

# Trends in Epithelial Ovarian Cancer Incidence (1981-2012) and Mortality (1992-2012) Among Hispanic and Non-Hispanic White Residents of New Mexico.



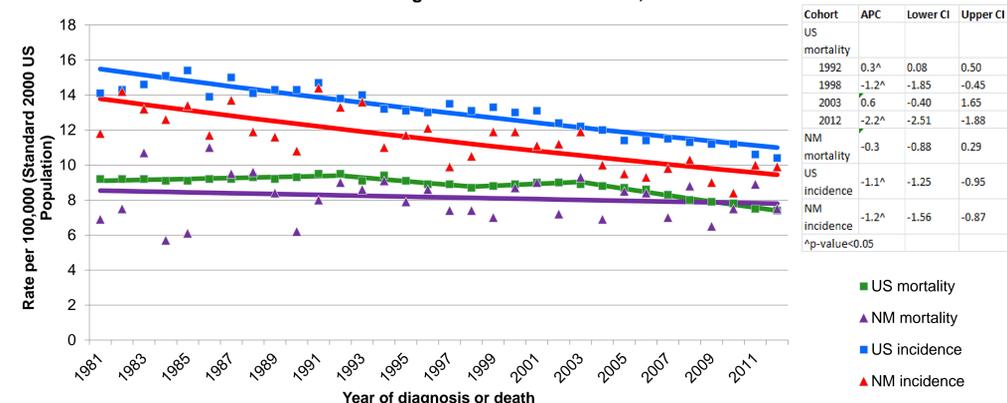
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## Background

- In the U.S. ovarian cancer
  - 11<sup>th</sup> most common cancer among women
  - 5<sup>th</sup> leading cause of cancer related death among women
  - Accounts for 21,290 new incident cases and 14,180 deaths in 2015
- There has been a downward trajectory of incidence and mortality over the last 25-30 years
- Hispanic trends in ovarian cancer are limited
- New Mexico is a unique resource to address Hispanic trends because it is a majority-minority state with 47.3% Hispanic and 39.4% non-Hispanic white, and has a long existing Hispanic population.

Figure 1. Age-adjusted incidence rates of epithelial ovarian cancer and age-adjusted mortality rates of all ovarian cancers among all US and NM residents, 1981-2012



## AIM

To describe trends in epithelial ovarian cancer incidence and mortality in Hispanic white (HW) women compared to non-Hispanic white (NHW) women in New Mexico.

## Data Sources and Methods

- Eligible subjects were identified from existing records in the population-based New Mexico Tumor Registry, a founding member of the National Cancer Institute's Surveillance, Epidemiology, and End Results Program (SEER).
- We included incident cases of invasive, epithelial ovarian carcinoma (International Classification of Diseases for Oncology-Third Edition anatomic site code C56.9) with relevant epithelial ovarian cancer histology codes diagnosed among New Mexico residents from 1981 to 2012.
- Deaths attributed to ovarian cancer were restricted to 1992 to 2012 because the national Hispanic data were not readily available prior to that time period in SEER\*Stat.
- Using SEER\*Stat, age-adjusted incidence and mortality rates were calculated by the direct method using the United States 2000 standard population. Ninety-five percent confidence intervals for incidence rates were calculated using the Tiwari method.
- Temporal trends and annual percent change (APC) were determined using Joinpoint regression analysis.

## Results

Figure 2. Age-adjusted incidence rates of epithelial ovarian cancer diagnosed 1981-2012 and age-adjusted mortality rates of all ovarian cancers 1992-2012 among NM residents

