

# THE CONTRIBUTION OF CANCER REGISTRIES TO THE PLANNING OF ACTIONS FOR THE CONTROL OF CANCER - MAGNITUDE OF CANCER BURDEN IN BRAZILIAN



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## BACKGROUND:

At the end of the sixties, population-based cancer registries (PBCR) appeared in Brazil as a result from initiatives to obtain information on cancer incidence, and the influence of the worldwide scenario represented by the appearance of cancer registries in several places around the world. The PBCR are an integral part of the surveillance system, and provide data on the magnitude of cancer burden and trends in risk factors, as well as the effect of prevention, early detection, treatment and palliative care.

## OBJECTIVE:

To describe patterns of cancer incidence in Brazilian PBCR with available and updated information.

## METHODS:

All incidence rates were age-standardized to the World Standard Population, and were expressed per 100,000 inhabitants. The incidence rates were calculated on the basis of age, sex, and the following sites: all cancers; lung, stomach, colorectal, esophagus, prostate, female breast and cervix uteri.

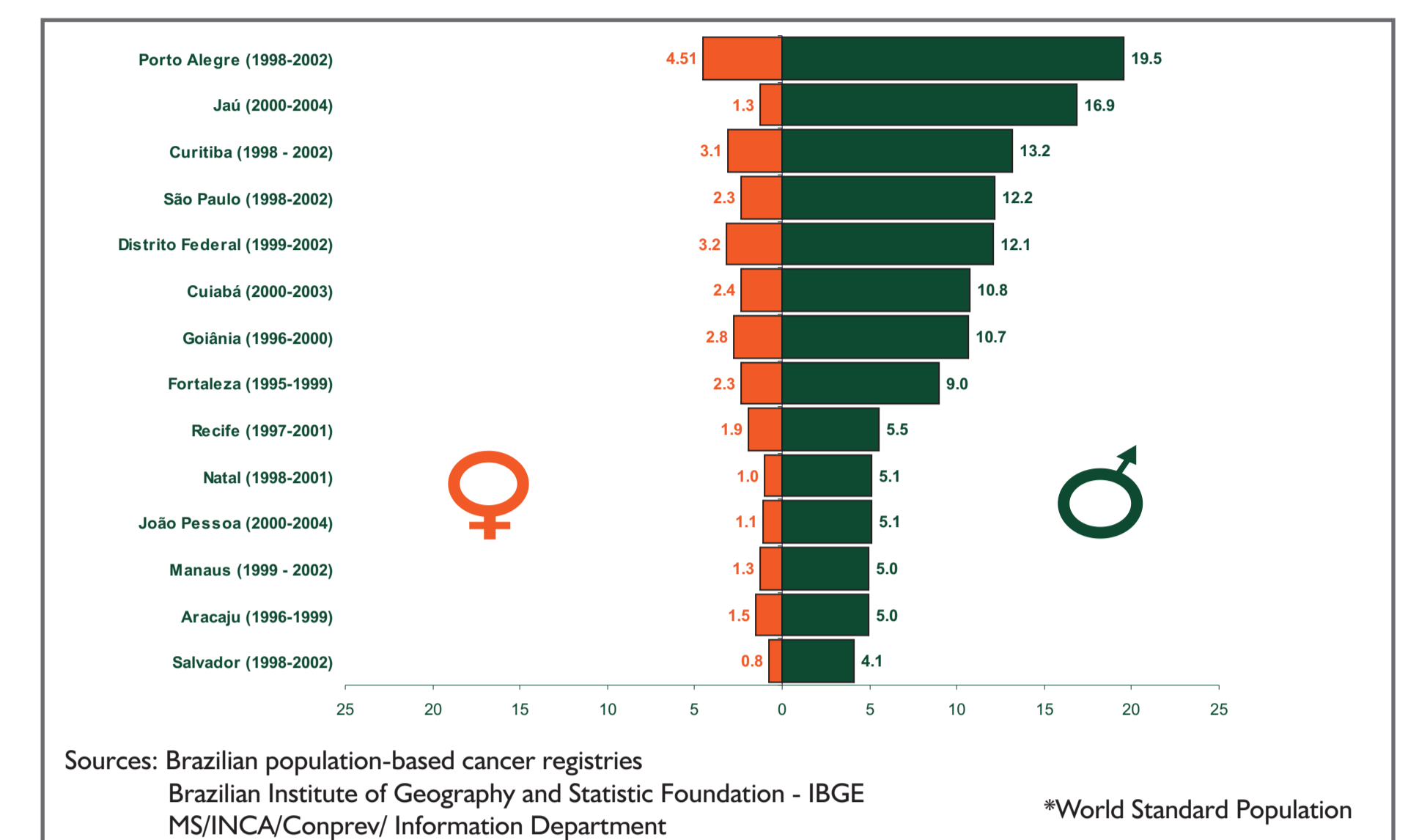
Incidence data: database from 14 general registries: PBCR of Aracaju, Cuiabá, Curitiba, Distrito Federal, Fortaleza, Goiânia, Jaú, João Pessoa, Manaus, Natal, Porto Alegre, Recife, Salvador, São Paulo. Reference period: 1996 through 2004.

