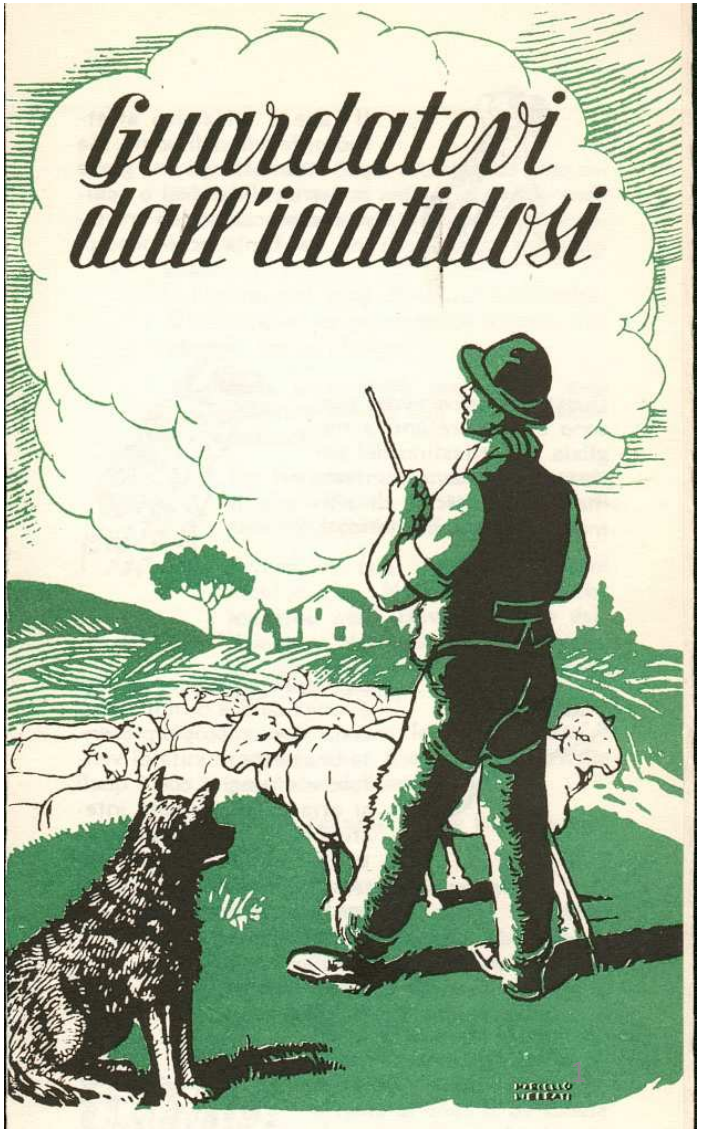
PARASSITI d'ITALIA
Una rete al servizio del SSN
Animali + Esseri umani = una sola salute
ROMA 20-21 ottobre 2011

L'Echinococcosi Cistica

(echinococcosi-idatidosi)

animale in Italia



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Facoltà di Medicina Veterinaria - Università di Sassari

Echinococcosi Cistica da *Echinococcus granulosus s.s.*

In numerose aree del mondo continua ad essere un importante :

- ✓ problema di sanità pubblica
- ✓ problema economico

È diffusa soprattutto nelle aree rurali e povere, compresa la regione mediterranea dove è endemica o iperendemica

- ✓ Scarsi o assenti i dati e le informazioni ufficiali
- ✓ Misconosciuta dagli operatori sanitari, dai media e dall'opinione pubblica
- ✓ Interesse della comunità scientifica, ma con scarse ricadute in termini di sorveglianza epidemiologica e programmi di controllo



ZOONOSI SCARSAMENTE CONSIDERATA (NEGLETTA)



PARASSITI d'ITALIA
Una rete al servizio del SSN
Animali + Esseri umani = una sola salute
ROMA 20-21 ottobre 2011

