

# CERVICAL CANCER

## What is cervical cancer?

- Cervical cancer – one of around 200 different types of cancer<sup>1</sup> – develops in the cervix, the cone-shaped part<sup>2</sup> of the uterus that connects the upper part of the uterus (the womb) and the vagina<sup>3</sup>.
- Cervical cancer develops when abnormal cells in the lining of the cervix begin to multiply out of control in response to HPV infection<sup>4</sup>. Abnormal cervical cells can gather to form a lump called a tumor. Benign (non-cancerous) tumors do not spread and usually are not harmful. Malignant (cancerous) tumors, however, spread from their sources and grow into life-threatening cancer<sup>5</sup>.

## What causes cervical cancer?

- Virtually all cervical cancers are caused by some type of human papillomavirus (HPV)<sup>6</sup>, a common<sup>7</sup> virus that infects about half of all people at some point in their lives<sup>8</sup>.
- More than two-thirds of cervical cancer cases are attributed to high-risk HPV types 16 and 18<sup>9</sup>.
- In an international study of women (n=1050) with cervical cancer in 22 countries, more than 90 percent of the women in South Asia (India, Indonesia, Philippines and Thailand) were infected with HPV, primarily types 16 and 18.<sup>10</sup>
- In separate studies in Thailand (n=338)<sup>11</sup> and the Philippines (356)<sup>12</sup>, nearly 90 percent of the women with cervical cancer were also infected with HPV with types 16 and 18 being the most common.
- Another study in Hong Kong (n=332) among women with abnormal Pap tests found HPV infection in 44 percent of women overall; among those with cervical cancer, nearly 80 percent were infected with HPV<sup>13</sup>.

## How common is cervical cancer?

- Worldwide, cervical cancer is the second-most common cancer affecting women<sup>14</sup> and the second-leading cause of cancer death in women<sup>15</sup>.
- Nearly 500,000 new cases of cervical cancer were reported worldwide in 2002, the last year for which data are available, with about 275,000 deaths from the disease<sup>16</sup>. Almost 80 percent of all cervical cancer cases occur in the developing world<sup>17</sup>,
- The prevalence of cervical cancer is estimated to be 1.4 million cases worldwide<sup>18</sup>.
- In the Asia Pacific region, cervical cancer ranks second only to breast cancer as the most common cancer among women. It is the fourth most common cause of cancer-related death in women in the region<sup>19</sup>.
- For 2002, there were more than 100,000 new cases of cervical cancer and about 53,000 deaths from the disease in women in South-Eastern and Eastern Asia. The data by country are<sup>20</sup>:

Country	Number of New Cases	Deaths
• China	• 45689	• 25561
• Indonesia	• 15050	• 7566
• Japan	• 7772	• 3573
• Philippines	• 6000	• 4349
• Thailand	• 6243	• 2620
• Vietnam	• 6224	• 3334
• Myanmar	• 5017	• 2594
• Korea, Republic of	• 4949	• 1327
• Korea, Democratic Republic of	• 2150	• 558
• Cambodia	• 1768	• 949
• Malaysia	• 1492	• 766
• Singapore	• 323	• 205
• Laos	• 317	• 159
• Mongolia	• 171	• 92
• Brunei	• 26	• 13

### Who gets cervical cancer?

- Cervical cancer tends to occur in women in their 40s and 50s<sup>21</sup>, when many are still raising children and contributing to their families' livelihoods and security<sup>22</sup>.
- Women in underserved communities are less likely to undergo recommended cervical cancer screening, which could account for the greater risk for cervical cancer among these groups<sup>23</sup>

### How is cervical cancer diagnosed?

- The Pap test (also called Pap smear) is a simple test – usually conducted in a doctor's office or clinic – that detects abnormal or cancerous cervical cells<sup>24</sup>.
  - Because the Pap test can detect cervical changes before they progress to cancer<sup>25</sup>, it is credited with significantly reducing cervical cancer deaths since its widespread use began in the 1950s<sup>26</sup>. Between 1950 and 1970, the number of cervical cancer deaths in the United States decreased 70 percent<sup>27</sup>. **(or insert relevant country statistic)**
  - Like other medical tests, however, Pap tests aren't perfect<sup>28</sup>. Sometimes they do not find cervical abnormalities that actually exist – but regular screening can help women and their healthcare providers overcome these “false-negative” screenings<sup>29</sup>.
  - In addition, Pap tests can sometimes show minor cervical abnormalities<sup>30</sup> that are due to infection with low-risk HPV types such as types 6 and 11<sup>31</sup>. These results can be costly for the health system, but more importantly, may cause unnecessary anxiety for the patient<sup>32</sup>.

### What are the symptoms of cervical cancer?

- Precancerous changes and early cancers of the cervix generally do not cause pain or other symptoms<sup>33</sup>; therefore, it is important to get regular Pap screenings to detect cervical pre-cancers or cancers at a stage when they can be treated most effectively<sup>34</sup>.
- As the disease progresses, women may notice one or more of the following symptoms:

- Abnormal vaginal bleeding<sup>35</sup>:
  - Bleeding that occurs between regular menstrual periods<sup>36</sup>
  - Bleeding after sexual intercourse, douching or a pelvic exam<sup>37</sup>
  - Menstrual periods that last longer and are heavier than before<sup>38</sup>
  - Bleeding after menopause<sup>39</sup>
- Increased vaginal discharge<sup>40</sup>
- Pelvic pain<sup>41</sup>
- Pain during sexual intercourse<sup>42</sup>

### How are cervical cancer and pre-cancer treated?

- There are a number of treatment options available for cancerous and pre-cancerous cervical lesions. In each case, a woman and her healthcare provider determine the most appropriate treatment.
  - *Pre-invasive stage (Stage 0 – Carcinoma in Situ)* - When the cancer has affected only the outer layer of the lining of the cervix<sup>43</sup>, treatment may include:
    - Laser surgery uses a laser beam to destroy abnormal cells<sup>44</sup>.
    - Cryosurgery destroys cancerous and pre-cancerous lesions by freezing them<sup>45</sup>.
    - Loop electrosurgical excision procedure (LEEP) uses a thin wire loop (through which an electrical current is passed) to cut away an area of abnormal cells from the cervix<sup>46</sup>.
    - Conization surgically removes a cone-shaped piece of tissue from the cervix.
  - *Invasive stage (Stages 1-4)* - When the cancer has penetrated into the cervix and possibly to other tissues and organs<sup>47</sup>, treatment may include:
    - Radiation uses high-energy rays to shrink tumors by destroying the cancer cells' ability to reproduce<sup>48</sup>.
    - Chemotherapy uses anticancer drugs which reach all areas of the body to kill cancer cells, including those that have spread to distant organs<sup>49</sup>.
    - Hysterectomy can be performed two ways, depending on the extent of the cancer: 1) Simple hysterectomy is the removal of the cancer, the cervix and the uterus<sup>50</sup>. 2) Radical hysterectomy involves the removal of the cervix, the uterus, part of the vagina and lymph nodes in the area<sup>51</sup>.

### How can cervical cancer be prevented?

- Cervical cancer can usually be prevented if women are screened regularly with Pap tests. Women should talk to their healthcare providers about having regular Pap screening tests<sup>52</sup> and discuss results with them.

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