

METABOLIC SYNDROME IN U.S. ADULTS INCREASES WITH DECREASED GFR: RESULTS FROM NHANES SURVEYS (2001-2004)

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The prevalence of the metabolic syndrome (MetSyn) is high in the United States and its presence is associated with an increased risk of developing cardiovascular disease. The purpose of this study was to determine the prevalence of MetSyn in U.S. adults with decreased eGFR. We analyzed data from two National Health and Nutrition Examination Surveys (NHANES) between the years 2001-2004. The prevalence of the MetSyn as defined by ATP III criteria. The prevalence of associated cardiac risk factors, and CKD status was determined in participants aged 40 years and older. eGFR was calculated using the abbreviated Modification of Diet in Renal Disease Study formula based on serum creatinine, age, and race. All estimates were weighted. Overall, the prevalence of MetSyn more than doubles as the eGFR decreases. Females are more likely than males in all race/ethnic groups to have a higher prevalence of decreased eGFR ($p < 0.001$).

	eGFR				
	90+	60-89	30-59	15-29	Total
MetSyn	22.5%	24.9%	36.9%	55.0%	25.2%
Male	21.8%	24.4%	30.4%	39.6%	23.9%
Female	23.2%	25.4%	40.8%	70.7%	26.4%
NH-White	23.1%	25.2%	37.0%	55.0%	25.8%
Male	23.5%	24.9%	31.3%	40.7%	25.0%
Female	22.6%	25.5%	40.4%	68.5%	26.5%
NH-Black	17.2%	22.9%	37.7%	32.3%	20.4%
Male	13.6%	22.2%	32.3%	25.6%	17.9%
Female	19.9%	23.4%	41.4%	43.9%	22.5%
MA/Other Hispanic	27.0%	23.3%	29.5%	38.1%	25.8%
Male	26.2%	21.9%	17.0%	28.5%	24.4%
Female	27.8%	24.6%	34.9%	76.9%	27.2%

The prevalence of MetSyn in U.S. adults increases with decreased eGFR overall while the prevalence of MetSyn among females is twice the prevalence of males.