

Pulmonary Embolism Mortality Rate Comparison IUD, CHC (Pill Patch & Ring) and Pregnancy

Activity	Risk of Death	Source
Women not using a combined hormonal pill/patch/ring and are not pregnant	1 in 188,000	European Medicines Agency - Assessment report for CHC's containing medicinal products Jan.(2014) ¹
Using an IUD (Paraguard or Mirena/Skyla)	1 in 188,000	European Medicines Agency - Assessment report for CHC's containing medicinal products Jan. (2014) ^{1,9}
Risk from VTE (PE) during Pregnancy	1 in 53,000	Andra H. James, Venous Thrombembolism in Pregnancy (2009). ^{4,5,6}
Using 1st & 2nd Generation CHC with Levonorgestrel, Norethisterone, Norgestrel or Norgestimate Progestin	1 in 43,000	European Medicines Agency. Anita L.Nelson, MD & Carrie Cwiak, MD, MPH. ^{1,2,3,5,7}
Using 3rd Generation CHC - Progestin Etonogestrel (Ring) or Norelgestromin (Patch)	1 in 31,000	European Medicines Agency. Anita L.Nelson, MD & Carrie Cwiak, MD, MPH. ^{1,2,3,5,7}
4th Generation CHC - Progestin Drospirenone (i.e. Yasmin, Yaz) or Desogestrel	1 in 24,000	European Medicines Agency. Anita L.Nelson, MD & Carrie Cwiak, MD, MPH. ^{1,2,3,5,7}

1. European Medicines Agency - Assessment report for combines hormonal contraceptives containing medicinal products Jan. 2014 EMA/739865/2013

2. Contraception Technology (20th Edition) Chapter 11 Combined Oral Contraceptives (COC's) Anita L.Nelson, MD & Carrie Cwiak, MD, MPH.Two-thirds of VTE cases are deep vein thrombosis (DVT's); DVT carries a 6% mortality rate.

3. Contraception Technology (20th Edition) Chapter 11 Combined Oral Contraceptives (COC's) Anita L.Nelson, MD & Carrie Cwiak, MD, MPH.The other third of VTE events involve pulmonary embolism which has a 12% mortality rate.

4. James AH, Bushnell CD, Jamison MG, Meyers ER, Incidence and risk factors for stroke in pregnancy and the puerperium. *Obstet Gynecol.* 2005;106:509-519

5. Andra H. James, Venous Thromembolism in Pregnancy. From the Division of Maternal-Fetal Medicine Department of Obstetrics and Gynecology, Duke Medical Center

6. James AH, Jamison MG, Biswas MS, Brancazio LR, Swany GK, Meyers ER, acute myocardial infarction in pregnancy; a United Sates population-based study, *Circulation.* 2006;113:1564-1571

7. Susan Jick, *Medicines for Women*; Chapter 6 - Oral Contraceptives and the Risk of Venous Thromboembolism

8. DVT deaths (MI's, Strokes, that don't include a PE are not included as we do not yet have a source for this data. VTE related deaths will likely increase the numbers currently stated in PE deaths.

9. A minimum IUD-related mortality rate of approximately 3 per million woman-years of use. CDC - Current Trends IUD Safety : Report of a National Physician Survey Oct. 17,1997

10. IMS Health, National Prescription Reports 2014.