

The Effect of Environmental Factor on the Survival of Marine *Vibrio vulnificus*

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This study was conducted to assess the effects of environmental factors such as temperature, salinity, pH, and UV light on the survival of life-threatening *Vibrio vulnificus*. In the temperature range of 15 to 25°C, the numbers of *V. vulnificus* increased during the 6-day incubation. Incubation between 1 and 10°C showed that *V. vulnificus* survived poorly below 10°C. At salinities between 5 and 25ppt, the numbers of *V. vulnificus* increased or remained unchanged for 6-day. At salinities above this range, the numbers of *V. vulnificus* decreased. The optimal pH range was 6.5 to 8.0 and outside this range, the survival ratio of *V. vulnificus* was small. At 15 and 25°C, UV radiation was bactericidal for cultures of *V. vulnificus*. The counts of *V. vulnificus* were reduced approximately 10,000-fold after 2h of UV light treatment at both temperatures. Above results showed that environmental factors were important in the survival of *V. vulnificus* in the environment.