

Background

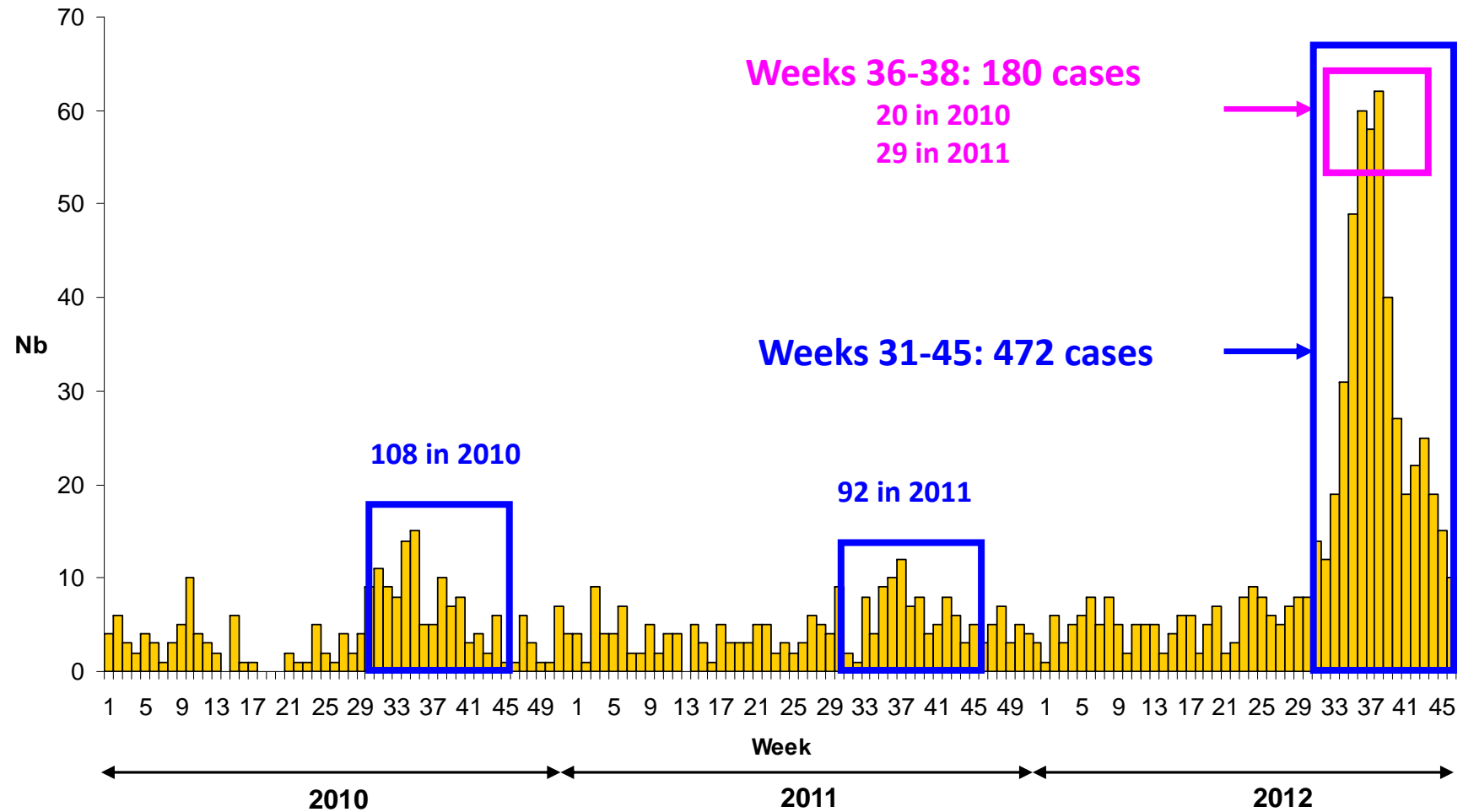
Cases of cryptosporidiosis occur sporadically or as part of water- or foodborne outbreaks

Majority of the cases occur due to sporadic infections

Most of current knowledge on cryptosporidiosis has been obtained from outbreak studies

No risk factor studies on sporadic cryptosporidiosis from the Netherlands exist

Number of *Cryptosporidium* positive faecal samples by week of confirmation in 4 laboratories*, Netherlands, January 2010 to November 2012



*CBSL (Hilversum), Haarlem, Saltro (Utrecht) and Labmicta (Enschede)
 WG Klinische Parasitologie, 24-09-2013

Conclusion Case-Control Study 2012

No single source of infection

Mineral water? Apple juice?

Contamination of surface water? Cannot be excluded

Additional question asked to some cases



CRYPTO-study 2013-2014

Since beginning April 2013

Study objectives:

- To describe the **epidemiology of sporadic *Cryptosporidium* infections** in the Netherlands.

