

## 4.S. Health outcomes and social determinants

### Changes in disease burden in Poland, 1990-2017: a systematic analysis for the GBD Study 2017

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#### Background:

In Poland, a comprehensive analysis describing trends in disease burden for major conditions has never been published. The study objective was to use the GBD database to assess disease burden in Poland, evaluate changes in population health between 1990-2017, and compare Poland with other Central European (CE) countries.

#### Methods:

The results of GBD 2017 for 1990 and 2017 for Poland were used to assess rates and trends in years YLLs, YLDs, DALYs.

#### Results:

Between 1990 and 2017, age-standardized YLL rates for all causes declined in Poland by 46.0%, YLD rates declined by 4.0%, and DALY rates by 31.7%. Greater relative declines were observed for females regarding YLLs/YLDs. There was a decrease in communicable, maternal, neonatal and nutritional disease DALYs (48.2%); DALYs due to non-communicable diseases (NCDs) decreased 2.0%. In 2017, Poland performed better than CE as a whole (ranked 4th for YLLs, 6th for YLDs and 5th for DALYs) and achieved greater reductions in YLLs and DALYs than most CE countries. In both 2017 and 1990, the leading cause of YLLs and DALYs in Poland was ischemic heart disease (IHD), of YLDs - low back pain. In 2017, the top 20 causes of YLLs and YLDs in Poland and CE were the same, although the order was different. In Poland, age-standardized DALYs from neonatal causes, other cardiovascular and circulatory diseases, and road injuries declined substantially between 1990 and 2017, while alcohol use disorders and chronic liver diseases increased. The highest observed-to-expected ratios (OER) were seen for alcohol use disorders for YLLs, neonatal sepsis for YLDs, and falls for DALYs (3.21, 2.65 and 2.03 respectively).

#### Conclusions:

Improvement in Health in Poland has been observed since 1990. In 2017 the country outperformed CE as a whole for YLLs, YLDs and DALYs. While the health gap between Poland and Western Europe has diminished, it remains substantial. IHD is still the leading cause of disease burden in Poland, but DALYs from IHD are declining.

#### Key messages:

- In the light of dramatic shortage/aging of the workforce and low public health expenditure, the observed rise in NCDs and between-gender inequalities pose a challenge for the Polish health-care system.
- To minimize the gap between Poland and Western Europe, an integrated response, which addresses the causes of death and ill-health, particularly those for which rates have increased, is urgently needed.