

# Molluscicide exposures among dogs: a 2022 annual overview of calls to the Belgian Poison Centre

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## Objective

The present study gives an overview of all molluscicide exposures (ME) among dogs reported to the Belgian Poison Centre (BPC) in 2022.

## Methods

Data of all ME-related calls concerning dogs to the BPC, including follow-up (FU) research (between January 1 - December 31, 2022) were considered. Follow-up was done by telephone and was classified as failed when remained unanswered after three calls. Descriptive analysis of data was performed in Microsoft Excel.

## Results

The BPC received 53 calls for canine ME, involving 54 victims. Of all calls, 41/53 (77.4%) and 12/53 (22.6%) were from pet owners and veterinarians, respectively. Most calls were received in May (13/53; 24.5%) and June (16/53; 30.2%). Only witnessed ME by the owner or veterinarian were considered for further analysis (47/54; 87.0%). Follow-up failed in 7/47 (14.9%). Results of the concerned active substances and symptoms after ferric phosphate and metaldehyde ME are shown in figure 1, 2 and 3 respectively.

Almost all symptomatic dogs, of which FU was successful (13/20; 65%), recovered after symptomatic treatment (11/13; 84.6%). Three dogs died (3/20; 15%). One dog after methiocarb exposure, one dog after metaldehyde exposure and another dog five days after exposure to an unknown agent.

Fig 1: ME in dogs (n=47)

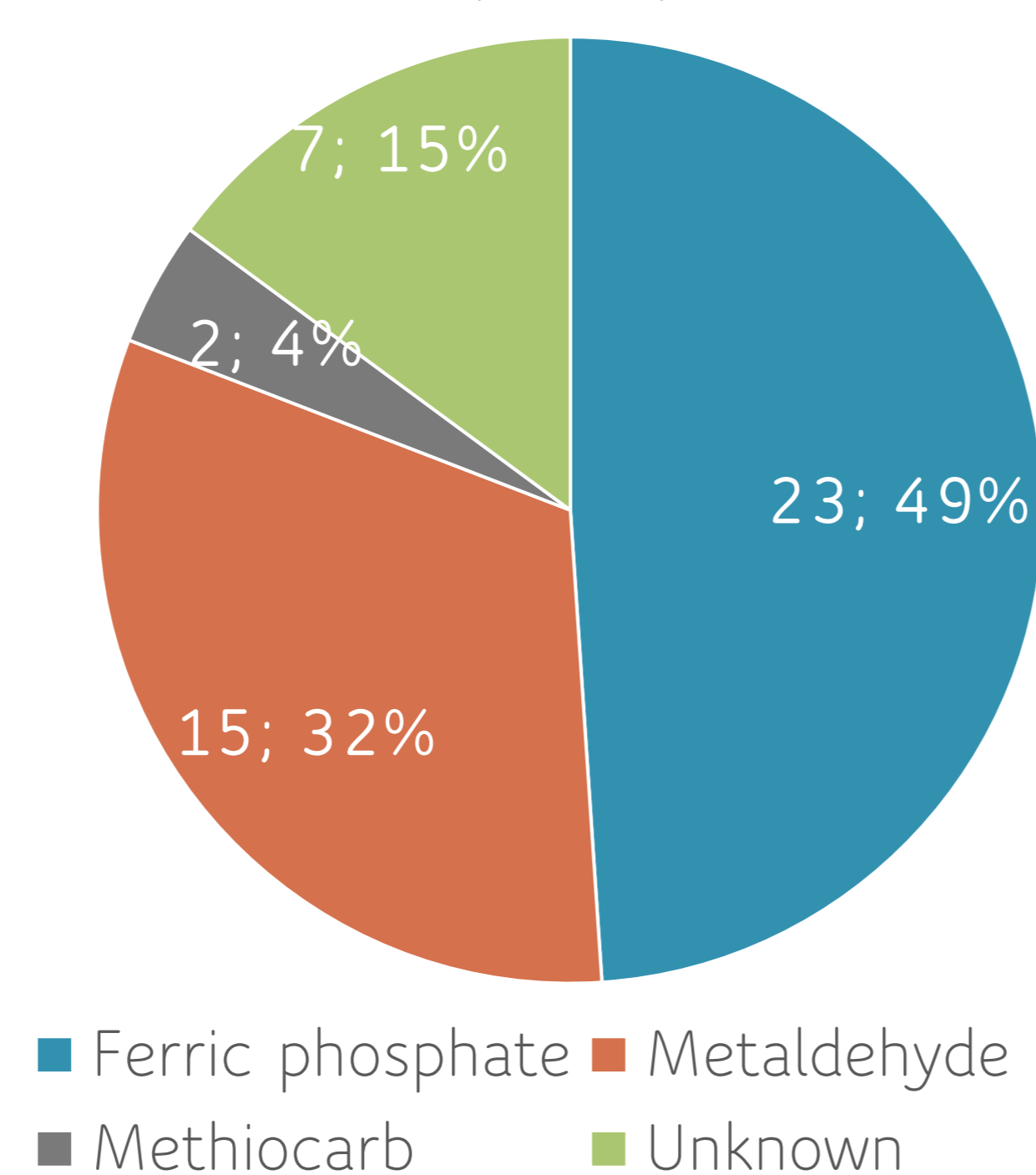


Fig 2: Ferric Phosphate ME in dogs (n=23)

