

**Prescribing Tip For Information**

**Propranolol – Prescribers to be aware of the risk of toxicity in overdose**



**Locals Trusts would like to raise awareness to Primary Care prescribers that there has been an increased number of patient deaths following an overdose of propranolol and to ensure prescribers are aware of the risk of toxicity in overdose.**

The [BNF](#) displays an overdose warning within the propranolol monograph which states ‘Severe overdoses with propranolol may cause cardiovascular collapse, CNS depression and convulsions’.

Patients can access propranolol via online pharmacies following assessment for conditions such as migraine, therefore, it is important to ask **all** patients during a medication review if they are obtaining medication from other sources.

The Healthcare Safety Investigation Branch (HSIB) released a [report](#) in 2020 detailing the under recognised toxicity of propranolol. It states that between 2012 and 2017 there was a 33% increase in the number of deaths reported linked to propranolol overdose, with 52 deaths recorded in 2017. The report findings for Primary Care are shown below:

- Propranolol is a cardiac medication but is now predominantly prescribed for the treatment of migraine or anxiety.
- Propranolol is widely used by many patients without incident and with clinical benefit.
- Currently guidance for prescribing propranolol does not contain sufficient warnings regarding the potential severe toxicity of propranolol when taken in overdose.
- Current awareness of the potential impact of propranolol in overdose is limited and hinders the ability of prescribers to exercise clinical judgement when choosing to prescribe propranolol.
- There is a lack of published research and guidance on how propranolol may interact with antidepressant medication when taken in overdose.
- Propranolol is licensed for use to treat anxiety symptoms as reflected in the BNF, but clinical guidance regarding when and how it should be used in practice is not available from NICE.

**Prescribers should be aware that there is a specific group of patients who may be at an increased risk of propranolol overdose including those who have co-existing migraine, depression, anxiety or have a history of self-harm**

To contact the Medicines Optimisation Team please phone 01772 214302

If you have any suggestions for future topics to cover in our prescribing tips please contact [Nicola.schaffel@nhs.net](mailto:Nicola.schaffel@nhs.net)