Supplemental Figures

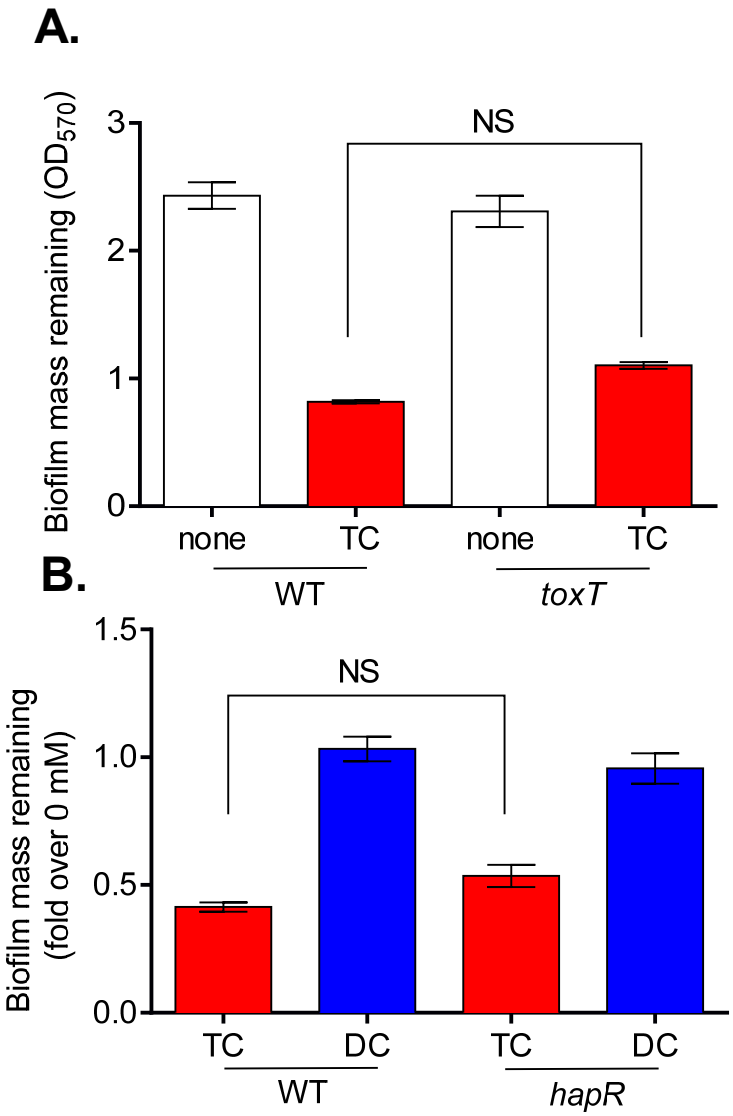

Figure S1. The effects of virulence gene expression and quorum sensing on biofilm dispersal. **A.** Detachment of WT and Δ*toxT* mutant strains in the presence of TC or DC, in which remaining biofilm mass is quantified by CV staining. **B.** Detachment of WT and Δ*hapR* mutant strains in the presence of TC or DC, in which remaining biofilm mass is quantified by CV staining. As Δ*hapR* strains form thicker biofilms, data are presented as fold change over the no supplement condition. Statistical significance reported as NS: no significance.

