Introduction Hypertension a leading cause for cerebro-cardiovascular diseases. However, a positive lifestyle could potential modify the risk of hypertension. Despite, reports on the positive association between sedentary work life and hypertension/prehypertension, studies involving blue collar workers are scarce. Current multi-centered study investigated the cross sectional prevalence of prehypertension and hypertension among a group of blue collar (construction) workers.

Methods Present cross sectional quantitative multi-centre study (Ahmedabad & Bengaluru) was executed after later to receiving Institute human ethics committee approval. Details on basis demographics and substance use was collected from all consenting construction labourers employed at construction sites. Blood pressure and Body Mass Index (BMI) were measured using standard protocols. R software was used to collect, record and clean the data.

Results A total of 1253 construction workers with mean (SD) age of 28.6 (9.6) years and 92% males consented to participate. About 46.7% and 30% respectively reported of tobacco and alcohol usage. The prevalence of pre-hypertension and hypertension was estimated as 39.3% and 11.1% respectively. Factors such as age, substance use, average work hours per day and BMI significantly increased the risk for hypertension.

Conclusion Interestingly the prevalence of prehypertension among these blue collar workers was high, despite the labour intensive nature of work and relatively young age. Current observations suggest the need for further investigations, strengthen the ongoing screening and intervention programs by the public health policy makers.
prostate cancer risk. Triazole fungicides are widely used in agriculture to fight against several crop diseases such as odi-
uum 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 PESTI-
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 dur-
ing 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

EXPOSURE LEVELS OF DUST, ENDOXOIN, AND
MICROORGANISMS IN THE DANISH RECYCLING
INDUSTRY

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, endo-
toxin, 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 endo-
toxin, 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/card-
board, 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; how-
ever, 8 – 58% of individual measurements are above estab-
lished or suggested occupational exposure limit. Waste fraction
and to a less degree, also location and ventilation were deter-
minants of inhalable dust, endotoxin, and microorganism
exposures, and thus an implication of this study is for the
companies to use ventilation when working indoors.