prostate cancer risk. Triazole fungicides are widely used in agriculture to fight against several crop diseases such as odium scab, rot... Some are carcinogenic on animals, many are endocrine disruptors and most of them were never studied in epidemiology.

**Material and Methods** Data on pesticide use on 10 crops, including years of beginning and ending, were collected in 2005–2007 for 81,960 men from the enrolment questionnaire of AGRICAN. Incident prostate cancer cases were identified through linkage with cancer registries. Exposure to 26 triazole fungicides was assessed using the crop-exposure matrix PESM-MAT (Baldi, 2017). Hazard Ratios (HR and 95%CI) were estimated using Cox models with attained age as time scale.

**Results** Until 2017, we identified 4,654 incident prostate cancer cases among AGRICAN men. 42,316 men were exposed to pesticides and 21,645 to at least one of the 26 triazole fungicides. An elevated prostate cancer risk was found with azaconazole -used on fruit growing between 1995 and 2003 (HR=1.21, p=0.12), with no duration effect. We also found a tendency of excess risk with exposure to myclobutanil (used on vineyard and fruit growing) for use exceeding 30 years (HR=1.43, p=0.20), and to penconazole (used on vineyard, fruit growing and tobacco) for a duration of use between 30 and 40 years (HR=1.65, p=0.16). In contrast, we found a tendency of decreased risk for exposure to tebuconazole during more than 40 years (HR=0.70, p=0.19), and for short exposure duration to triadimenol (HR<10 years=0.88, p=0.18).

**Conclusions** Considering ever/never exposure, we found few associations between prostate cancer and triazoles. We will assess exposure more in depth with the calculation of life-long cumulated scores score exposure (probability x frequency x intensity), especially for triazoles associated with prostate cancer in the present analysis.

**Dusts and fibres**

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<th>EXPOSURE LEVELS OF DUST, ENDOXOIN, AND MICROORGANISMS IN THE DANISH RECYCLING INDUSTRY</th>
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**Introduction** The amount and recycling of domestic waste and subsequent numbers of employees in the recycling industry is expected to increase. This study aims to quantify current exposure levels of dust, endotoxin, and microorganisms and to identify determinants of exposure among recycling workers.

**Material and Methods** This study investigates employees in the Danish recycling industry, who pre-treat or recycle domestic waste. We collected inhalable dust with personal samplers and analysed the samples for endotoxin (n = 170) and microorganisms (n = 101). Exposure levels of dust, endotoxin, and microorganisms and determinants of exposure were explored by mixed-effects models.

**Results** The overall geometric mean exposure level among workers pre-treating or recycling domestic waste was 0.6 mg/m³ for inhalable dust, 10.7 endotoxin unit (EU)/m³ for endotoxin, 1.6×10⁴ colony forming unit (CFU)/m³ for bacteria, 4.4×10⁴ CFU/m³ for fungi (25 °C), and 1.0×10³ CFU/m³ for fungi (37 °C). Workers handling metal, plastic, paper/cardboard, or mixed fractions were higher exposed than workers handling electronics and hazardous waste. For inhalable dust and endotoxin, exposure levels for outdoor work were low compared to indoor work. Indoor ventilation decreased fungi exposure (up to 3.5 times).

**Conclusion** Exposure levels of inhalable dust and endotoxin among recycling workers in Denmark are generally low; however, 8 – 58% of individual measurements are above established or suggested occupational exposure limit. Waste fraction and to a less degree, also location and ventilation were determinants of inhalable dust, endotoxin, and microorganism exposures, and thus an implication of this study is for the companies to use ventilation when working indoors.