

Trends in the incidence and prevalence of atopic dermatitis in the United States: eliciting differences by age and sex, 2019-2022



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Background

- Atopic dermatitis (AD) impacts over 9.6 million children and 16.5 million adults in the US.^{1,2}
- AD typically begins in childhood and disproportionately impacts females.³
- Recent evidence on nationwide trends in prevalence and incidence of AD stratified by age and sex is scarce.

Objective

The primary objective of this study was to examine the most recent prevalence and incidence trends of AD stratified by age and sex.

Study Design

•Data source

For this study we used IQVIA PharMetrics® Plus database which is representative of US commercially insured population under 65 years of age.

PharMetrics Plus comprises adjudicated claims for more than 210 million unique patients across the US, with approximately 40 million active patients in the most recent calendar year

•Study population

Patients with an AD diagnosis in 2019-2022 were identified and included in this analysis.

•Measures

- Incidence proportion was defined as the proportion of new AD cases per 100,000. Annual incidence proportions were reported.
- Period prevalence was defined as the proportion of total patients with AD per 100,000.
- Incidence proportion and prevalence were also reported by age group and sex.

Results

Fig. 1. Proportion of incident AD cases by sex, 2019-2022

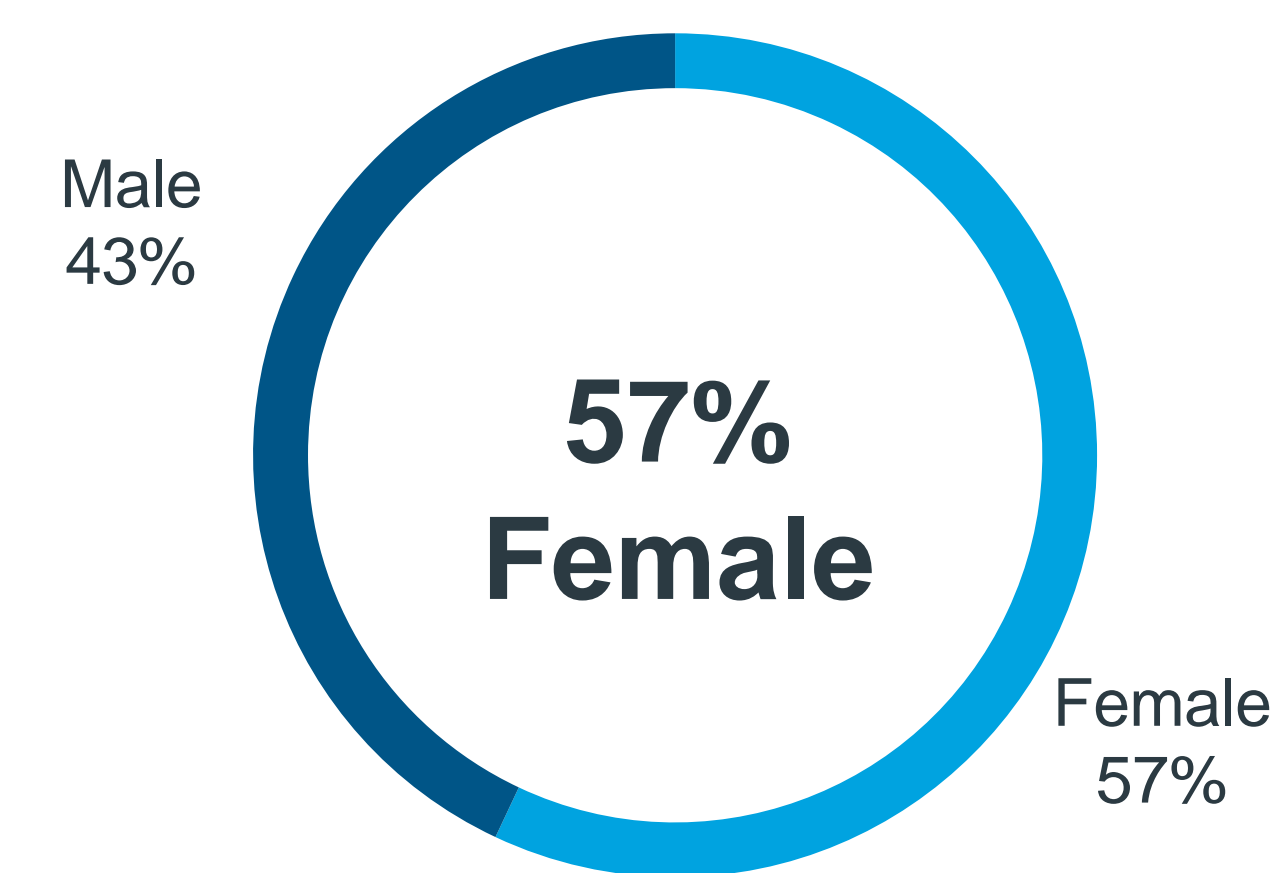


Fig. 2. Annual AD Incidence proportion

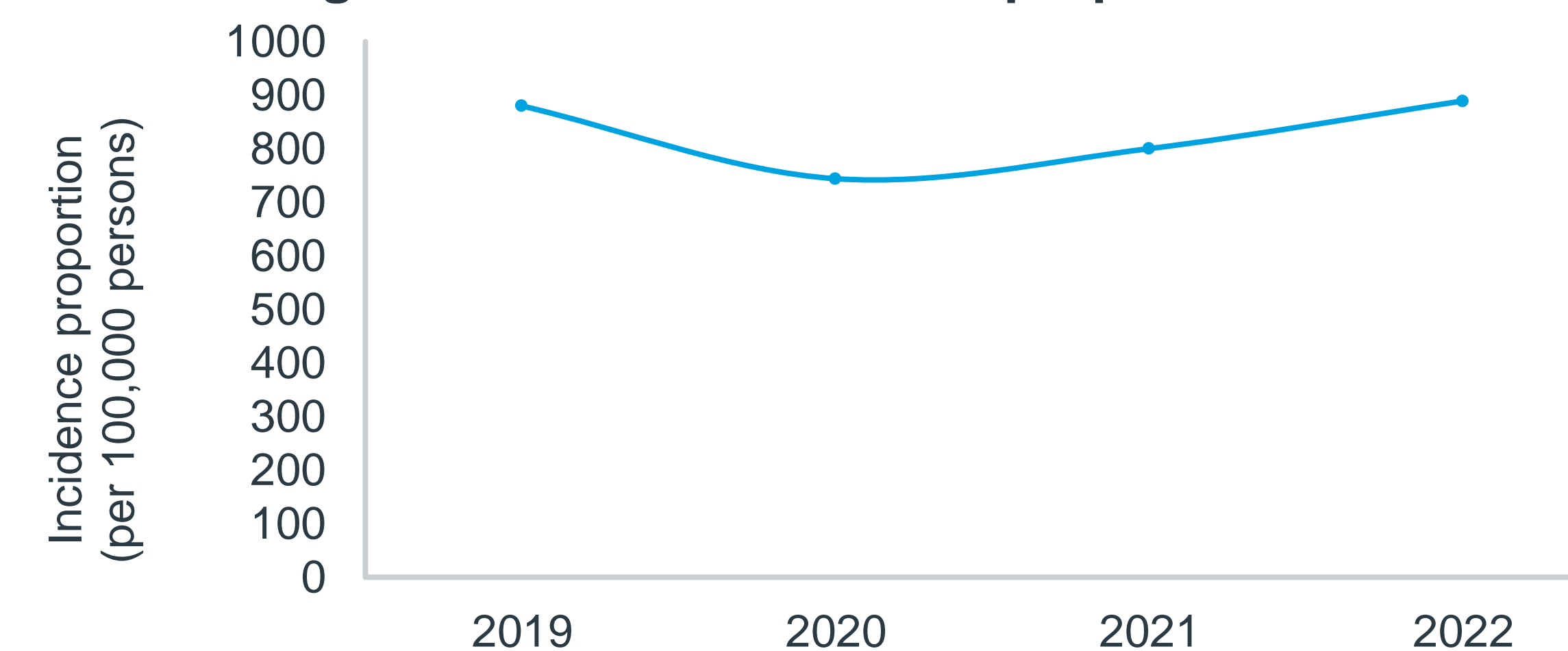


Fig. 3A. Annual AD Incidence proportion by age and sex

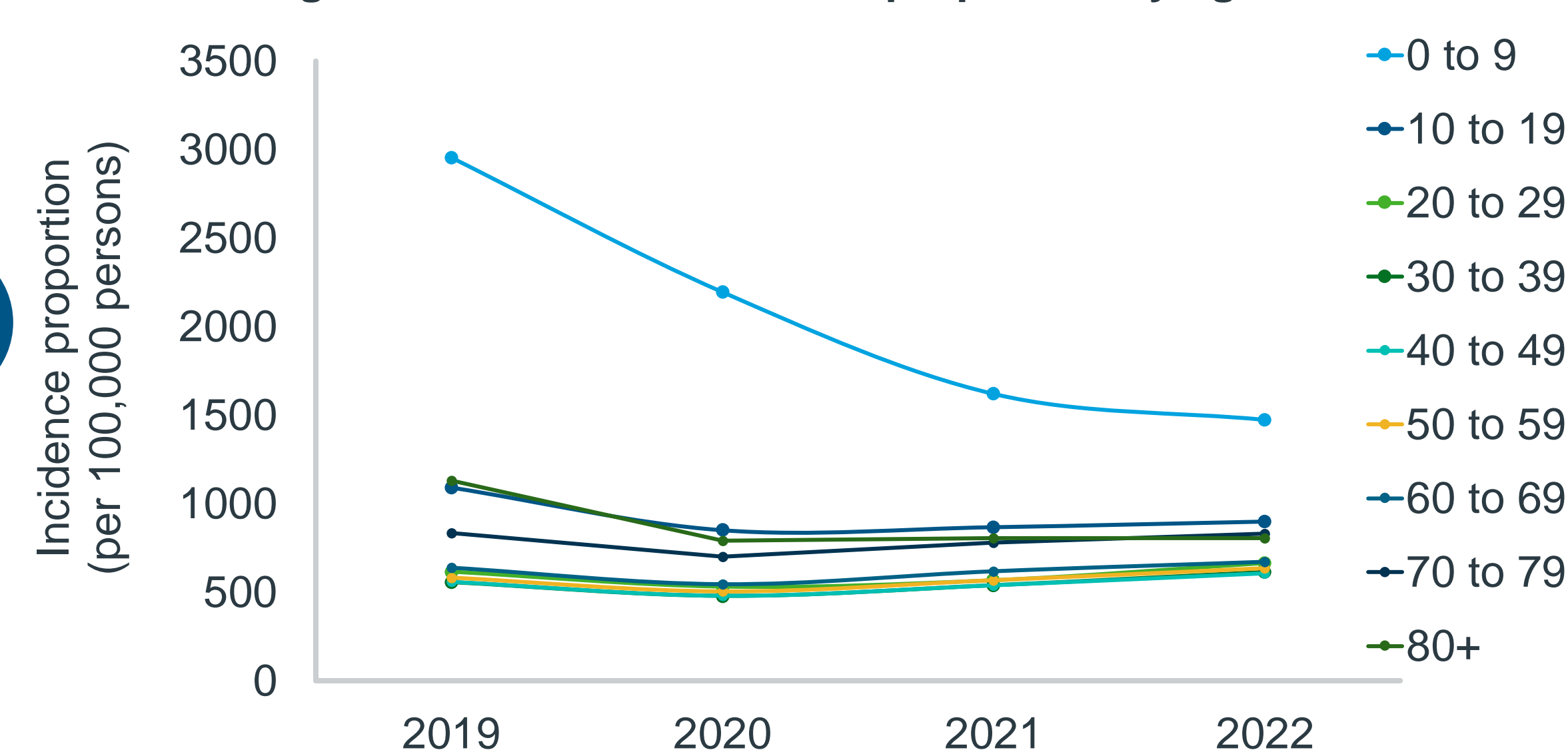


Fig. 3B. Annual AD Incidence proportion by age and sex

