Results Intervention arm families had a significantly lower median water temperature at 3 and 12 months follow up than control arm families (3 months: I=45.0C (IQR 45.0C, 46.0C), C=56.0C (IQR 52.0C, 59.0C), p<0.001; 12 months: I=46.0C (IQR 45.3C, 46.0C), C=55.0C (IQR 52.0C, 58.0C), p<0.001). They were significantly more likely to be satisfied with their bath hot water temperature (RR 1.43, 95% CI 1.05 to 1.93), less likely to report their water was too hot (RR 0.33, 95% CI 0.16 to 0.68) and less likely to check the temperature of every bath (RR 0.84, 95% CI 0.73 to 0.97). Seven (15%) families reported problems with their TMV.

Conclusion TMVs reduce bath hot tap water temperatures and are acceptable to families. Housing providers should consider fitting TMVs in their properties and legislators should consider mandating their use.

0416 RANDOMISED CONTROLLED TRIAL OF THERMOSTATIC MIXER VALVES IN REDUCING BATH HOT TAP WATER TEMPERATURE IN FAMILIES WITH YOUNG CHILDREN IN SOCIAL HOUSING

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Background Hot bath water scalds are a serious problem in the UK, and thermal injuries disproportionately affect disadvantaged families. TMVs are designed to reduce bath tap water temperature and scald risk. Their use in private homes has not been tested using a randomised design.

Method RCT undertaken in collaboration with Glasgow Housing Association. Families with young children were randomised to (a) intervention arm (I)=TMV fitted to the bath water supply pipes and educational leaflets, or (b) control arm (C)=TMV fitted at end of the trial. The primary outcome measure was bath hot tap water temperature at 3 and 12 months post intervention. Secondary outcome measures included acceptability and bath safety practices.