The seasonal accumulation of heavy metals were determined in bogue (*Boops boops*) collected monthly from Antalya Bay by using for ICP-AES Vista. Two standard material DORM-3 and DOLT-4 were analyzed for each ten elements. Analysis of these reference materials showed good accuracy. Cd, Cu, Fe, Ni, Se and Zn were determined in all tissues in all seasons, but other metals in tissues were below detection limit in some tissues. Fe was the highest metal in tissues while the lowest was was Cd. In this study, the results showed that the highest of heavy metals were found in the liver while the lowest concentrations were found in muscle and gill. The level of metals shows differences among seasons. In general, the metal levels were highest spring. Positive and negative relationships were found between metal levels and fish size. Metal concentrations in the muscle of examined fish were compared with Turkish Food Codex, World Health organization and EC standards.