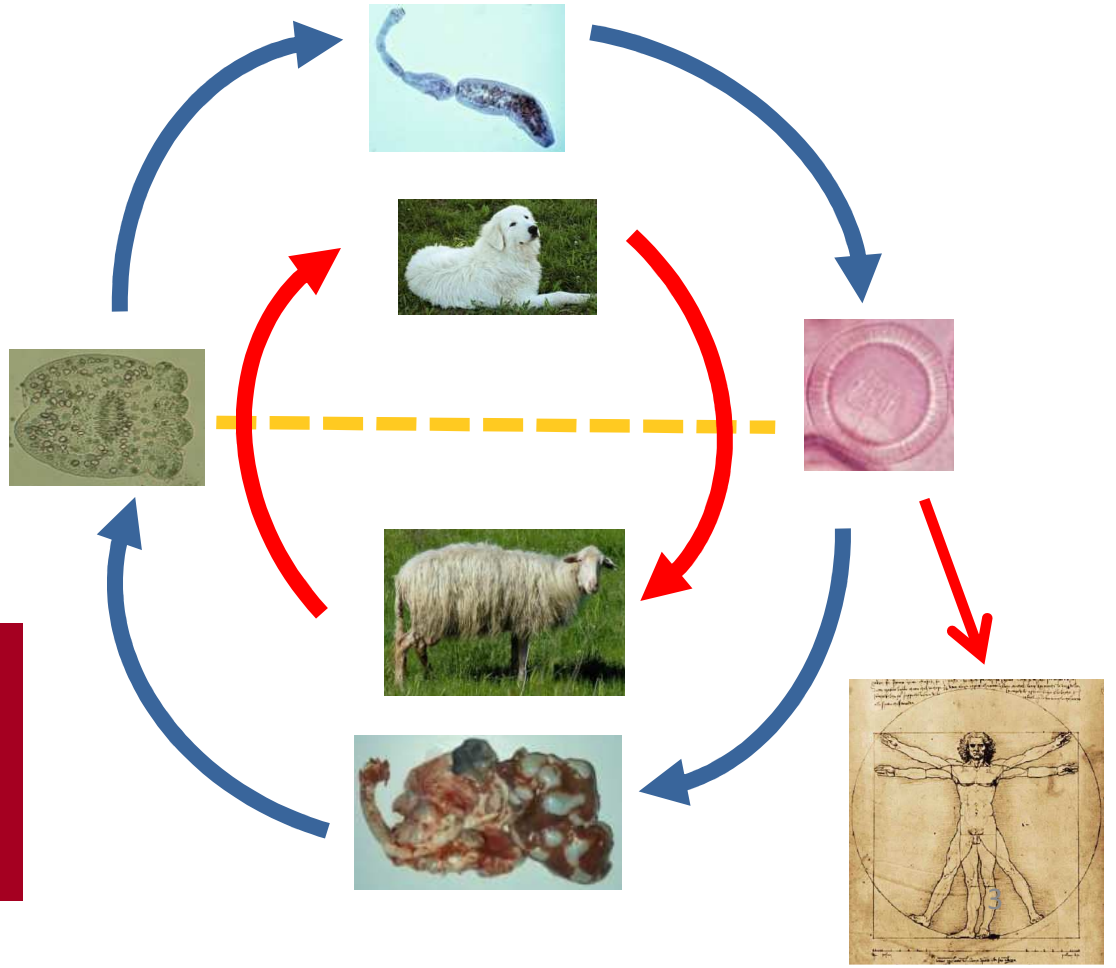
SOIPA
Società Italiana di Parassitologia

IN ITALIA PRESENTE ANCHE IN AREE CONSIDERATE NON A RISCHIO



strettamente legata all'allevamento ovino condotto con metodiche tradizionali

Mantenuta dal "ciclo classico cane-ovino"



FLUSSO DATI

L'O.M. 21.4.1964 stabilisce che i veterinari addetti alla macellazione delle carni riportino su un apposito registro i casi di echinococcosi riscontrati negli animali macellati