(<http://www.inca.gov.br/cgi/sisbasepop.asp>)

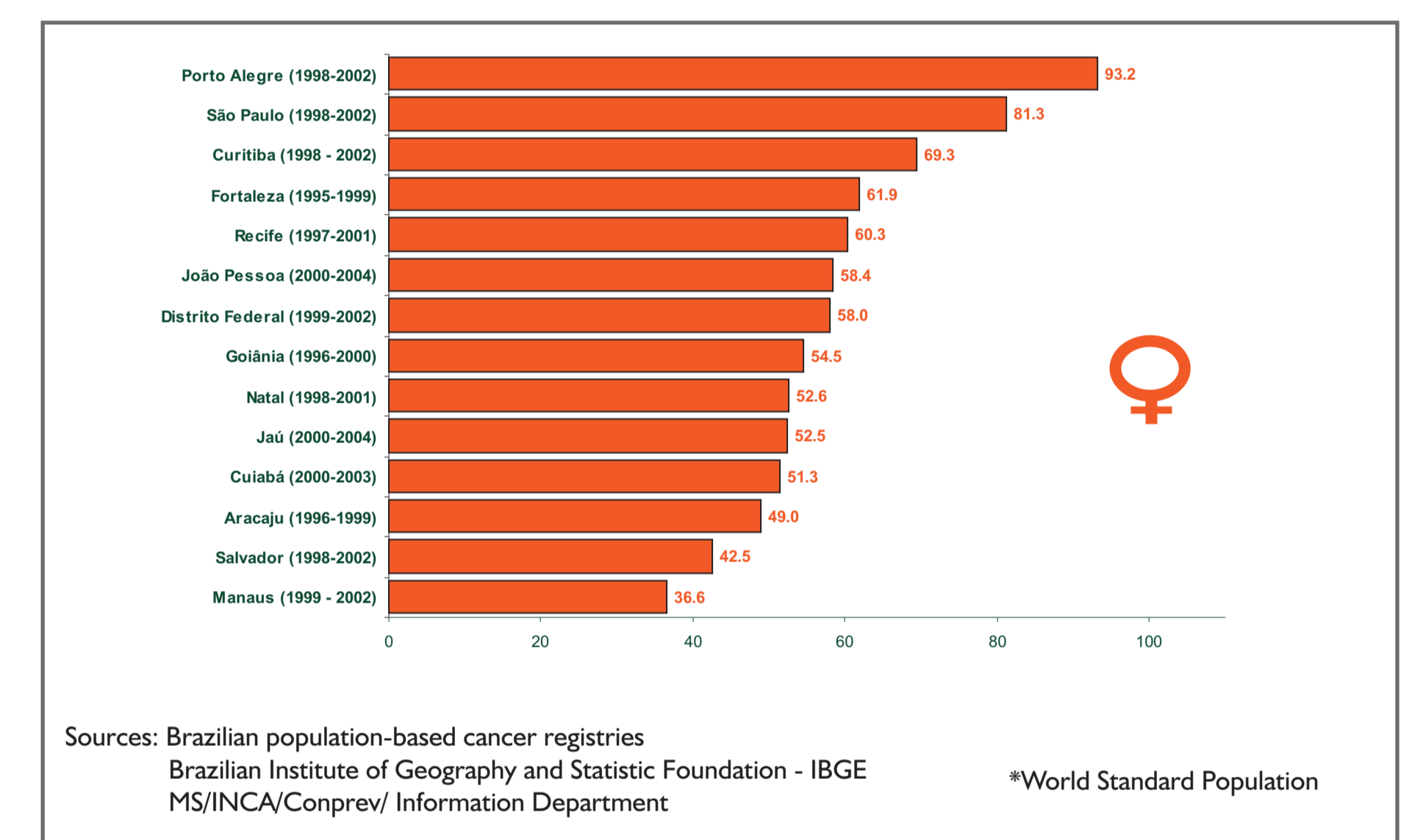
Population data: Brazilian Institute of Geography and Statistics - IBGE

