RELATIONSHIP BETWEEN OPEN DEFECATION BEHAVIOR AND THE INCIDENCE OF DIARRHEA IN TLOGOAGUNG VILLAGE. KEDUNGADEM DISTRICT, BOJONEGORO Eva Hesti Puspa Sari¹, Ngadino², Pratiwi Hermiyanti³ Kementerian Kesehatan RI Politeknik Kesehatan Kemenkes Surabaya Program Studi Sanitasi Lingkungan Program Sarjana Terapan Email: evahesti24@gmail.com ABSTRACT The problem of sanitation in the residential environment, especially in family latrines, is a health problem that needs to be prioritized. Diarrhea can be transmitted through human feces, everyone in the family must use a latrine and the latrine must be clean to avoid insects that can transmit or transfer disease to food. The ownership of latrines in Tlogoagung Village in 2021 is 1,034 families and those who do not have latrines are 132 families. The incidence of diarrhea in 2021 is 97 cases out of a total population of 1,199 people. The purpose of this study was to analyze the relationship between latrine ownership and the incidence of diarrhea in Tlogoagung Village, Kedungadem District, Bojonegoro Regency. This type of research is analytical research with a case control approach. The research sample was 40 people with diarrhea and 40 did not have diarrhea using random sampling technique. Data collection was done by filling out a questionnaire and secondary data for the incidence of diarrhea. The data obtained were analyzed using Chi Square test. The results of the study of latrine ownership that met the requirements were 48 people (60.0%) and 32 people (40.0%), people (50.0%). The results of the Chi Square test between the latrine ownership variable and the incidence of diarrhea showed a p-value of 0.000 0.05, there was a relationship between latrine ownership and the incidence of diarrhea in Tlogoagung Village, Kedungadem District, Bojonegoro Regency.. Suggestions to the community to complete the facilities and infrastructure for supporting family latrines, both those that have been assisted by the government or other parties, so that the latrine becomes a proper latrine to be used... Keywords: Latrine Ownership, Diarrhea