Questi dati o altri (desunti da piani di lotta, diagnosi nel cane, diagnosi nei selvatici…) istituzionali (ASL, IZS)

↓

REGIONE

↓

COVEPI – SIN Zoonosi (IZS Abruzzo e Molise) ⟷ Gruppo esperti nazionale

VERIFICA DEI DATI TRASMESSI E COMMENTI

(commenti anche su echinococcosi umana e utilizzando dati di ricerca)

↓

MINISTERO DELLA SALUTE

↓

EFSA

CONSIDERA SOLO I DATI UFFICIALI e PUBBLICA COMMENTI

ITALIA: "DATI UFFICIALI"

Table EH4. **Echinococcus** *in farm animals, inspected at slaughter, 2009*

Country	Species[1]	Cattle		Pigs		Goats		Sheep		Solipeds	
		N	% pos	N	% pos	N	% pos	N	% pos	N	% pos
Austria	*E. spp.*	619,617	<0.1	5,537,389	0	4,967	0	121,547	<0.1	-	-
Belgium	*E. spp.*	799,256	0	-	-	-	-	-	-	-	-
Bulgaria	*E. g.*	38,300	5.1	531,631	0.1	4,149	10.5	581,285	7.0	6,647	0
Cyprus	*E. spp.*	17,308	0	-	-	126,608	0	136,705	0	-	-
Denmark	*E. spp.*	507,200	0	18,972,880	0	-	-	-	-	-	-
Estonia	*E. spp.*	46,934	0	405,456	0	-	-	5,846	0	-	-
Finland	*E. spp.*	268,056	0	-	-	-	-	25,687	0	-	-
Germany	*E. g.*	-	-	-	-	-	-	265	0.8	-	-
Greece	*E. spp.*	161,069	1.0	826,783	<0.1	654,468	0.5	2,126,481	1.8	-	-
Italy[2,3]	*E. spp.*	1,730,438	0.2	6,093,180	<0.1	27,055	2.5	306,048	11.3	21,313	<0.1
	E. g.	-	0.1	-	<0.1	-	0.1	-	<0.1	-	-
Latvia[4]	*E. spp.*	99,903	0	323,588	0	-	-	-	-	400	0
Lithuania	*E. spp.*	84,985	<0.1	167,266	0.2	-	-	247	0	-	-
Poland	*E. spp.*	-	-	17,799,372	0.5	-	-	-	-	-	-
Romania	*E. spp.*	131,013	26.1	3,023,757	0.7	1,910	0.3	318,102	3.4	-	-
Slovenia	*E. g.*	123,760	<0.1	295,960	<0.1	450	0	9,759	0	1,426	0
Spain[5]	*E. spp.*	2,271,834	0.6	39,959,670	<0.1	-	-	-	-	30,918	0.1
Sweden	*E. spp.*	426,504	0	2,942,912	0	773	0	252,873	0	3,807	0
United Kingdom	*E. spp.*	341,057	0.4	-	-	-	-	-	-	-	-
Total (18 MSs)		**7,667,234**	**0.8**	**96,879,844**	**0.1**	**820,380**	**0.5**	**3,884,845**	**3.2**	**64,511**	**<0.1**
Norway	*E. spp.*	313,300	0	1,522,300	0	23,300	0	1,165,300	0	1,600	0

Note: Data are only presented for sample size ≥25.

1. *E. spp.* = *Echinococcus* spp., *E.g.* = *Echinococcus granulosus.*
2. In Italy, some samples were tested for *Echinococcus* spp. and others specifically for *E. granulosus*. The total number of samples is only stated once in Table EH4.
3. In Italy, an additional 848,702 sheep and goats were tested and 10,096 were positive (8,547 with *E. granulosus* and 1,549 with *Echinococcus* spp.).
4. In Latvia, an additional 9,329 sheep and goats were tested, 0 were positive.
5. In Spain, an additional 12,791,855 sheep and goats were tested and 86,786 were positive (*Echinococcus* spp.).

