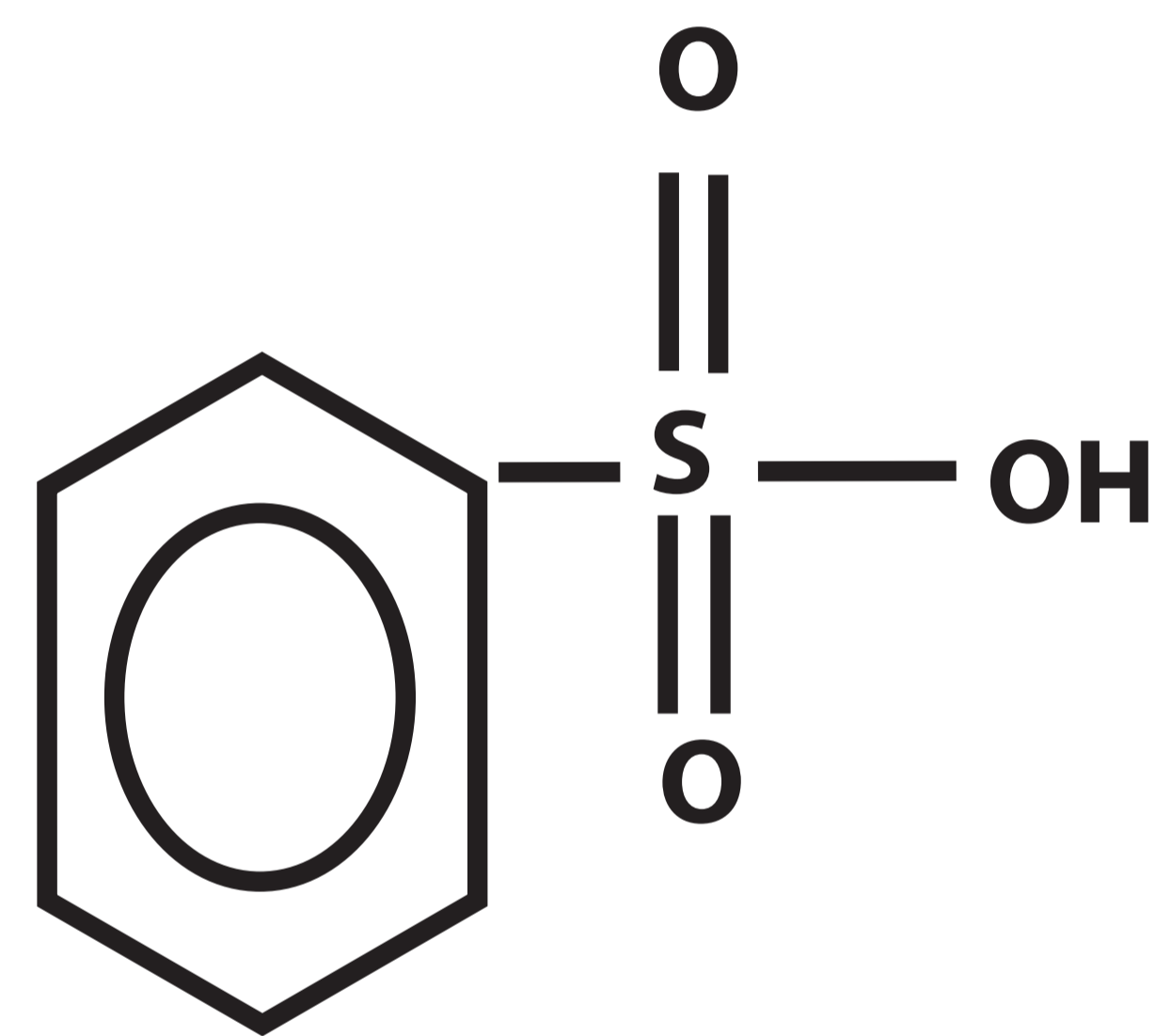


Reducing health risks through substitution – foundry case study

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Benzene sulphonic acid (BSA)



