

Proposal Subject	Real Time PCR Method for Determining Levels of <i>V. parahaemolyticus</i>
Text of Proposal/ Requested Action	<p>With the advent of real-time PCR assays, it is now possible to conduct more rapid and accurate screening for <i>Vibrio parahaemolyticus</i> within 24 hour time frame. Real-time PCR assays are generally less labor intensive and less time consuming than the traditional biochemical assays that have been used to detect total <i>Vibrio parahaemolyticus</i>.</p> <p>The State of Washington Department of Health has developed a multiplex real time PCR assay for the detection of <i>Vibrio parahaemolyticus</i> (VP) using the Applied Biosystem Taqman Platform. This assay targets two species identification markers (<i>tlh</i> and <i>gyrase B</i>) for total VP, the virulence marker (<i>tdh</i>), and a <i>16S</i> target that is specific for five species (<i>V. parahaemolyticus</i>, <i>V. alginolyticus</i>, <i>V. furnissii</i>, <i>V. harveyi</i>, <i>V. fluvialis</i>) within the genus.</p>
Public Health Significance	<p><i>Vibrio parahaemolyticus</i> continues to cause food borne outbreaks globally due to the consumption of raw or undercooked oystersⁱ.ⁱⁱ Current molecular methods can differentiate between pathogenic (<i>tlh</i>+, <i>tdh</i>+) and non-pathogenic (<i>tlh</i>+, <i>tdh</i>-) organisms but real-time PCR procedures are not fully approved by the ISSC. This real-time PCR assay, if approved, would improve the turn around time for results for public health protection and seafood safety.</p> <p>ⁱWong, H.C., S. H. Liu, et al. (2000). Characteristics of <i>Vibrio parahaemolyticus</i> O3:K6 from Asia.” <u>Appl Environ Microbiol</u> 66(9): 3981-6.</p> <p>ⁱⁱDePaola, A., C. A. Kaysner, et al. (2000). “Environmental investigations of <i>Vibrio parahaemolyticus</i> in oysters after outbreaks in Washington, Texas, and New York (1997 and 1998).” <u>Appl Environ Microbiol</u> 66(11): 4649-54.</p>
Cost Information (if available)	None
Action by 2005 Laboratory Methods Review Committee	Recommended Proposal 05-108 be referred to the appropriate committee as determined by the Conference Chairman, with further direction to the Executive Office to organize a meeting of the Laboratory Methods Committee within six (6) months of the conclusion of this Biennial Meeting.
Action by 2005 Task Force I	Recommended adoption of the Lab Methods Review Committee recommendation on Proposal 05-108.
Action by 2005 General Assembly	Adopted recommendation of 2005 Task Force I.
Action by USFDA	Concurred with Conference action.