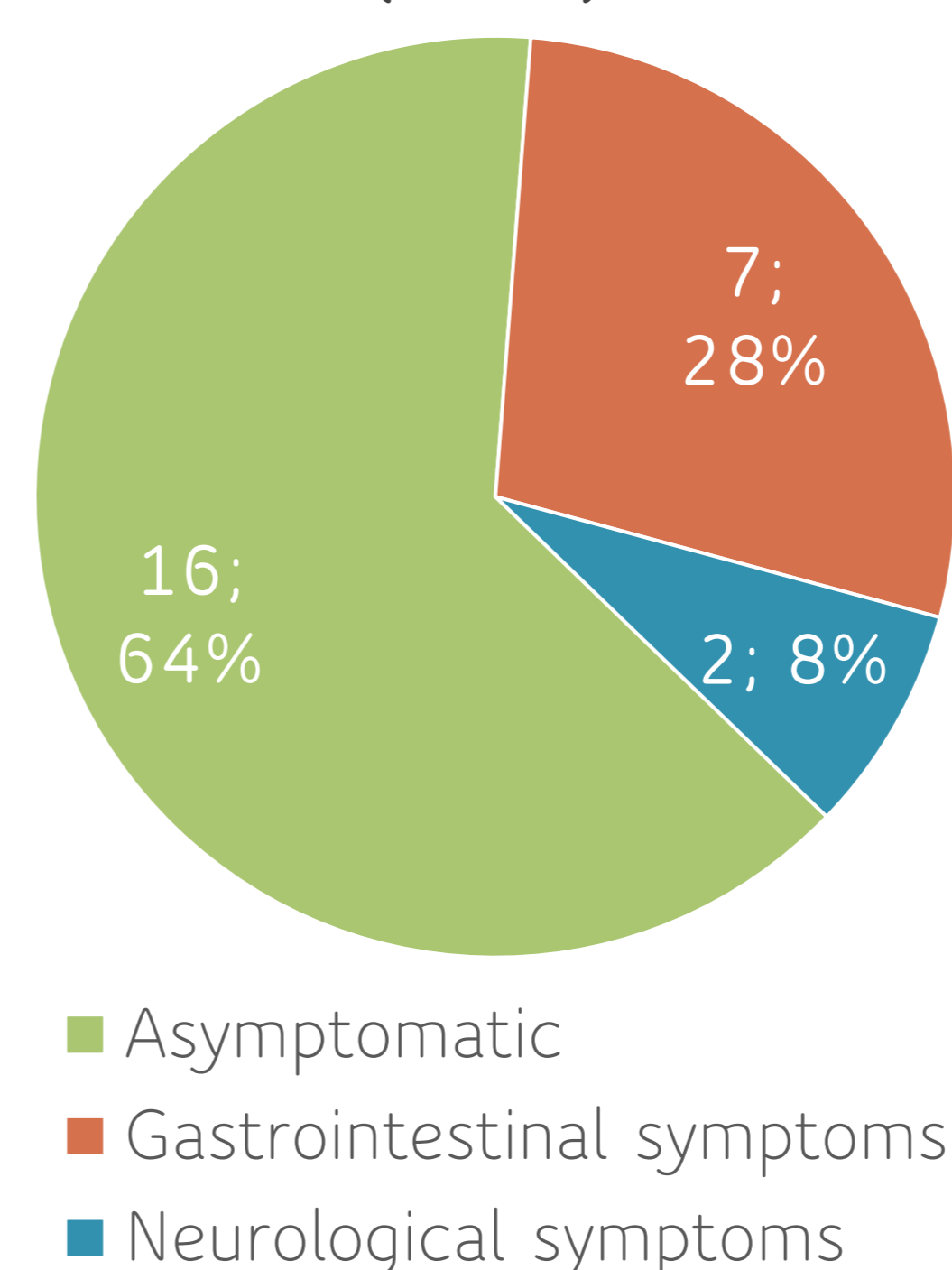
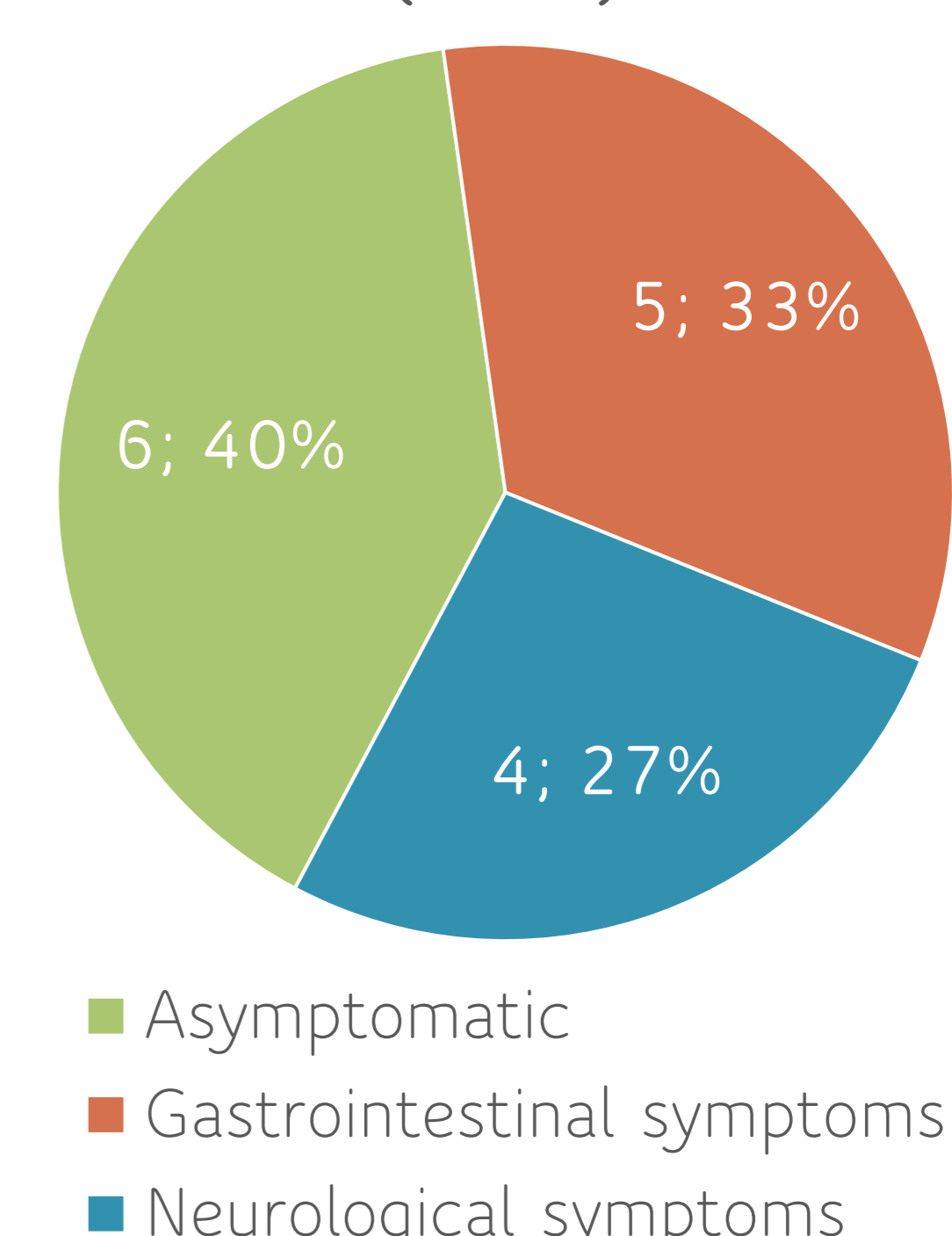


Fig 3: Metaldehyde ME in dogs (n=15)



The majority of exposures occurred accidentally while spreading snail poison (mainly a handful) in the garden (12/40; 30%). Since the use of snail poison occurs mainly in spring, seasonality clearly has impact on accidentally ME. Dogs breaking out to the neighbours (4/40; 10%), breaking into or having accidentally access to storage places or gardens (7/40; 17.5%) and destroying security measures, put in place by the owner (2/40; 5%), were other reported circumstances.

## Conclusion

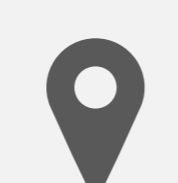
Spring is a risk period for canine ME, which most frequently involves contact with ferric phosphate followed by metaldehyde. Both caused gastrointestinal and neurological symptoms. Most dogs recovered well after supportive symptomatic treatment, but three dogs died. Preventive measures like keeping animals away during the use of molluscicides and storing them in safe, inaccessible places for pets, are recommended.



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