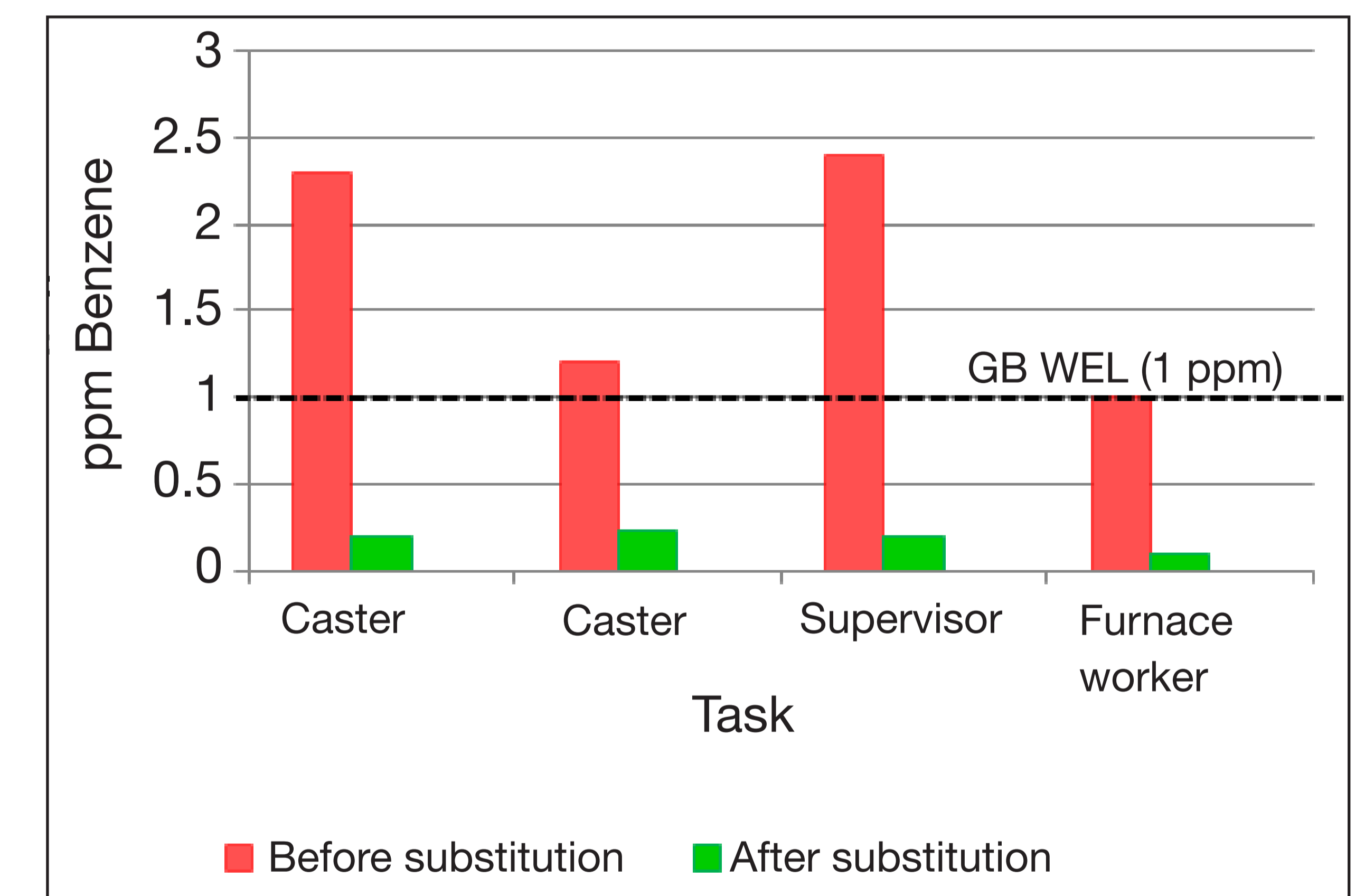
BSA is present in hardeners used in foundry mould making to aid with setting of moulds.

During casting, the heat from the molten metal can de-sulphonate the BSA generating benzene (a carcinogen¹) within the casting fume

At two foundries using BSA, workers involved in casting had measured exposures to benzene greater than the GB WEL of 1 ppm.



In accordance with the COSHH² Regulations 2002 (as amended) hierarchy of control, both foundries substituted the BSA for another, less harmful substance (xylene sulphonic acid). Once this was completed, benzene exposures were measured again and were found to have significantly reduced.



¹ International Agency for Research on Cancer

² Control Of Substances Hazardous to Health