INTRODUCTION: Since its first sighting in China at the end of 2019, COVID-19 had spread rapidly around the world, with no exception, to Indonesia. World Health Organization officially declared COVID-19 as a pandemic in March 2020. COVID-19 causes severe symptoms for those immunocompromised, making it an urgent matter to end the pandemic as soon as possible. In only 1 year since COVID-19 was found, the world has successfully developed COVID-19 vaccines which experts believe may bring an end to the pandemic. However, the vaccination also carries risk of adverse effect. AIM: The aim of this study is to report how the adverse effect of third dose mRNA-1273 vaccine in healthcare workers at Udayana University Hospital.

METHODS: The descriptive study collects data from all healthcare workers in Udayana University Hospital receiving third-dose mRNA-1273 vaccine using online questionnaires. We excluded incomplete responds to maintain quality of data. This report comprises demographic characteristics, clinical history, and the adverse effects and was approved by the ethical committee of Udayana University.

RESULTS: We received a respond rate of 86.9% (N=553) from a total of 636 healthcare workers who received the third-dose mRNA-1273 vaccine. Our respondents had a mean age of 37 (SD ± 7.81) years old. Most were female (55.8%) aging 20-29 years old (57.1%), and had an interval between their initial and third dose between 3-5 months (53.4%). Adverse effect most recorded was local pain (82.8%), followed by fever (56.4%), weakness/fatigue (39.3%), excessive sleepiness (32.5%), dizziness (30.1%), headache (27.6%), nausea/vomiting (21.5%), excessive hungriness (18.4%), other symptoms (11.0%) and local erythema (10.4%). About 39.9% of the respondents felt the adverse effect 12-24 hours post-vaccination.

CONCLUSION: Adverse effects following third-dose mRNA-1273 vaccination in healthcare workers of Udayana University Academic Hospital includes local pain, fever, weakness/fatigue, excessive sleepiness, dizziness, headache, nausea and vomiting, excessive hungriness, and local erythema. Most of these symptoms occurred within the first 24 hours post-vaccination.

Key words: Vaccine; Adverse Effect; mRNA-1273; COVID-19; Healthcare Worker; Booster Shot.