

## **STUDIES USING NEBRASKA PARKINSON'S DISEASE REGISTRY DATA**

### **Prevalence of Parkinson's disease in the Agricultural Community – September 2019**

Determine the need for future agricultural health and safety support for Nebraskans working in agriculture.

### **Age Specific Crude Incidence and Prevalence of Parkinson's disease – June 2019**

2012-2016 Age-specific crude incidence and prevalence of Parkinson's disease using actual and computer-generated date of diagnosis

### **Possible role of contaminants in Nebraska waterways by watershed – May 2018**

### **Association between Parkinson's Disease and Traumatic Brain Injuries – May 2018**

Examines the association between Parkinson's disease and traumatic brain injuries, including the different types and causes of injuries.

### **Parkinson's Disease Patient Comorbidities Compared to All Patients in Hospital Setting – Jan 2017**

Uses Nebraska Hospital Discharged Data to compare Parkinson's patients and comorbidities to all patients in the hospital setting. Results will be presented at the 2017 American Public Health Association Conference.

### **Patients and Cancer Risk Registry – Dec 2016**

Stratifies data by gender, primary cancer site, and county and calculates associated SIRs. Age-adjusted rates were calculated for four-year intervals for all cancer patients and stratified by gender to examine longitudinal trends.

### **Parkinson's Disease and Pesticides Exposure – Journal of Rural Health 2016**

Investigates the association between exposure to agricultural pesticides and Parkinson's using state-level crop classification data.

### **Parkinson's Disease Patients and Hospital Discharge Data – 2015**

Links Nebraska PD Registry Data with Nebraska Hospital Discharge Data (NHDD) to understand the consequences of PD patients who sought care in hospitals such as total charges, lengths of hospital stay and co-morbidity of PD patients.

### **Analysis by Max Theis, Dr. Thomas Safranek, DHHS Epidemiology – 2007**

PowerPoint presentation shows yearly patients diagnosed, source of initial reports, annual and mean crude PD incidence (including county map), etc.

### **Parkinson's Prevalence Estimated by a State Registry – Movement Disorder Journal 2004**

Examines the overlap of reporting by the sources to estimate the number not reported by any source, using the statistical technique "capture-recapture." Tabulations of age- and gender-specific prevalence rates, as well as county-level estimates, allow examination of areas of elevated or lowered prevalence.

### **Studies of Environmental Risk in Parkinson's Disease by John Bertoni MD and Daniel Strickland PhD – 2003**

Examines the relationship between PD and farm risk factors, including farm and non-farm exposure to pesticides, occupational exposure to other agents, medical history, genetic syndromes and familial clustering, and tobacco and alcohol use; the roles that soil and well water composition may play in PD risk; and levels of manganese, iron, and zinc in soil and well-water samples of PD patients.

**Other Studies**

We have received requests for PD data for other purposes such as requesting funding for the registry, determining the need of Parkinson's resource materials throughout the state, and supporting other DHHS staff to request federal funding for epidemiological studies.