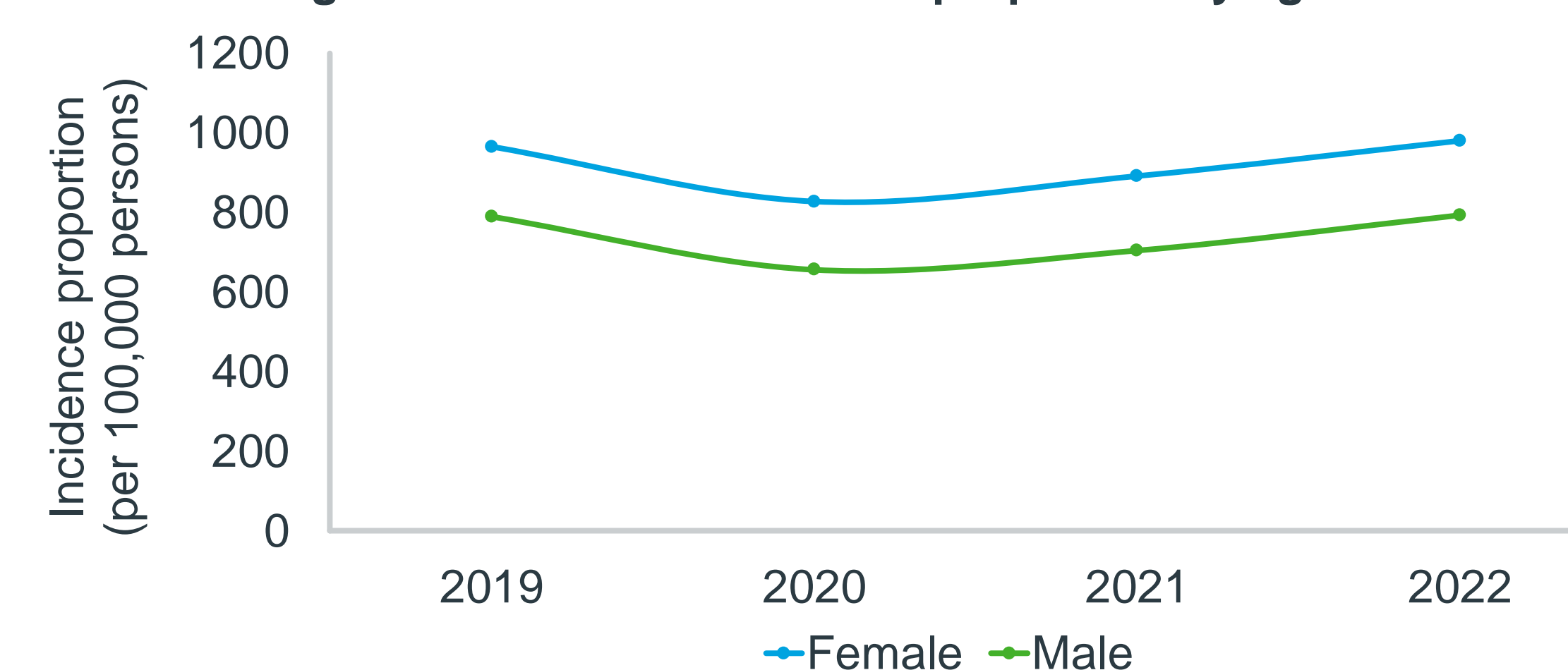


Fig. 4. Period prevalence of by age and sex, 2019-2022

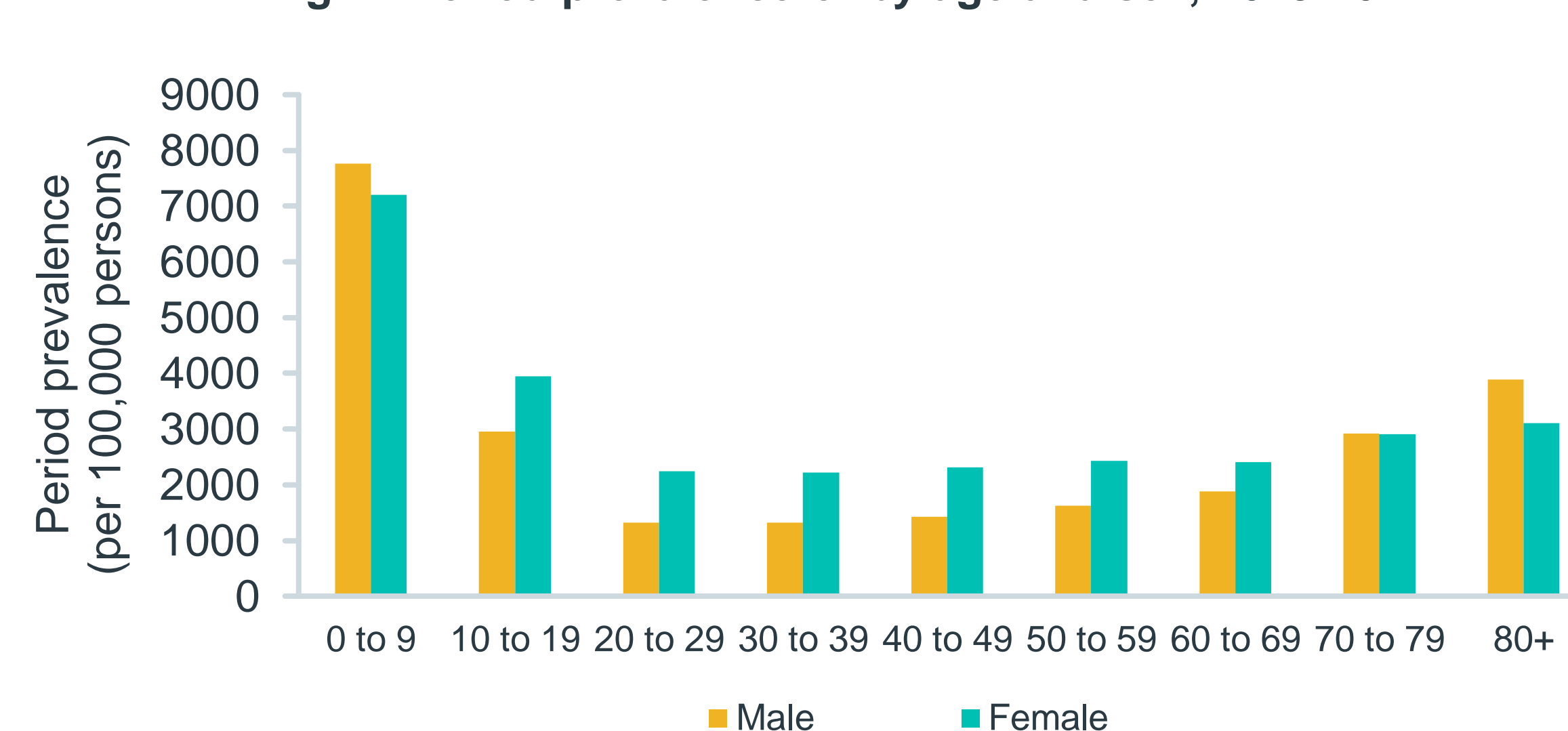


Fig. 5A. Overall annual prevalence of AD

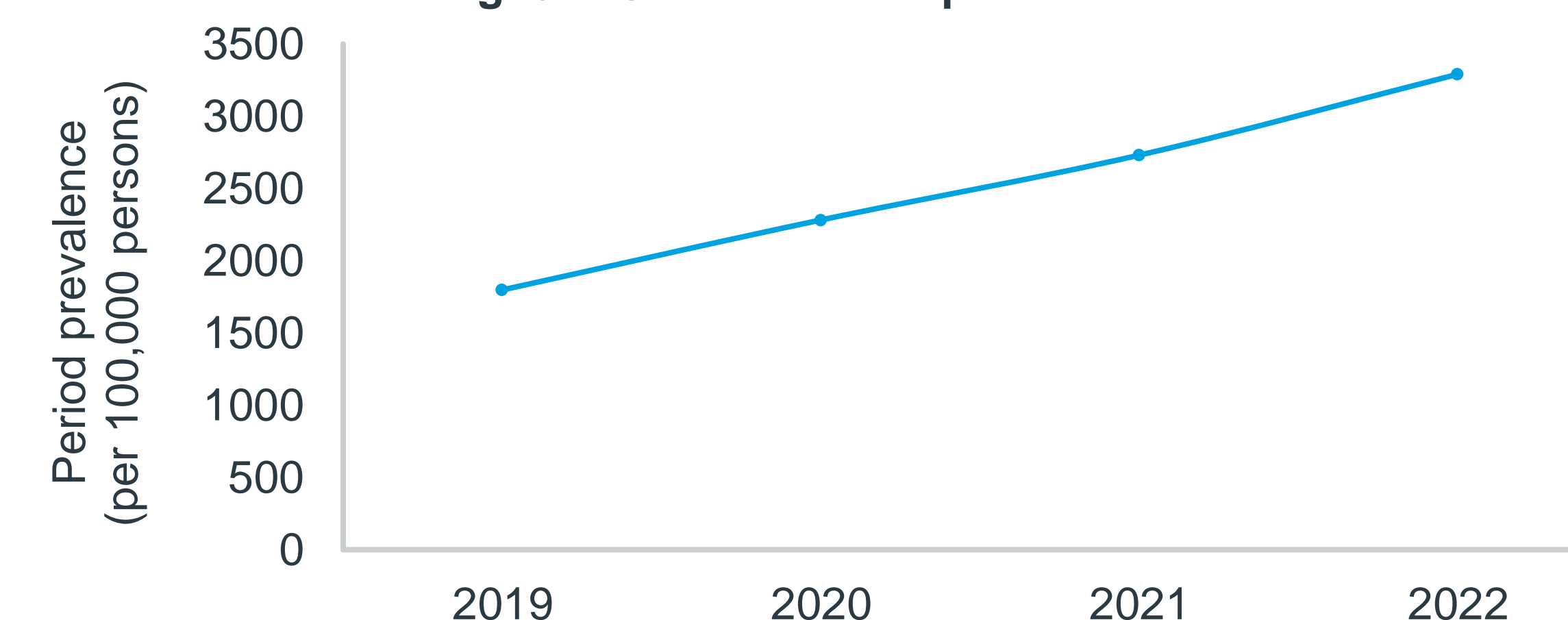


Fig. 5B. Annual prevalence of AD by age

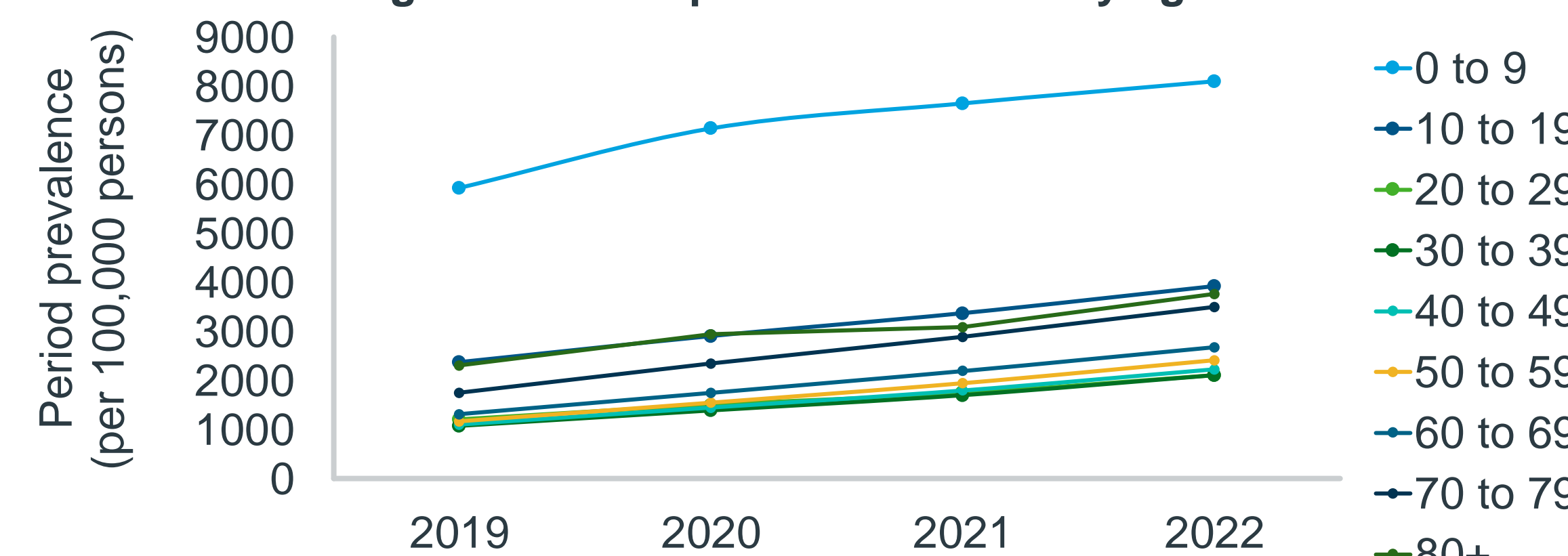
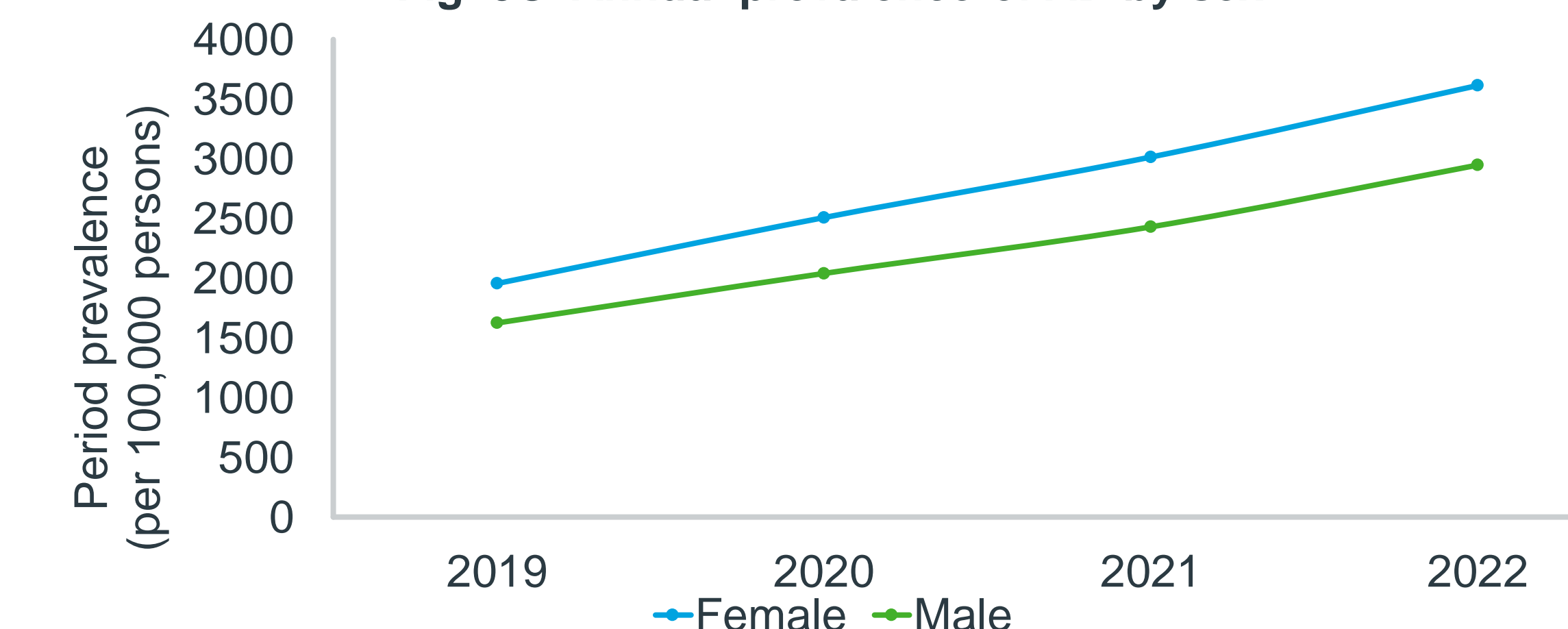


