130(11): 883-90.  $\langle \mathbf{x}_1, \mathbf{y}_1, \mathbf{z}_2 \rangle = \langle \mathbf{z}_1, \mathbf{z}_2, \mathbf{z}_1, \mathbf{z}_1, \mathbf{z}_2, \mathbf{z}_1, \mathbf{z}_1, \mathbf{z}_2, \mathbf{z}_1, \mathbf{z}_$ Engl J Med 1999;340(11): 825-31. 20. K , , , , JL, ..., JC, K LH. E. , B\_ . 🖍 Cancer Epidemiol Biomarkers Prev 1997;6(5): 369-77. 21. B, & , M, L\_ , J, F , . J. E, ( \_ , \_ , \_ , . I :, , , M, -, J, F J, J, J, Cancer Epidemiology and Prevention. Na 7 *Lancet Oncol* 2006;7(4): 347-9. 23. F \_ KM, C \_ MD, O \_ CL, G & L. . . \_ . , . \_ . . , 1999-2008. JAMA 2010;303(3): 235-41. 24. L C, F, \_ E, , M, G  $\sim$  LC, M, / \_ AH. I,  $\sim$  \_ . . . . . . . . . . , ) 2007;15(1): 216-24. 25. \_ KK, \_ • \_ E. • \_ \_ · \_ 2008. 2008;103(3): 788-97. D, F \_ J, \_ J, \_ Cancer Epidemiology and Prevention. N. 0 . \_ , 2006:721-62. , **4** , 1 23. **ک**ر 28.  $\Box$  , D,  $H_{1,1}$  ,  $N, B_{1,2}$  ,  $LM, \Lambda_{-}$  ,  $B_{-}/A$ ology 2003;14(1): 45-54. 29.  $L_1$ ,  $L_2$ ,  $M_1$  G , K,  $L_2$ ,  $L_2$ ,  $I_2$ ,  $M_2$ ,  $L_2$ ,  $D_3$ ,  $f_2$ ,  $L_2$ ,  $L_3$ ,  $L_4$ ,  $L_$ J, ..., Cancer Epidemiology and Prevention. N. ..., I: O ...., 2006:763-86.

32. , D. L. H. H. H. H. H. The Health Consequences of Smoking: A Report of the Surgeon General A. J. GA, 2004.

34. M, G  $\_$  \_ BI,  $\_$  , E ,  $\checkmark$  \_ HB, D  $\_$  JA, M, G ... KA. M  $\checkmark$  ,  $\checkmark$  : A  $\checkmark$  . EE -  $\checkmark$  ,  $\_$  . Hepatology 2011;54(2): 463-71.

36. A \_\_\_\_\_, JF, K \_\_\_\_, J\_\_\_, M, F \_\_\_\_, C, B \_\_\_. N\_1, \_\_\_\_, 1998-2003. Prev Chronic Dis 2008;5(3): A74. 37. A = C, E, F, L, F, AE, B, B,  $H_{4} = A$ , B,  $H_{1} = A$ , B,  $H_{1} = A$ ,  $H_{1} = A$ ,  $H_{1} = E$ , Epidemiol Rev 2006;28: 112-25.38. M = AEE, M = H, F = AE, A = A, E = A,  $H_{1} = A$ ,  $H_{2} = A$ , H

40. L<sub>1</sub> / A<sub>2</sub> , D<sub>1</sub> \_ A<sub>2</sub> \_ A<sub>2</sub> \_ A<sub>2</sub> \_ A<sub>2</sub> \_ A<sub>2</sub> B<sub>2</sub> \_ C<sub>4</sub> - A<sub>2</sub> -

41. B<sub>1</sub> J,  $M_{2}$  M,  $M_{2}$  A  $M_{2}$  A M

51. M, L<sub>1</sub> , J, L<sub>1</sub>,  $\lambda$  L,  $\underline{\ }$ , B,  $\lambda$  ...,  $\underline{\ }$ , J, I;  $\lambda$ 

▲ . (\_)-30(\_)-1(,\_)-15(,\_)-4(