## RESULTS:

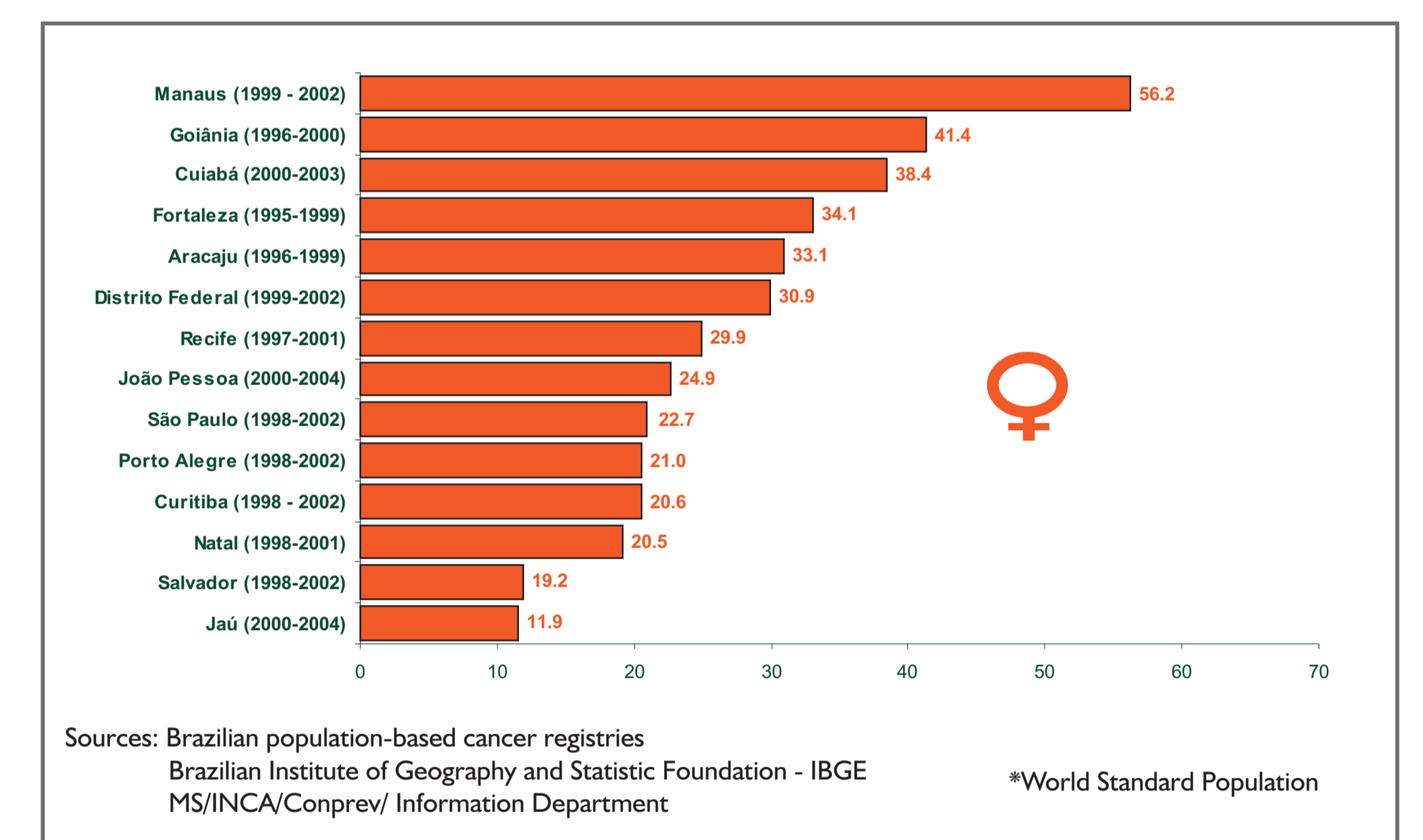
Throughout these 14 cities, incidence rates among males varied from a low rate of 152.7/100,000 in Salvador to a high rate of 425.0/100,000 in Porto Alegre. The median incidence rate was 240.0/100,000. Among females, incidence rates varied from 111.8/100,000 in Salvador to 332.5/100,000 in São Paulo. The median value was 199.5/100,000. Lung, colon and rectum, stomach and esophagus cancers are associated with the highest incidence rates in these 14 cities, in addition to sex-specific malignancies, such as: female breast, uterine cervix, and prostate cancers. Across these fourteen cities, the incidence of lung cancer is greater in Porto Alegre, with average-adjusted incidence rates of 73.0 per 100,000 men, and 23.4 per 100,000 women. Colorectal cancer presented the lowest rate in less developed cities, and the highest rate in more developed cities, from 5.7/100,000 among men (Manaus) to 34.5/100,000 among men (Porto Alegre). Average-adjusted incidence rates of stomach cancer vary from 4.9/100,000 among females in Recife to 29.8/100,000 among males in São Paulo. Average-adjusted incidence rates of esophagus cancer were more frequent in cities where smoking and alcohol consumption is more prevalent, ranging from 0.8/100,000 among women in Salvador to 19.5/100,000 in Porto Alegre. For sex-specific malignancies, female breast cancer is the most common cancer in 13 out of 14 cities. Incidence rates range from 36.6/100,000 in Manaus to 93.2/100,000 in Porto Alegre. Cervical cancer has the highest average-adjusted incidence rates in less developed cities. Incidence rates varied from 56.2/100,000 in Manaus to 11.9/100,000 in Jaú. Prostate cancer is the most common cancer among men in these 14 cities. The average-adjusted incidence rate ranges from 130.2/100,000 in São Paulo to 32.5/100,000 in Manaus.