BOVINI	0,2%
OVINI	11,3%
CAPRINI	2,5%
OVINI + CAPRINI	1,2%
SUINI	<0,1%
SOLIPEDI	<0,1%

Table EH6. **Echinococcus** *in wildlife other than fox, 2007-2009 (pooled data)*

Country	Deer		Reindeer		Other ruminants[1]		Wild boars		Other/unspecified wildlife[2]	
	N	Pos[3]	N	Pos[4]	N	Pos[4]	N	Pos[5]	N	Pos[6]
Bulgaria	-	-	312	0	-	-	-	-	-	-
Estonia	-	-	5,334	0	-	-	-	-	-	-
Finland	-	-	237,097	6	1,301	8	-	-	5,705	3
France	1	0	-	-	1	1	1	0	11	1
Germany	-	-	-	-	-	-	-	-	1,320	35
Greece							209	0		
Italy	1,918	0	-	-	-	-	22,927	53	13,065	93
Poland	-	-	-	-	-	-	11,470	0	-	-
Romania	-	-	-	-	-	-	415	0	-	-
Slovenia	165	0	-	-	2	0	31	0	15	0
Spain	310,886	159	-	-	-	-	211,203	264	-	-
Sweden	-	-	54,432	0	-	-	-	-	1	0
United Kingdom	83,538	1	-	-	-	-	-	-	-	-
Total (13 MSs)	**396,508**	**160**	**297,175**	**6**	**1,304**	**9**	**246,353**	**317**	**20,117**	**132**
Norway	-	-	46,800	0	-	-	-	-	-	0
Switzerland	-	-	-	-	-	-	-	-	1,027	166

1. Data include alpine chamois, bison and moose.
2. Data include bears, hares, lynx, martens, mice, muskrats, raccoon dogs, voles, wolves and other unspecified wild animals.
3. In deer, all positive samples were reported as *Echinococcus* spp.
4. In reindeer and 'other ruminants', all positive samples were *E. granulosus.*
5. In wild boar, 47 of the positive samples from Italy were reported as *E. granulosus*, the remaining samples from both Italy and Spain were reported as *Echinococcus* spp.
6. In other/unspecified wildlife, three positive samples from wolves from Finland were *E. granulosus*, 36 positive samples from muskrats from France and Germany were *E. multilocularis*, 25 and 68 positive samples from unspecified wildlife from Italy were reported as *E. granulosus* and *Echinococcus* spp., respectively, and 166 positive samples from mice from Switzerland were *E. multilocularis.*

CERVI	0%
CAMOSCI	0%
CINGHIALI	0,23%
ALTRI/NON SPECIFICATI	0,7%

altre fonti di dati

- ✓ **Piani di controllo , interventi regionali/locali**
- ✓ **Diagnosi su singoli animali**
- ✓ **Letteratura scientifica**

Discrepanza fra dati ufficiali che indicano basse prevalenze e quanto rilevato da indagini scientifiche e riportato in letteratura che evidenzia maggiore diffusione e prevalenza della parassitosi

efsa European Food Safety Authority — ZOONOSES MONITORING

ITALY

The Report referred to in Article 9 of Directive 2003/99/EC

TRENDS AND SOURCES OF ZOONOSES AND ZOONOTIC AGENTS IN HUMANS, FOODSTUFFS, ANIMALS AND FEEDINGSTUFFS

including information on foodborne outbreaks, antimicrobial resistance in zoonotic agents and some pathogenic microbiological agents.