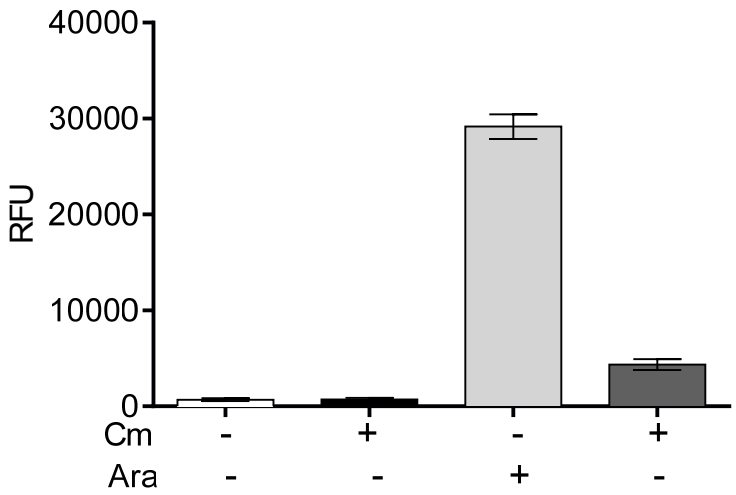

Figure S2. Effects of chloramphenicol on protein syntheis. *V. cholerae* harboring pBAD-GFP vector was inoculated into glass tubes and allowed to form biofilms for 24 hours at 22ºC. Biofilms were incubated with the protein-synthesis inhibitor chloramphenicol (Cm) and 0.1% arabinose for two hours. Biofilms were washed with PBS, manually disrupted, and fluorescence measured. Fluorescence was normalized to OD_{600} and reported in relative fluorescence units (RFU). Data are means and s.d. of three independent experiments.

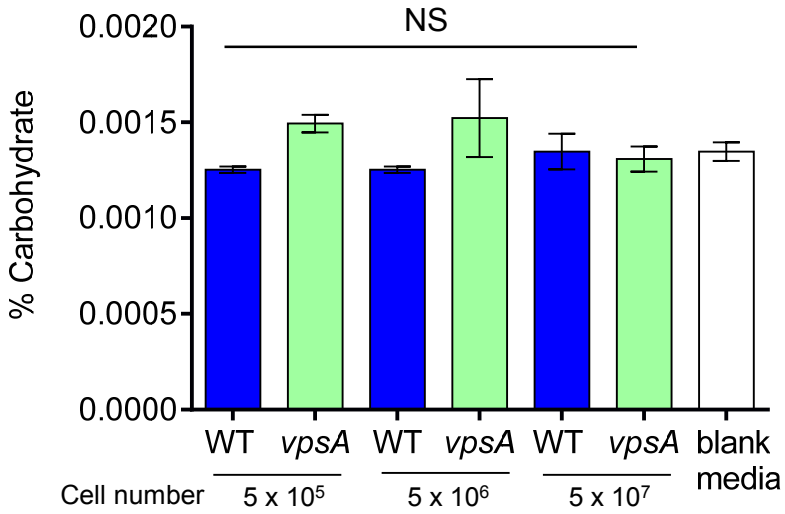

Figure S3. Contribution of cell lysis to carbohydrate content measured. 1 mL of mid-log culture of wild type or Δ*vpsA V. cholerae* was pelleted and resuspended in 1 mL of M9 minimal media + 0.2% glycerol then diluted 10, 100, or 1000-fold into 1mL of media. Aliquots were serially diluted and plated to quantify bacterial concentration. Samples were sterilized through 0.2 µM filters and carbohydrate content of filtrate was estimated using a modified phenol-sulfuric acid method. Data are means and s.d. of three independent experiments. Statistical significance reported as NS: no significance.

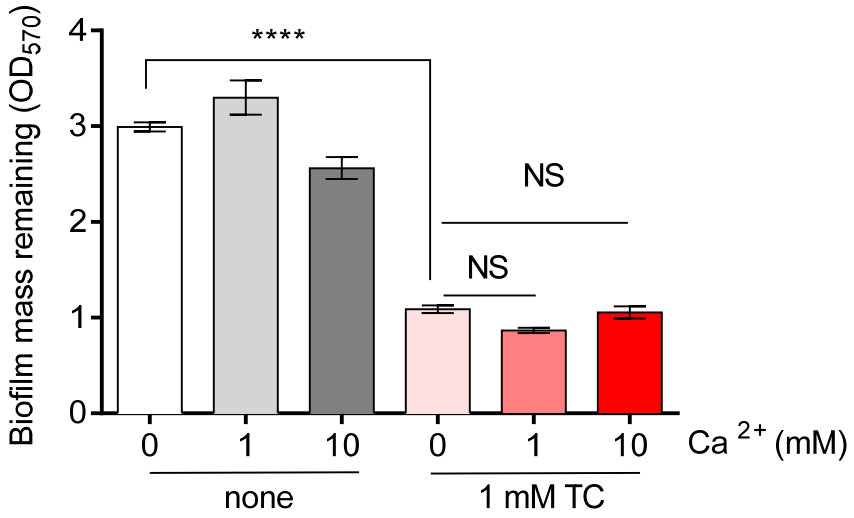

Figure S4. The effects of Ca^{2+} on biofilm dispersal. Detachment of WT V. cholerae in the presence of Ca2+ and TC as measured by biofilm mass remaining. Data are means and s.d. of three independent experiments. Statistical significance reported as NS: no significance; ****: P< 0.0001.

