

Age	$\alpha$	$\gamma$	$\delta$	$\log(\psi)$	$\log(\tau)$	$\log(\lambda)$	$\log(\phi)$
<5	0.126	0.040	0.024	0.197	177.157	0.179	0.398
5 – 14	0.254	0.086	0.024	0.269	0.354	0.301	0.482
15 – 44	0.182	0.063	0.024	0.148	0.307	0.264	0.127
45 – 64	0.119	0.039	0.024	0.126	1.048	0.221	0.141
65+	0.111	0.034	0.024	0.101	-	0.158	0.147

**S3 Table .** Model I: Standard error estimates for the age-specific model of IPD including Flu. Uncertainty around coefficients  $\tau_{<5}$  and  $\tau_{65+}$  was not well estimated.