INTISARI

Efektivitas Penerapan Biosekuriti di *Feedlot* Lembu Setia Abadi Jaya Tangerang Terhadap Penyakit Mulut dan Kuku (PMK)

Dyka Damayati

Biosekuriti merupakan tindakan pertahanan pertama untuk pengendalian wabah dan dilakukan untuk mencegah semua kemungkinan penularan/kontak dengan ternak tertular sehingga rantai penyebaran penyakit dapat diminimalkan. Penerapan biosekuriti merupakan pertahanan awal pengendalian wabah dengan komponen utama isolasi, kontrol lalu lintas dan sanitasi. Penyakit Mulut dan Kuku (PMK) kembali muncul di Indonesia setelah 3 dekade bebas dari penyakit tersebut. Penelitian bertujuan untuk mengidentifikasi efektivitas biosekuriti dan menganalisis kelayakan *feedlot* Lembu Setia Abadi Jaya terhadap kejadian penyakit PMK berdasarkan mortalitas dan morbiditas sapi.

Data pada penelitian ini adalah data mortalitas dan morbiditas sapi yang didapat saat terjadi wabah PMK sebelum melakukan biosekuriti (380 ekor) dan saat pengetatan biosekuriti (350 ekor). Penelitian dilakukan dengan mengamati selama 90 hari meliputi masa karantina selama 14 hari berupa (penerapan cheklist biosekuriti karyawan, tamu, kendaraan, barangdan ternak) melakukan pengobatan dan mengamati mortalitas dan mordibitas sapi. Data yang terkumpul berupa mortalitas, morbiditas, dan *checklist* biosekuriti dianalisis secara deskriptif. Kenaikan berat badan (ADG) dianalisis dengan uji normalitas, kemudian dilanjutkan uji Mann Whitney untuk membandingkan kenaikan rata rata bobot sapi per hari .

Hasil penelitian menunjukkan bahwa pengetatan biosekuriti berpengaruh pada kejadian PMK dengan penurunan mortalitas menjadi 0% dan morbiditas 2% dari sebelum pengetatan dengan mortalitas 1,05% dan morbiditas 9,47%. *Average Daily Gain* (ADG) dengan Uji Man Whitney didapatkan P<0,05 yang berarti ditemukan adanya perbedaan, menunjukkan kenaikan berat badan secara signifikan yaitu 0,84 kg/hari saat belum menerapkan biosekuriti ketat menjadi 1,40 kg/hari pada saat wabah PMK dan dilakukan biosekuriti yang ketat. Efektivitas biosekuriti pada saat terjadinya wabah PMK dengan pengetatan biosekuriti pada *feedlot* LSAJ menunjukkan hasil yang baik dengan penurunan mortalitas dan morbiditas pada penggemukan di *feedlot* LSAJ.

Kata kunci: Biosekuriti, *Feedlot*, PMK.

ABSTRACT

Effectiveness of Biosecurity Implementation in the Lembu Setia Abadi Jaya Tangerang Feedlot Against Foot and Mouth Disease (FMD)

Dyka Damayati

Biosecurity is the first line of defense for epidemic control and is carried out to prevent all possible transmission/contact with infected livestock so that the chain of disease spread can be minimized. The application of biosecurity is an initial defense for epidemic control with the main components of isolation, traffic control and sanitation. Foot and Mouth Disease (FMD) has reappeared in Indonesia after 3 decades of being free from the disease. The aims of the study were to identify the effectiveness of biosecurity and to analyze the feasibility of the Lembu Setia Abadi Jaya feedlot against FMD disease based on the mortality and morbidity of cattle.

The data in this study were mortality and morbidity data for cattle obtained during an FMD outbreak before carrying out biosecurity (380 head) and during biosecurity tightening (350 head). The study was conducted by observing for 90 days including a 14-day quarantine period in the form of (implementation of the employee, guest, vehicle, goods and livestock biosecurity checklist) conducting treatment and observing the mortality and morbidity of cattle. The data collected in the form of mortality, morbidity, and biosecurity checklists were analyzed descriptively. Weight gain (ADG) was analyzed using the normality test, then continued with the Mann Whitney test to compare the average increase in the weight of cattle per day.

The results showed that biosecurity measures had an effect on the incidence of FMD with a reduction in mortality to 0% and morbidity of 2% from before tightening with a mortality of 1.05% and morbidity of 9.47%. The Average Daily Gain (ADG) with the Man Whitney Test obtained $P < 0.05$, which means there was a difference, showing a significant increase in body weight, namely 0.84 kg/day when not implementing strict biosecurity to 1.40 kg/day during an outbreak FMD and strict biosecurity is carried out. The effectiveness of biosecurity during FMD outbreaks by tightening biosecurity in the LSAJ feedlot showed good results with reduced mortality and morbidity in fattening in the LSAJ feedlot.

Keywords: Biosecurity, Feedlot, FMD