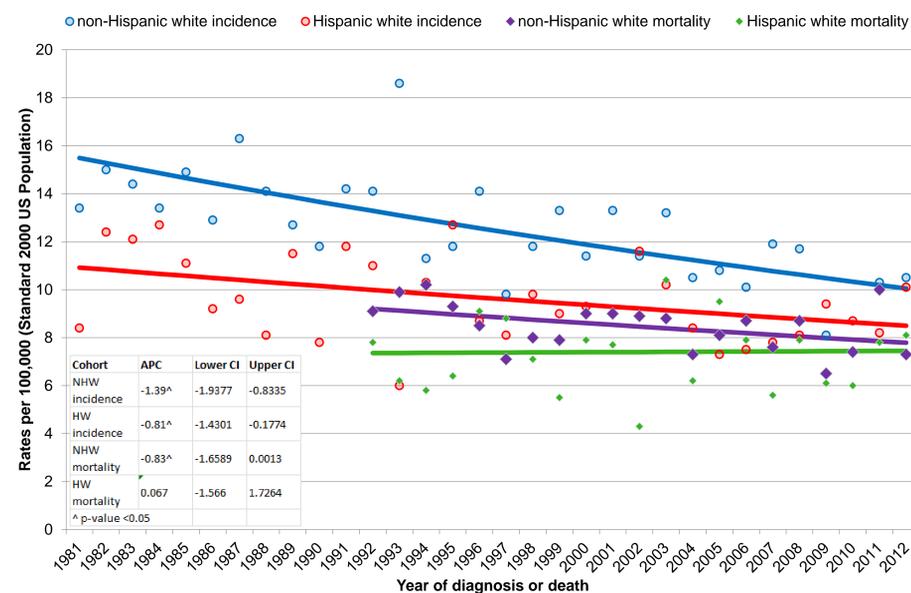
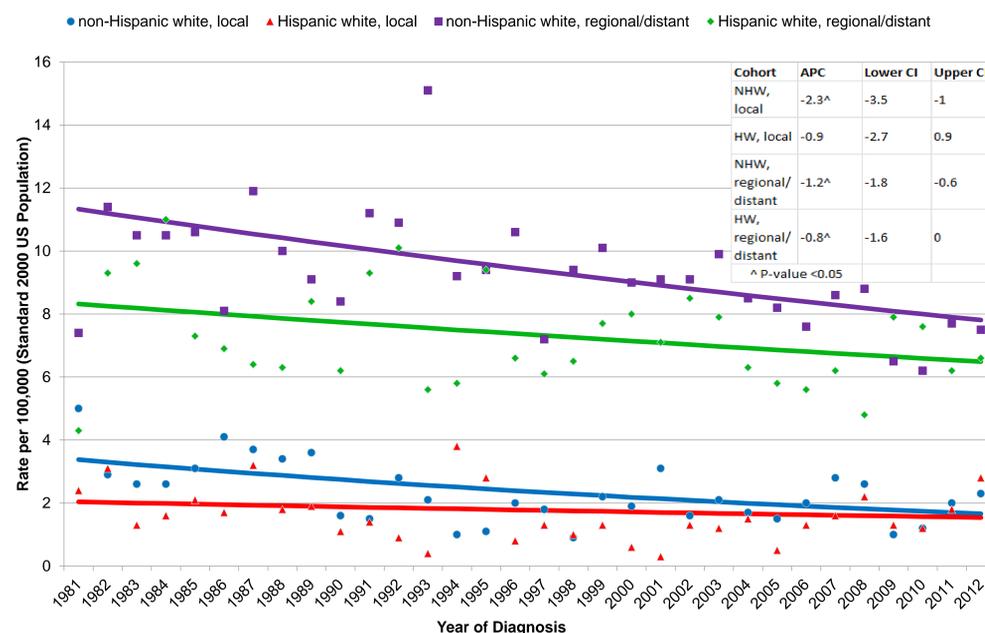


Figure 3. Age-adjusted epithelial ovarian cancer incidence rates in NM by race/ethnicity and stage, 1981 - 2012



## Results

- The overall incidence of ovarian cancer in New Mexico declined during the time period from 1981 to 2012 as seen in the national data.
- There was a significant reduction in the age-adjusted epithelial ovarian cancer incidence among NHW women in NM (APC=-1.4, p<0.05)
- A more modest but significant reduction was seen in HW women (APC=-0.81, p<0.05)
- A statistically significant decrease in the age-adjusted ovarian cancer mortality rates were seen among NHW (APC=-0.83, p<0.05) and no change in HW women (APC=0.06, p=0.9).
- There was a statistically significant decrease in the age-adjusted epithelial ovarian cancer incidence among NHW with both local and regional/distant disease (APC=-2.3, p<0.05 and APC=-1.2, p<0.05) among HW with regional/distant disease (APC=-0.8, p<0.05), but a non-statistically significant decrease was seen among HW with local disease (APC=-0.9, p=0.3).

## Discussion

- Incidence and mortality are decreasing for both HW and NHW women.
- We found that HWs are experiencing a decrease in the incidence of epithelial ovarian cancer, although not as strong as that seen in NHWs.
- It appears as though the disparities between NHW and HW is lessening among women diagnosed with local and regional/distant disease.
- For unknown reasons, this is not accompanied by an analogous decrease in mortality.
- We found that HWs are experiencing a decrease in their incidence rate of local and regional/distant stage disease at diagnosis, although not as strong as that seen in NHWs.

## Key Findings / Conclusions

- More research is needed to better understand the racial/ethnic differences in order to eliminate the racial/ethnic disparity.
- The decrease in overall incidence among both groups of women may largely be due to oral contraceptive use during a woman's reproductive years.

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