IN 2008

Italy - 2008 Report on trends and sources of zoonoses

2.9 ECHINOCOCCOSIS

2.9.1 General evaluation of the national situation

A. Echinococcus spp. general evaluation

History of the disease and/or infection in the country

Until now, in Italy, the following agents of echinococcosis have been identified:
(i) Echinococcus granulosus (Cystic echinococcosis), genotypes G1 (common sheep strain; E. granulosus sensu strictu), G2 (Tasmanian sheep strain), G3 (buffalo strain), G4 (horse strain; E. equinus), G5 (cattle strain; E.ortleppi) e G7 (pig strain). E. granulosus has been reported in dogs, in farmed animals (especially sheep), wildlife (wolves, wild-boars, ruminants), and in humans.
(ii) E. multilocularis (Alveolar echinococcosis), since 2002, has been reported in foxes, mainly in Alpine areas. It is not present in other animals or in humans, althought some wrong reports were notified.

National evaluation of the recent situation, the trends and sources of infection

The lack of official data and poor level of reporting, both in animals and humans, do not allow to have a complete and appropriate picture on diffusion of Cystic echinococcosis (CE) in Italy. Recent research updating shows different CE prevalence levels, with sporadic (north), endemic (center) and hyperendemic (south and islands of Sardinia and Sicily) areas. However, high prevalences of CE in adult sheep (from 37% to 40%) have been reported everywhere sheep are bred, independently from the socio-economic development and the number of sheep raised in the involved area.
The situation of Sardinia and Sicily continues to be alarming, even if prevalences of CE and fertility rates of cysts seem to be lower than in the past. The sheep-dog cycle is the most important way of diffusion followed by the parasite.

ITALIA

Dati ufficiali EFSA-ECDC (2009) – Prevalenza complessiva

OVINI	11,3%
BOVINI	0,2%

Dati di ricerca (2006-09) - Prevalenza-Range

	Nord	Centro	Sud	Sicilia	Sardegna
OVINI	0,1- 0,5% (a)	20-80 %	4-36%	58 %	75%
BOVINI	0,02- % (b)	2-21 %	6,6-52,7 % (c)	11-67%	41,5 (44) %

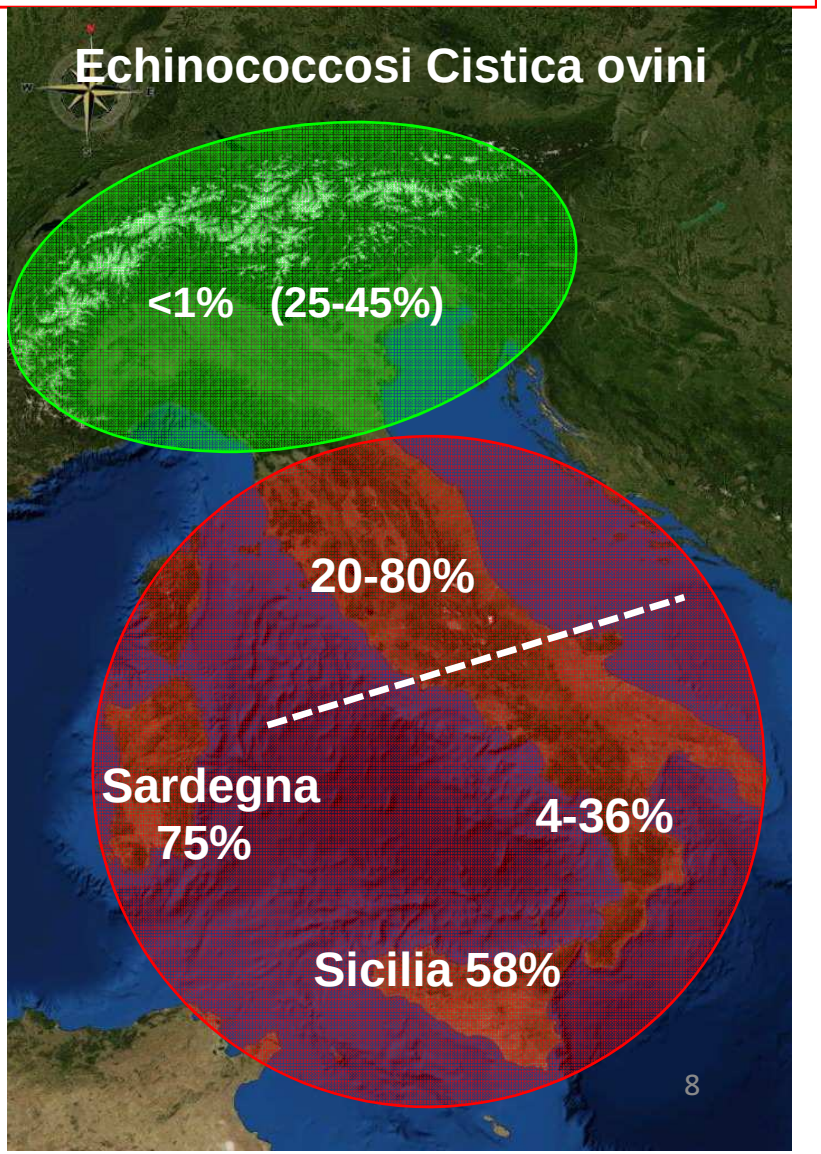
(a) In alcune aree, pecore adulte 15 - 45 !
(b) In alcune aree > 1 (e si sospettano anche > 5 !)
(c) Bufali (Campania) 10,5