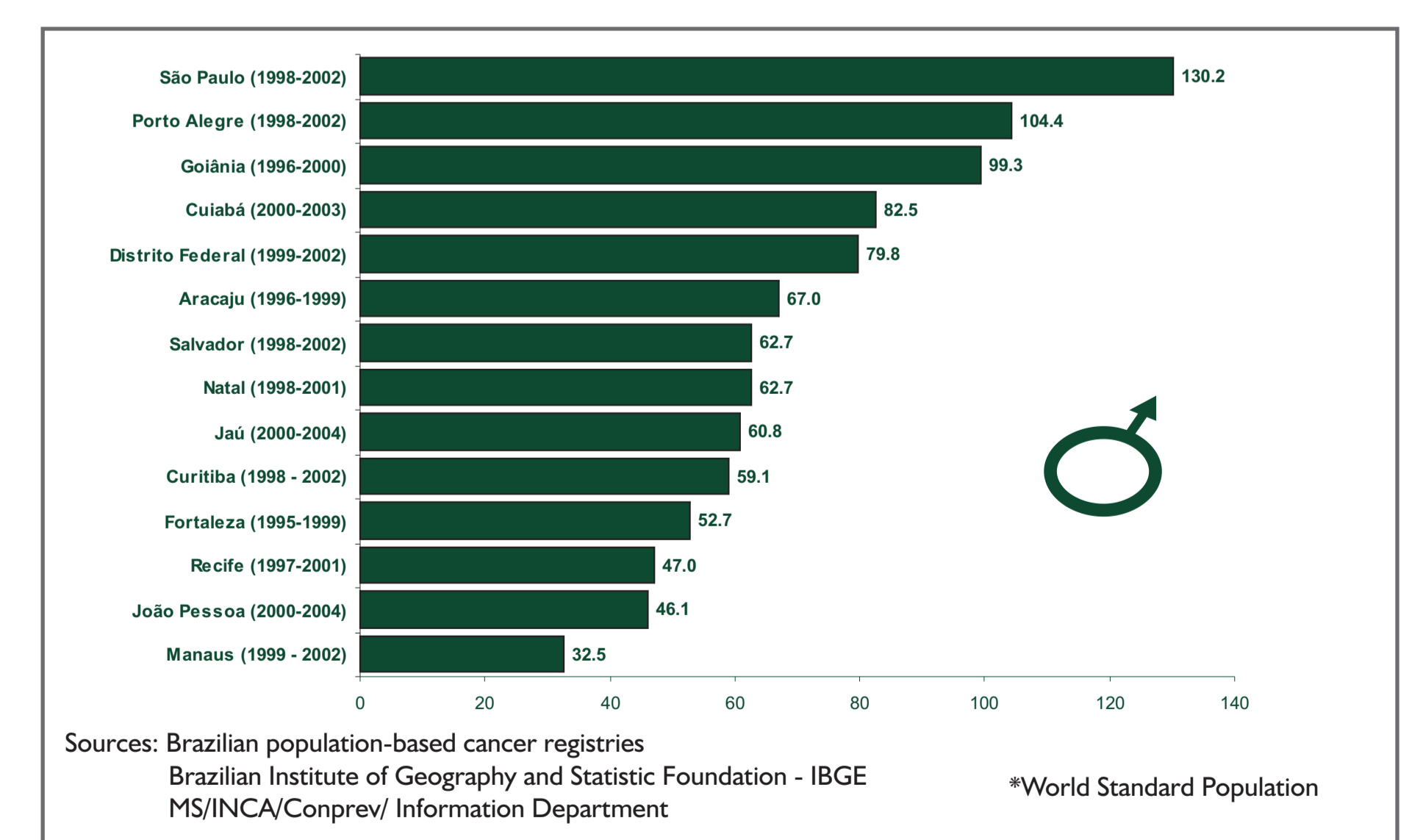
Average age-adjusted incidence rates\* from esophagus cancer (C15) by sex. Brazilian population-based cancer registries.



