The aims of the present research is studying the level of sex, gonadotropic hormones and incidence of osteoporosis in perimenopausal women with bronchial asthma (BA) depending on the severity of asthma. Methods. Overall 120 asthmatic women aged from 42 to 55 years (mean age 50,25±0,38 years) were assessed. Patients were divided into four groups: I gr. – 30 patients with intermittent asthma, II gr. – 28 patients with mild persistent asthma, III gr. – 32 patients with moderate persistent asthma, IV gr. – 30 patients with severe persistent asthma. Control gr.: 28 perimenopausal women without BA (mean age 50,82±0,67 years). Physical examination, serum levels of follicle-stimulating (FSH) and luteinizing hormones (LH), estradiole, progesterone were performed. Osteoporosis was detected by ultrasound bone densitometry (T-score). Results. There were not authentic differences in levels of sex and gonadotropic hormones in patients of I gr. and II gr. compared with control gr. Patients of III gr. had a tendency to increase of estradiole level. Patient of IV gr. had authentically lower concentration of FSH (p=0,005), estradiole (p=0,001), and progesterone (p=0,001). Patients with severe BA have the authentically highest incidence of osteoporosis – 46,67 % compared with women of the control gr. – 14,29 % (p=0,006), patients with intermittent BA – 20 %, mild and moderate BA – 17,85 % and 31,25 % respectively. We received positive correlation between estradiole level and T-score (r=0,44, p=0,001). Conclusion. Perimenopausal women with severe asthma have a necessity of early detection of sex hormones disorders, correction of hormonal status to prevent osteoporosis.