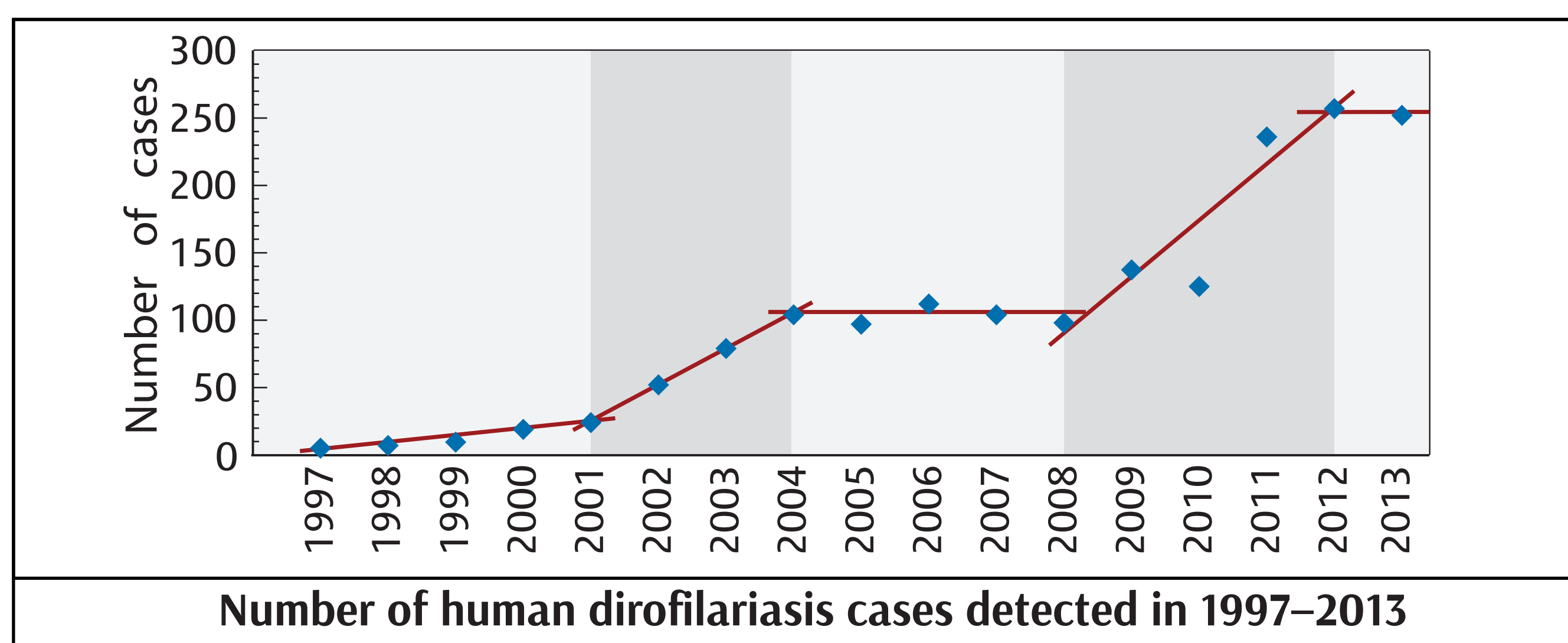
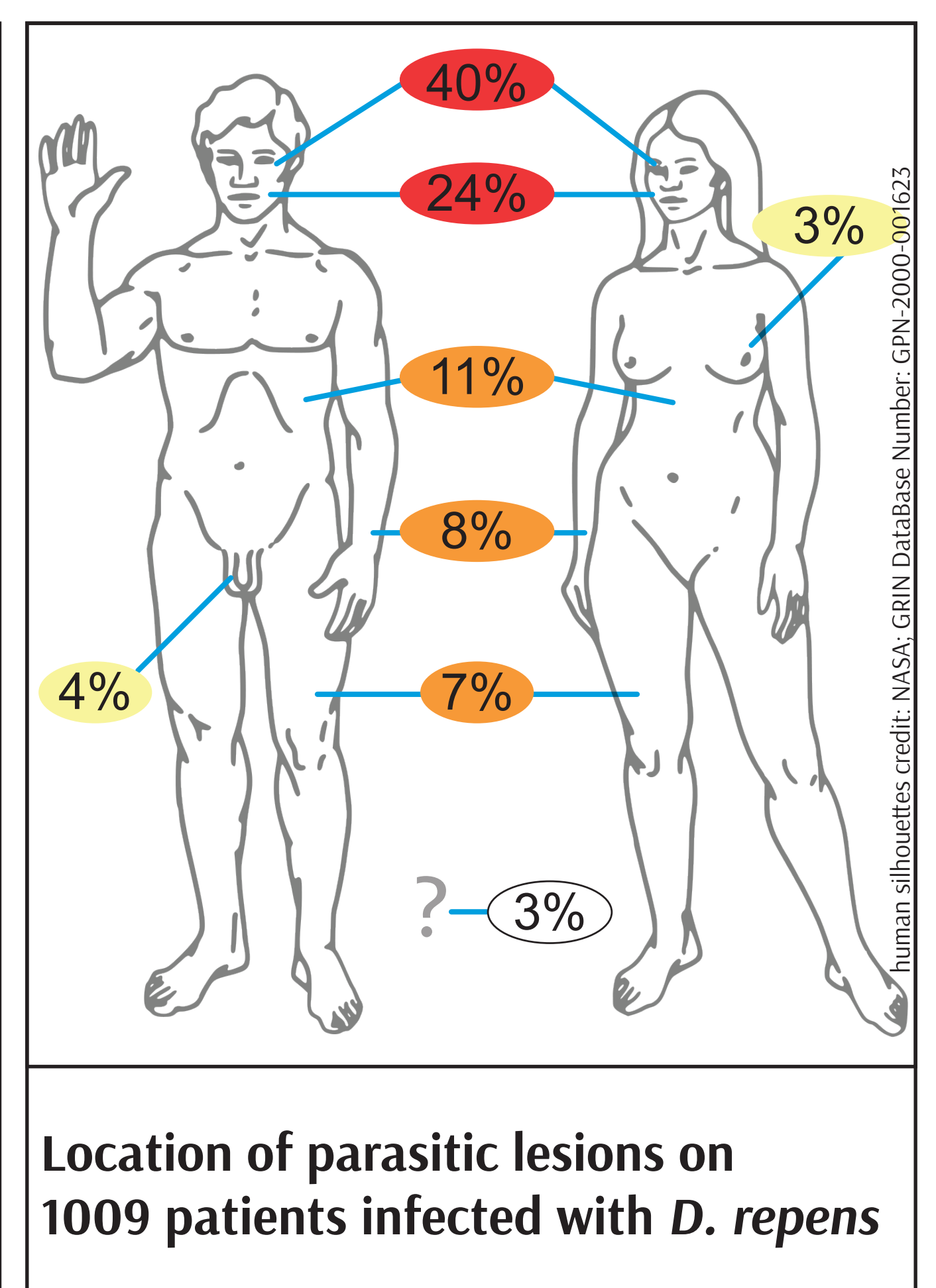
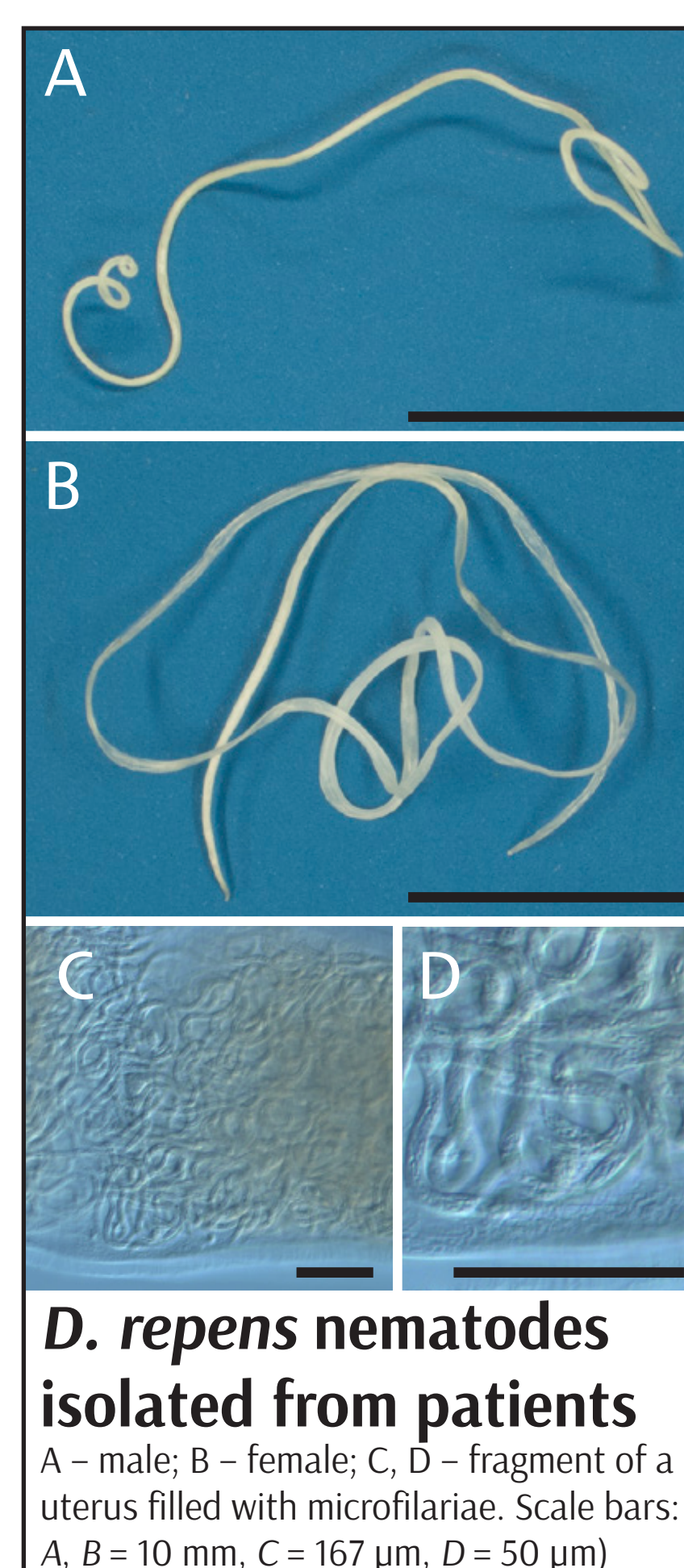
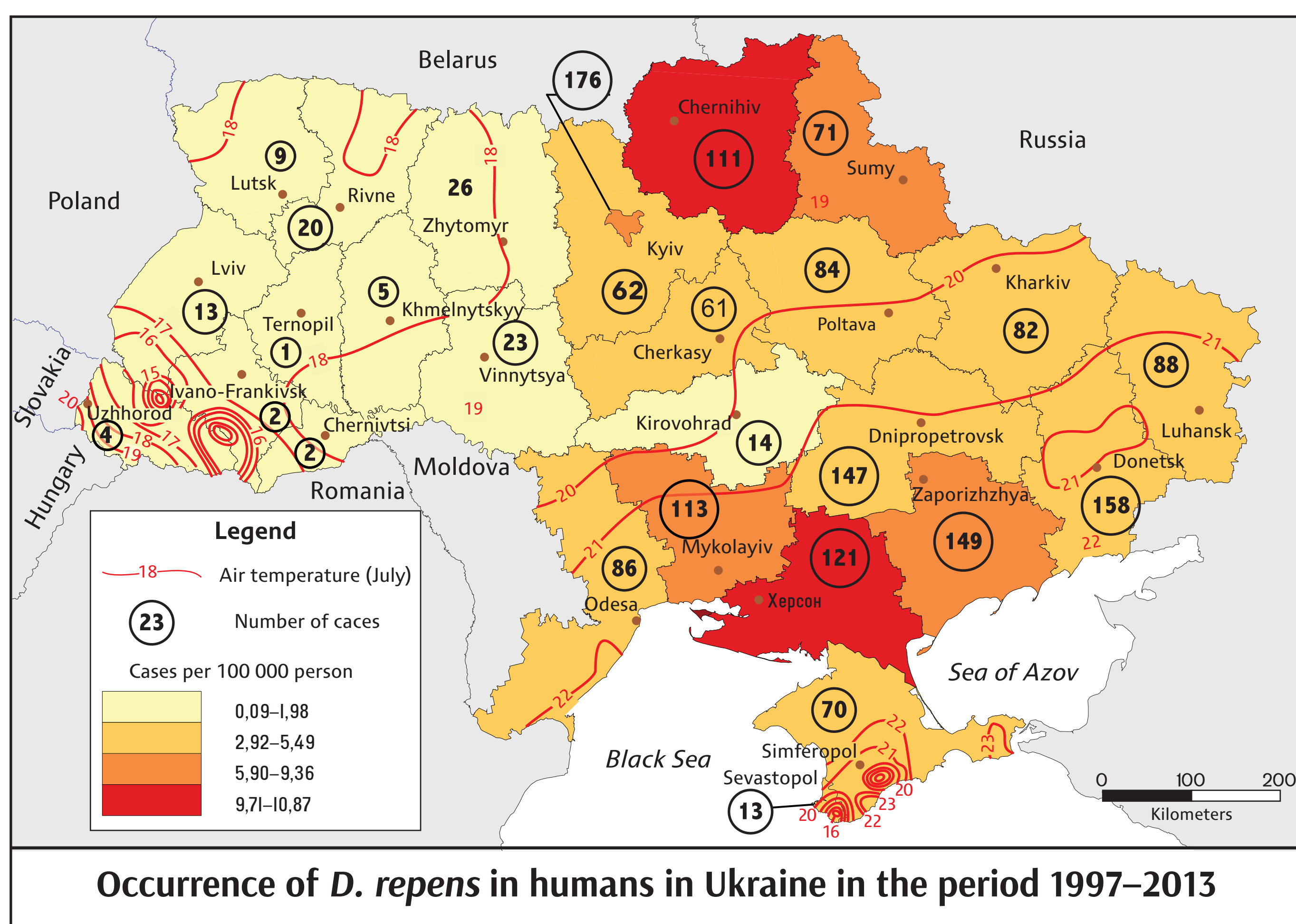
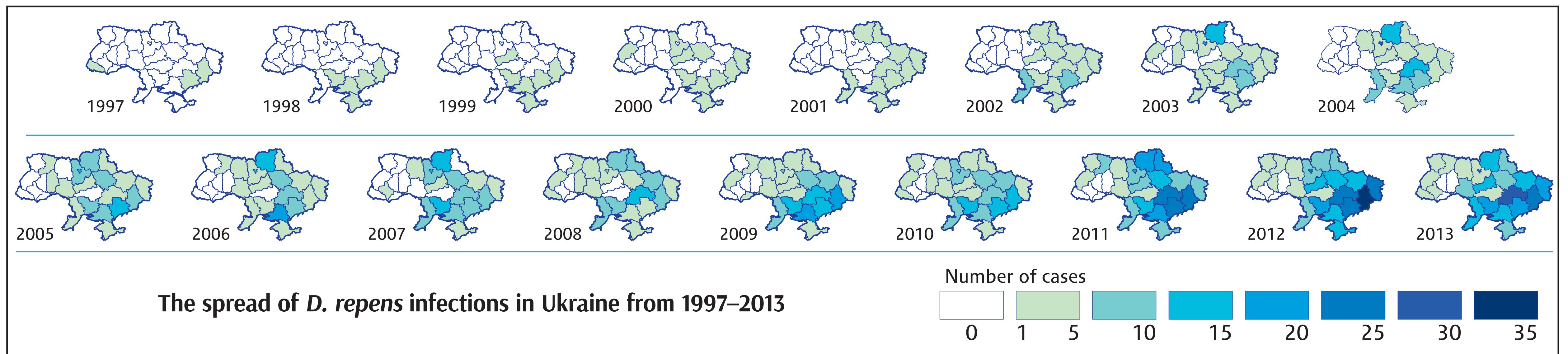


HUMAN *DIROFILARIA REPENS* INFECTION IN UKRAINE (1997–2013)

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BACKGROUND: In Ukraine, dirofilariasis has been known for a long time. The first case of human *D. repens* infection was noted in 1927; 16 cases were described in the literature through 1974. From 1975 the cases of human dirofilariasis have been a subject of mandatory epidemiological registration in Ukraine and are recorded in the state register that covers the entire country (Salamatin *et al.* 2013; Acta Parasitologica 58(4): 592–598).