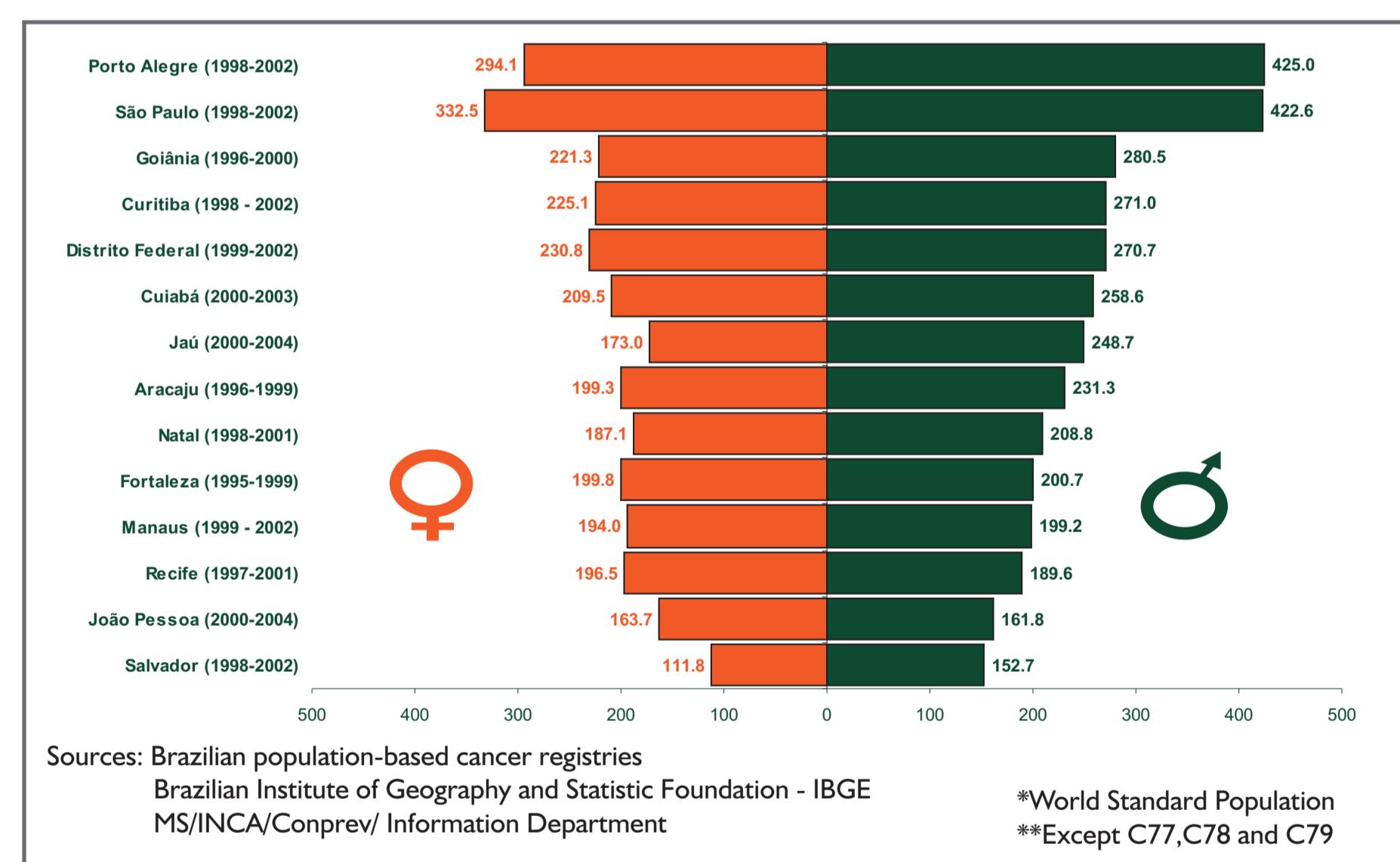
Average age-adjusted incidence rates\* from female breast cancer (C50). Brazilian population-based cancer registries.