Fig. 5C. Annual prevalence of AD by sex



Key Insights

- A total of **1.7 million patients** had AD during 2019-2022. There was a higher proportion of incident AD cases among women during this time frame (Fig. 1).
- The **annual incidence** increased from 880.46 (CI: 877.71-883.23) in 2019 to 889.90 (CI: 886.91-892.89) per 100,000 in 2022; with a decrease in 2020 (Fig. 2).
 - Stratification by age demonstrates the annual incidence increased among adults but decreased among younger patients (aged 0-19 years) and elderly patients (aged 70-79, and 80+ years) (Fig. 3A).
 - Female patients had higher annual incidence than men (Fig. 3B).
- The 2019-2022 **period prevalence** of AD was 2,819.15 per 100,000 persons (95% CI: 2,815.05-2,823.25).
 - The period prevalence was higher among female patients in all age groups except younger patients (aged 0-19 years) and elderly patients (aged 70-79, and 80+ years) (Fig. 4).
- The **annual prevalence** increased from 1,795.62 (CI: 1,791.71-1,799.53) in 2019 to 3,292.32 in 2022 (CI: 3,286.71-3,297.93) per 100,000 persons (Fig. 5A)
 - The annual prevalence of AD increased from 2019 to 2022 for all age groups (Fig. 5B).
 - There was a sharper increase among women (1,955.28 [2019] to 3,614.74 [2022] per 100,000) than men (1,624.66 [2019] to 2,946.22 [2022] per 100,000) (Fig. 5C).

Conclusions

- There is an increase in prevalence of AD overall and among all age groups from 2019 to 2022.
- The proportion of newly diagnosed AD patients increased from 2019 to 2022 among all age groups except younger and elderly patients.
- The overall prevalence of AD was higher among female patients, but stratification by age elicited that this pattern varied among younger and elderly patients.

References

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