Nord
presenza ovini limitata

NON ENDEMICA

Centro, Meridione, Isole
allevamento ovino condotto con tecniche tradizionali

ENDEMIA / IPERENDEMIA



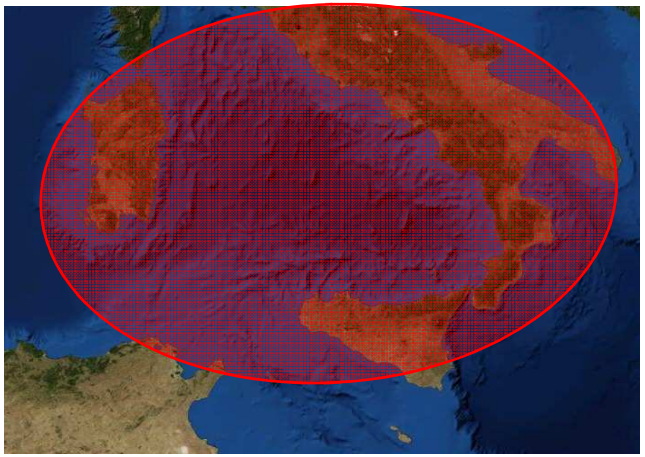
PREVALENZE PREOCCUPANTI

BOVINI	P (%)
EMILIA-ROMAGNA	1,4
ABRUZZO	21
MOLISE	25,7
BASILICATA	23,7
PUGLIA	57,7
CAMPANIA	22

CANI *	P (%)
ITALIA SETTENTRIONALE	2,5
ITALIA CENTRALE	4
ITALIA MERIDIONALE	6
SICILIA	6
SARDEGNA	3 (10)

* Prevalenze minime riportate in letteratura (dati di ricerca 2006-2010)

CENTRO, SUD, ISOLE SITUAZIONE SEMPRE GRAVE ED ALLARMANTE



IN SARDEGNA DA SEGNALARE SITUAZIONE DICOTOMICA

indici epidemiologici in diminuzione nelle aree caratterizzate da una buona gestione dell' allevamento e da migliori condizioni socio culturali

Indici epidemiologici paragonabili agli anni '50 (nonostante le "campagne di eradicazione") in aree caratterizzate da gestione "tradizionale" di allevamento

*Concludendo……..**a fronte dell'impegno profuso in questi anni permangono alcune criticità quali:***

Assente progettazione e gestione dei piani di controllo coordinata Università, S.S.N., IIZZSS, Assessorati Sanità e Asl

Assenza di un quadro puntuale della diffusione della parassitosi

Persistenza dell'Echinococcosi Cistica

Grazie per l'attenzione



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