Statement of Dr. Anne Mc Tiernan prepared for the Subcommittee on Economic and Consumer Policy Hearing on Examining the Public Health Risk on Carcinogens and Consumer Products, March 12, 2019

Chairman Krishnamoorthi, Ranking Member Cloud, and members of the subcommittee, good morning and thank you for inviting me. My name is Dr. Anne McTiernan. I am a cancer prevention researcher in the Epidemiology Program, Division of Public Health Sciences, at the Fred Hutchinson Cancer Research Center in Seattle, Washington. I am also a Research Professor in the University of Washington Schools of Public Health and Medicine. I am not representing the Fred Hutchinson Cancer Research Center or the University of Washington in the presentation of my testimony to the Subcommittee. I am an internal medicine physician and epidemiologist. My research focuses on cancer epidemiology and prevention, particularly cancers in women. I was asked to give testimony today because I have conducted a thorough and systematic review of the science linking use of talcum powder products and risk for ovarian cancer. As part of this review, I prepared an expert report on behalf of consumers for an ongoing multi-district litigation on talcum powder products as causes of ovarian cancer.

My scientific review focused primarily on the epidemiologic research. Epidemiologists look at large groups of people with a disease, and compare them to people without that disease, to find what might be causing the disease.

The American Cancer Society and the U.S. National Cancer Institute estimate that in 2019, 22,530 women will receive a new diagnosis of ovarian cancer and 13,980 women will die from ovarian cancer.(1, 2) There is no established method to screen for early ovarian cancer. As a result, most women are diagnosed at an advanced, less treatable stage. There is also no

established method to prevent ovarian cancer other than surgical removal of ovaries. Therefore, it is critical to identify causes of ovarian cancer in order to prevent this serious disease.

My review identified 38 high-quality epidemiologic studies conducted over the past 40 years. These studies asked women about their use of talcum powder products in the genital area, and tested associations with risk of ovarian cancer. Together, these studies included over 14,000 women with epithelial ovarian cancer (the most common type) and an even greater number of women without ovarian cancer. Most of these studies were conducted in the United States.

Ovarian cancer is thought to develop over years. Therefore, a woman's exposures in her young and middle years can affect her risk of ovarian cancer decades later. Women have reported use of talcum powder products on sanitary napkins, underwear, and directly to the genital area. In some studies, over 4 in 10 women report ever regularly using these products in the genital area.(3)

Summarizing data from all of the published studies consistently shows that women who had ever used talcum powder products in the genital area had a statistically significant 22 - 31% increased risk of developing epithelial ovarian cancer compared with women who had never used them.(4-6) Evidence suggests that these associations hold across diverse race and ethnic groups.

These combined analyses showed that increasing amount of exposure to talcum powder products in the genital area resulted in increasing risk of developing epithelial ovarian cancer.

Published laboratory and clinical studies provide evidence that in humans, talc can migrate from the genital area to the ovaries and fallopian tubes. Talc has been shown to cause an inflammatory response in the human body. Elevated levels of inflammation in women are associated with increased risk of ovarian cancer. All of this provides a biologically plausible pathway by which talcum powder product exposure can cause ovarian cancer.

Given the frequency with which asbestos has been found in cosmetic and personal use talc products, I reviewed the literature on the epidemiology of asbestos and risk of ovarian cancer. In 2012, the International Agency for Research on Cancer stated that a causal association between exposure to asbestos and cancer of the ovary was clearly established.(7) That agency has also classified fibrous talc as a Class 1 carcinogen – the most dangerous level of carcinogen.

Given the high prevalence of use of talcum powder products, a 22 - 31% increase in risk can have profound effects on clinical events and public health. Women need to know about the risks of using talcum powder products in their genital areas. All consumers need to be warned about the contents of these products, including asbestos and fibrous talc, so that they can make informed decisions about use.

Thank you for the opportunity to provide this testimony. I would be happy to answer any questions you may have.

Anne McTiernan, MD, PhD Full Member, Public Health Sciences Fred Hutchinson Cancer Research Center, Seattle, Washington 1. <u>https://www.cancer.org/content/dam/CRC/PDF/Public/8773.00.pdf</u> (accessed 3/7/19)

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