

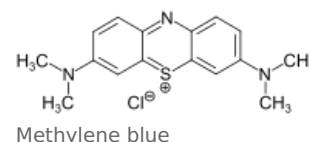
# Antidotes in intoxications

**Antidotes** are a group of substances that bind to a harmful substance, inactivating it or nullifying its **toxic effect**. They exist only for certain harmful substances and have a specific effect. The effect is greater the earlier they are administered, but the indications for administration are not uniformed. For example, for BZDs only on coma, for opiates on respiratory depression or only after ingestion of a toxic dose (e.g., paracetamol, lead). The misconception is that most poisonings are treatable with (specific) antidotes. Most poisonings are treated with non-specific antidotes - intestinal adsorbents, or are treated symptomatically.

Most of the specific antidotes are not registered (low demand), the Ministry of Health of the Czech Republic (MZČR) grants an exemption from registration, the antidotes are supplied by Phoenix. Rare antidotes are available at Toxicology Information Centre (<https://www.tis-cz.cz/index.php/informace-pro-odborniky/antidota/antidota-zasoby-aktualne>) and generally only some are available. For example, the equipment HMP (<https://www.zshmp.cz/>) 2021 includes atropine, calcium gluconicum, carbo activatus (Carbosorb), ethanol magistraliter p.o., flumazenil (Anexate), glucagon (Glucagon), hydroxycobalamin (Cyanokit), naloxone (in alphabetical order).

## Intoxicatium (Toxicant - antidote)

<i><b>Toxicant</b></i>	<b>Antidote</b>
<i>amanita phalloides</i>	silybin, N-acetylcysteine
opiates	naloxone
<i>atropine</i>	physostigmine
<i>benzodiazepines</i>	flumazenil
<i>digitalis</i>	digoxin-specific antibody
<i>glycols</i>	ethanol, fomepizole
<i>heparin</i>	protamine sulfate
<i>carbamates</i>	atropine
<i>coumarin</i>	vitamin K
<i>cyanides</i>	amylum nitrosum, hydroxycobalamin, sodium thiosulfate
<i>methemoglobinizing agents</i>	methylene blue
<i>methanol</i>	ethanol, fomepizole
<i>arsenic, lead, mercury</i>	EDTA, DMSA, succimer
<i>organophosphates</i>	atropine, oximes
<i>paracetamol</i>	N-acetylcysteine
<i>non-specifically orally ingested poisons</i>	carbo activatus
<i>Ca<sup>2+</sup> channel blockers</i>	calcium gluconicum
beta blockers	glucagon
<i>local anaesthetics</i>	20% fatty emulsion (TIS procedure)
iron	deferoxamine



Methylene blue

## Sources

- CBRNE
- List of drugs whose intoxication can be treated with "lipid therapy" and CPR procedure (<https://www.tis-cz.cz/index.php/informace-pro-odborniky/lipidova-terapie>) Toxicology Information Centre of the VFN Prague

## External links

- BENEŠ, Jiří. *Studijní materiály* [online]. [cit. 24.02.2010]. <<http://jirben.wz.cz>>.

## Bibliography

- PELCLOVÁ, Daniela. *Nemoci z povolání a intoxikace*. 2. edition. Karolinum, 2006. pp. 207. ISBN 80-246-1183-X.