Average age-adjusted incidence rates\* from cervix uteri cancer (C53). Brazilian population-based cancer registries.

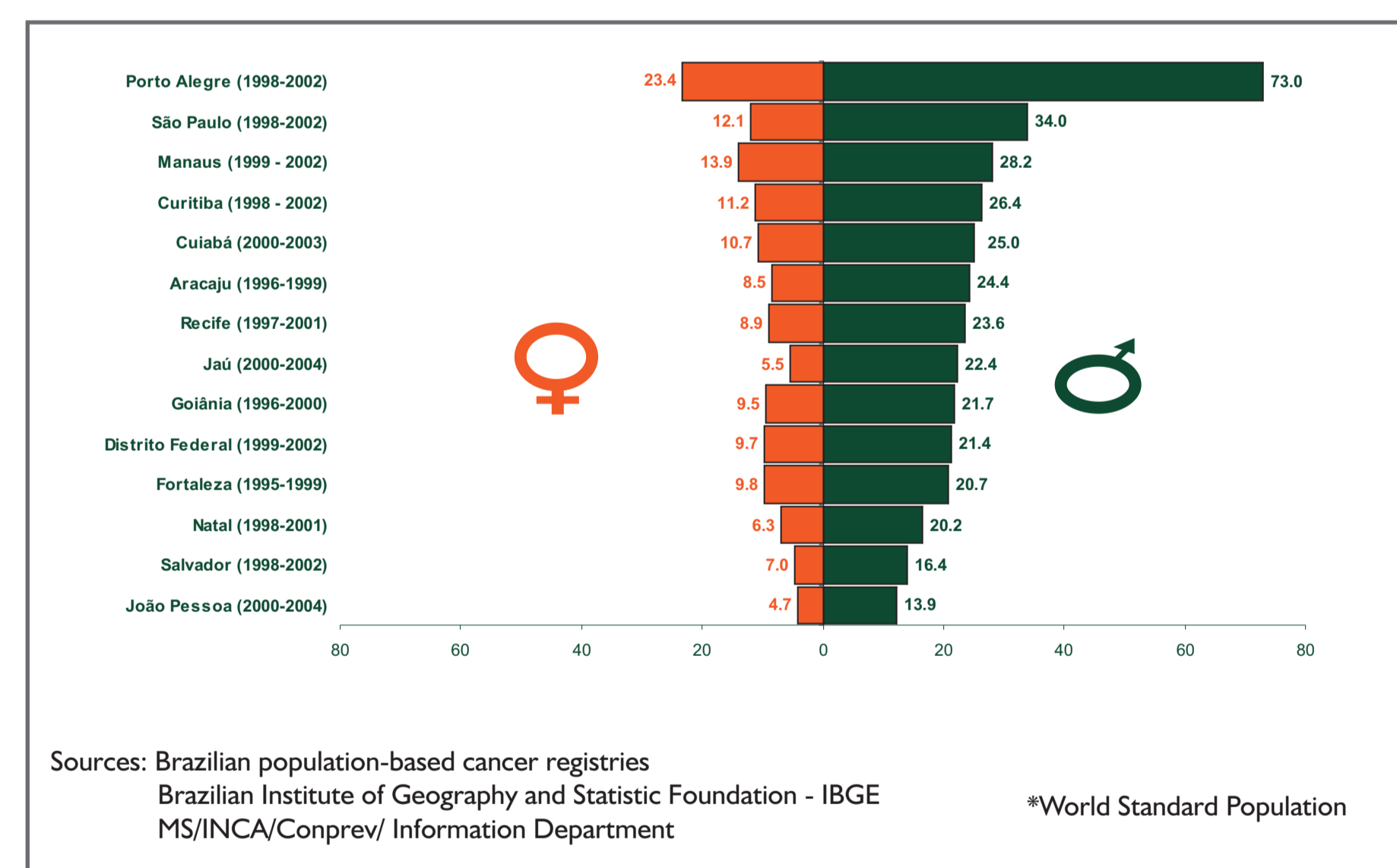


Average age-adjusted incidence rates\* from prostate cancer (C61). Brazilian population-based cancer registries.