METHODS: The epidemiological data covering the period of 1997–2013 have been analyzed. Data have been collected from the reports of all 27 regional sanitary-epidemiological stations owned by the Ministry of Health of Ukraine. The case was confirmed when both the clinical and laboratory criteria were fulfilled. A detailed analysis of clinical data gathered during the last 5 years (2009–2013) was conducted.

RESULTS and DISCUSSION: Within the period of 17 years, 1997–2013, 1717 confirmed human cases of *D. repens* dirofilariasis have been registered. Infections were noted in all the oblasts of Ukraine plus Crimea, Kyiv, and Sevastopol. The majority of the cases were noted in Kyiv (176), then the oblasts of Donetsk, Zaporizhzhya, Dnipropetrovsk, Kherson, Mykolayiv and Chernihiv. Analyzing clinical data of 1007 cases (years 2009–2013), it was found that in 662 cases (66%) the parasitic lesions were located in the head, including 414 (41%) cases of lesions around the eyes. Dirofilariasis of the limbs and torso constituted a lower percentage of cases – 15% and 11% respectively. *D. repens* were also detected in the sexual organs of men (4%), and in female mammary glands (3%). In 17 cases (2%) the location of the parasite was not specified in the data. The age of patients was from 11 months up to 90 years.

It seems interesting that despite the fact that endemic regions of *D. repens* are located in many areas in Europe, the total number of cases described in Europe without Ukraine is surprisingly low – ca. 600 (Masny *et al.* 2012; Parasit Vectors 6: 38) compared to Ukraine's.

CONCLUSIONS: The Ukrainian sanitary-epidemiological services managed to achieve some measure of success, one of which is creating a system of registering *D. repens* infections in Ukraine. Therefore, it appears that in order to achieve a proper outlook on the epidemiological situation, it would be necessary to introduce mandatory registration of *D. repens* dirofilariasis cases in the EU countries.