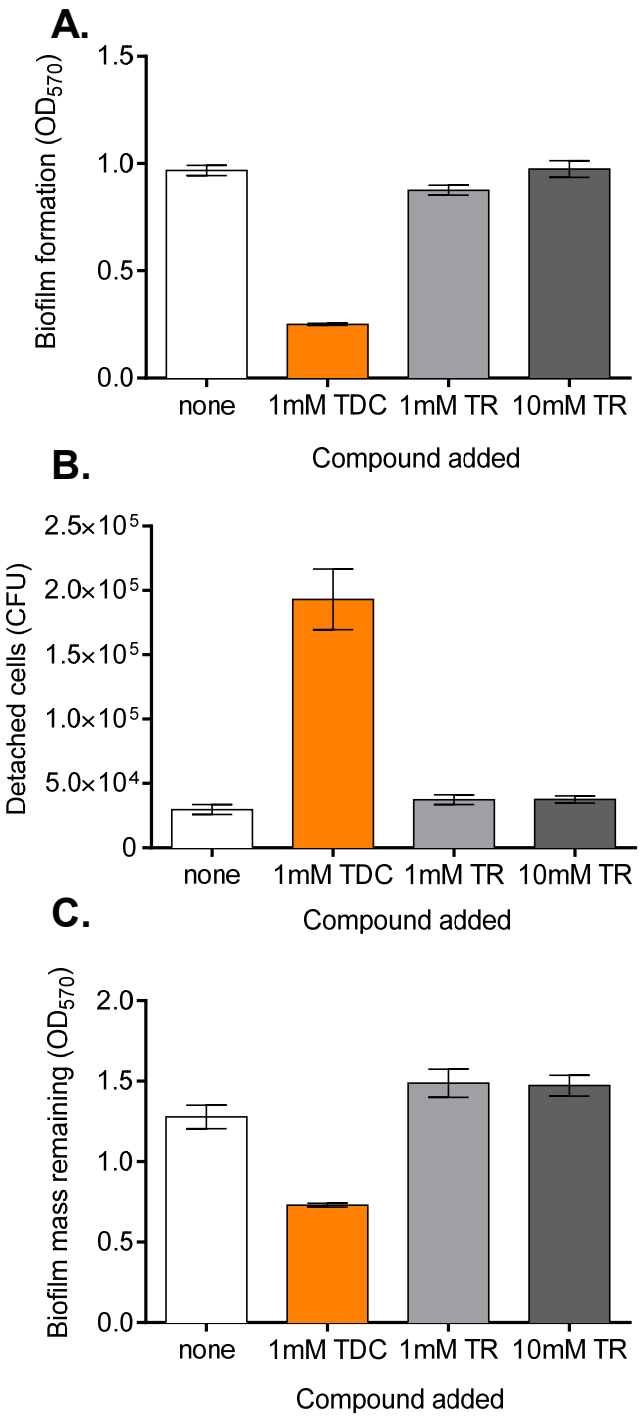

Figure S5. The effect of taurine and TDC on *V. cholerae* biofilm dispersal. **A**. *V. cholerae* was inoculated into glass tubes and allowed to form biofilms for 24 hours at 22ºC. Biofilms of cultures grown in the presence of taurodeoxycholate (TDC), or taurine (TR) were quantified with crystal violet staining and data are presented in OD_{570} values. **B and C.** Detached cells and remaining biofilm mass when mature biofilms were incubated in the presence of 1mM TDC, 1mM TR or 10 mM TR for two hours. Data are means and s.d. of three independent experiments.