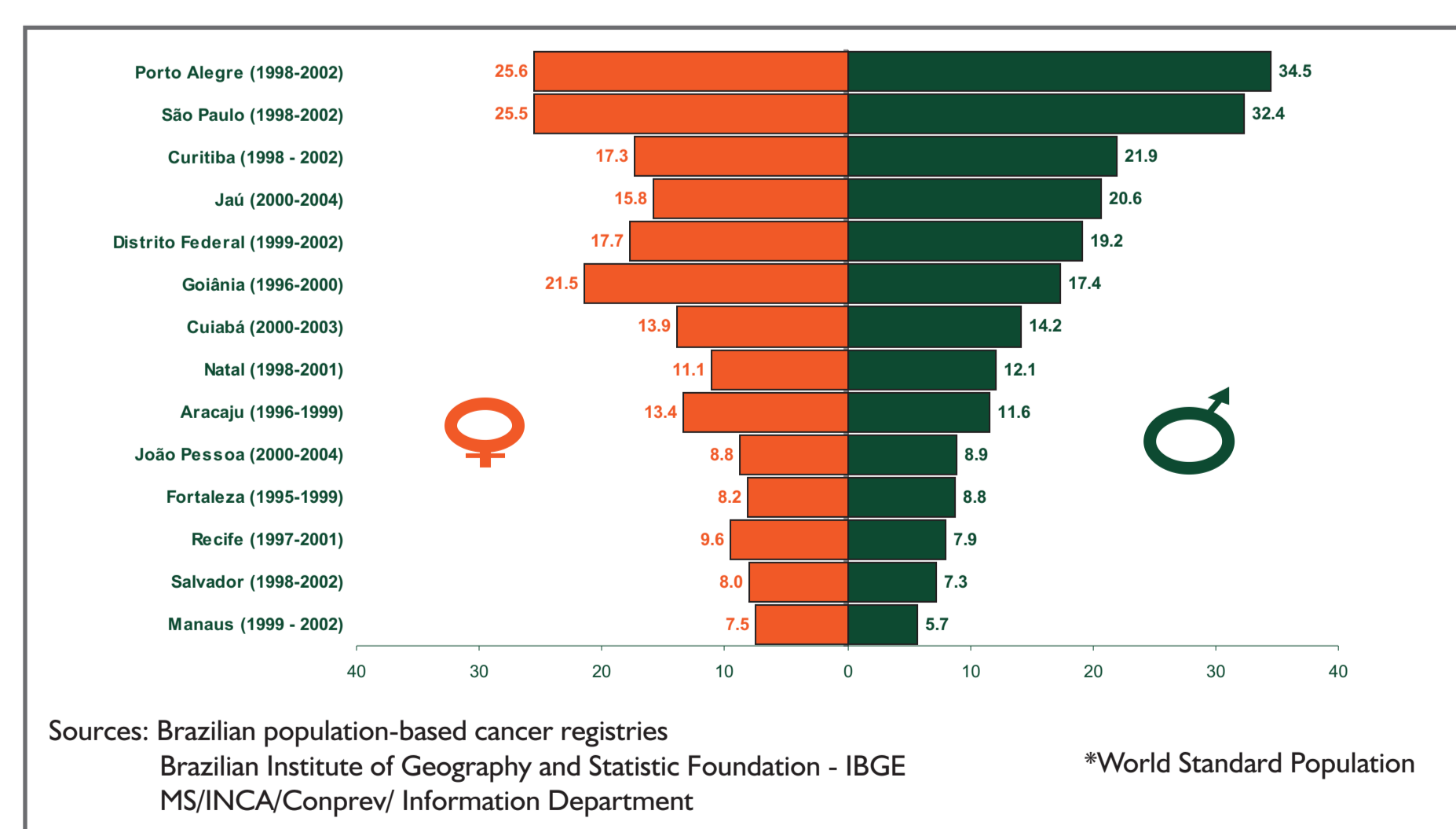
Sources: Brazilian population-based cancer registries  
Brazilian Institute of Geography and Statistic Foundation - IBGE  
MS/INCA/Conprev/ Information Department  
\*\*Except C77,C78 and C79

Average age-adjusted incidence rates\* from all cancers but skin (C00-C97\*\*) by sex. Brazilian population-based cancer registries.



