Epidemiological cut-off values were developed for application to antibiotic susceptibility data for Flavobacterium psychrophilum generated by standard CLSI test protocols. The MIC values for ten antibiotic agents against Flavobacterium psychrophilum were determined in two laboratories. For five antibiotics, the data sets were of sufficient quality and quantity to allow the setting of valid epidemiological cut-off values. For these agents, the cut-off values, calculated by the application of the statistically based normalized resistance interpretation method, were ≤16 mg L-1 for erythromycin, ≤2 mg L-1 for florfenicol, ≤0.025 mg L-1 for oxolinic acid (OXO), ≤0.125 mg L-1 for oxytetracycline and ≤20 (1/19) mg L-1 for trimethoprim/sulphamethoxazole. For ampicillin and amoxicillin, the majority of putative wild-type observations were 'off scale', and therefore, statistically valid cut-off values could not be calculated. For ormetoprim/sulphadimethoxine, the data were excessively diverse and a valid cut-off could not be determined. For flumequine, the putative wild-type data were extremely skewed, and for enrofloxacin, there was inadequate separation in the MIC values for putative wild-type and non-wild-type strains. It is argued that the adoption of OXO as a class representative for the quinolone group would be a valid method of determining susceptibilities to these agents.