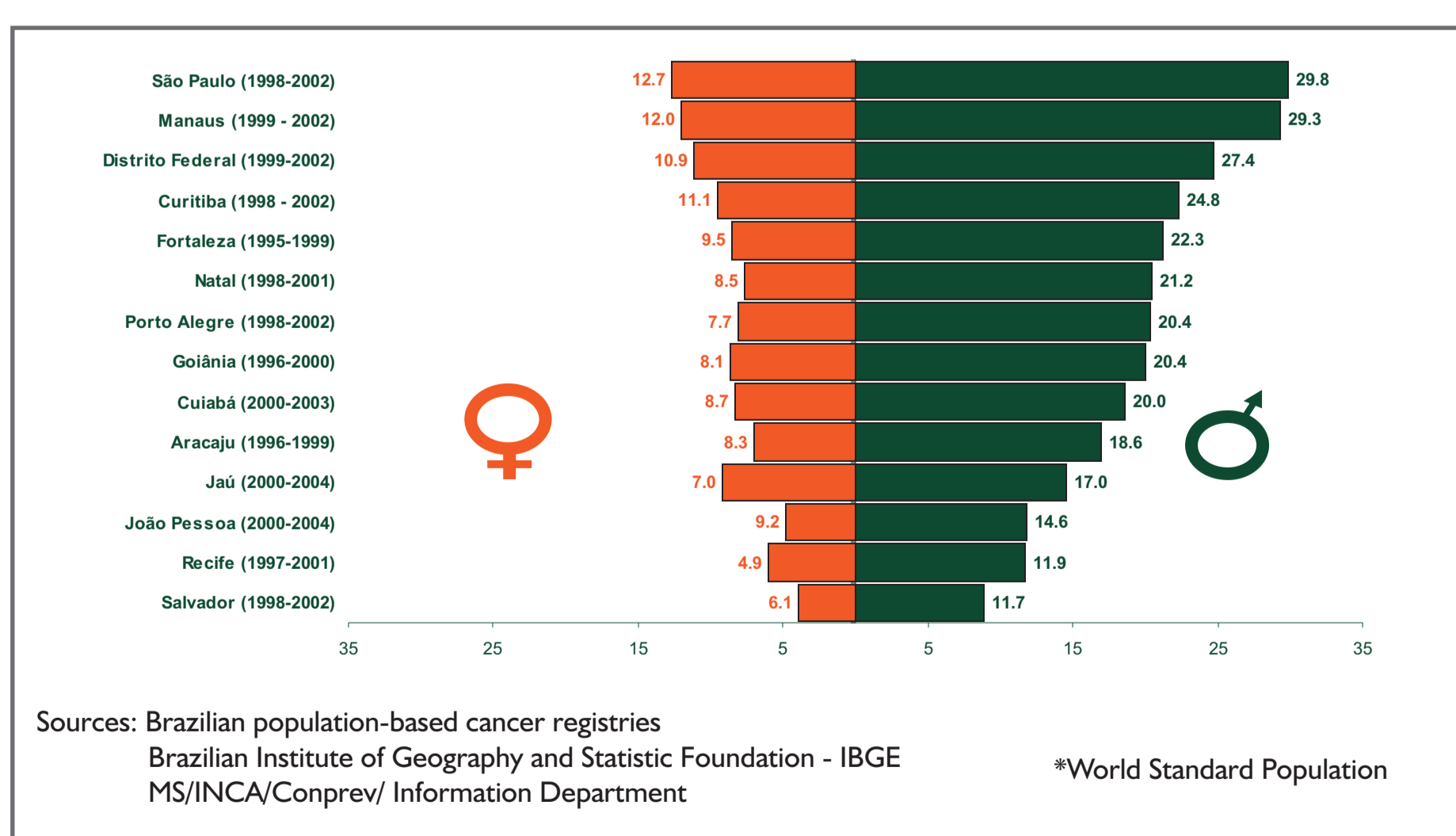
Sources: Brazilian population-based cancer registries  
Brazilian Institute of Geography and Statistic Foundation - IBGE  
MS/INCA/Conprev/ Information Department

Average age-adjusted incidence rates\* from lung cancer (C33-C34) by sex. Brazilian population-based cancer registries.



Sources: Brazilian population-based cancer registries  
Brazilian Institute of Geography and Statistic Foundation - IBGE  
MS/INCA/Conprev/ Information Department

Average age-adjusted incidence rates\* from colorectal cancer (C18-C20) by sex. Brazilian population-based cancer registries.



Sources: Brazilian population-based cancer registries  
Brazilian Institute of Geography and Statistic Foundation - IBGE  
MS/INCA/Conprev/ Information Department

Average age-adjusted incidence rates\* from stomach cancer (C16) by sex. Brazilian population-based cancer registries.

## CONCLUSION:

The observed incidence profile reflects the differences in Brazilian geographic macro-regions with distinct socioeconomic, demographic, cultural and intake consumption characteristics. Therefore, this information shows the contribution of cancer registries to the identification and evaluation of strategies for preventive actions and cancer control, emphasizing its relevance within the National Plan for Cancer Control.

Projeto Gráfico: Seção de Multimídias / SDC / CEDC / INCA



Ministério da Saúde