- To identify **risk factors for sporadic** (eventually clustered) **clinical infections with *Cryptosporidium*** in the Netherlands in order to acquire information for control strategies

Methods

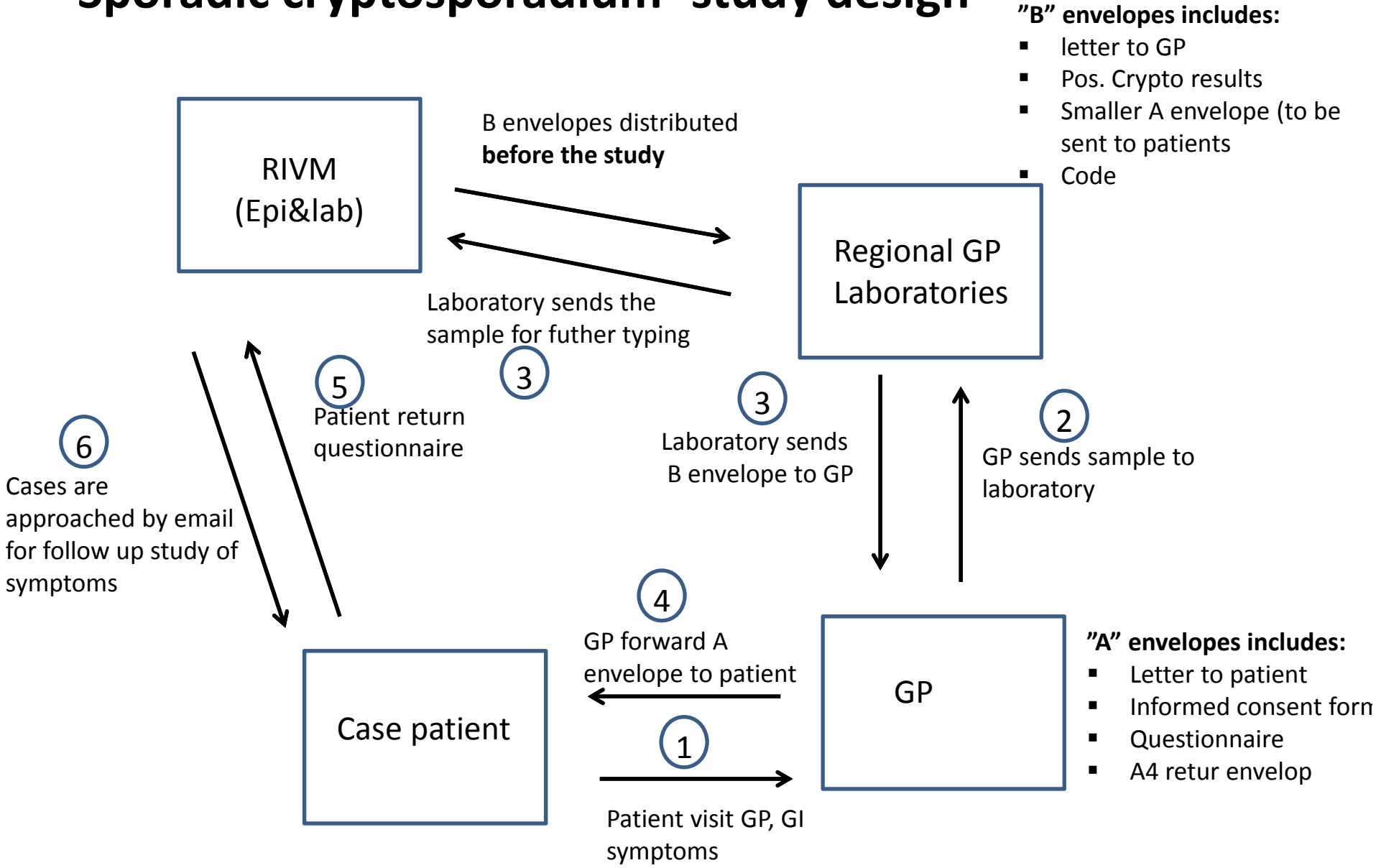
- Study duration: 2 year, METC (niet-WMO form completed)
- Invitation for participation of laboratories sent end February
 - April 2013: study start

Species determination on those samples for which a questionnaire was completed

Molecular typing only carried out if an outbreak (e.g. food-borne) is suspected

Monthly updates by e-mail to participating labs (CRYPTO-news)

Sporadic cryptosporadium- study design



Study goes on for 2 years, starting April 2013

Study flow

"B" envelopes include:

- letter to GP
- Positive Crypto results from the lab
- Smaller A envelope (to be sent to cases)



Code 123

B envelope

Code put on the sample (with other information on lab form)

- Date of birth
- post code
- Gender
- travel history
- date of diagnosis



Code 123



A envelope

"A" envelope includes:

- Information letter for patient
- Informed consent form
- Questionnaire
- A4 return envelop

Questionnaires for cases and controls

- Symptoms, hospitalization, immune deficiency
- Recall period for exposures: 2 weeks prior to onset
 - Personal hygiene / attending day care / living situation
 - Drinking water intake (general, prior to illness)
 - Outdoor activities
 - Contact with Recreational water
 - Food history (unpasteurised dairy products, raw vegetables)
 - Animal contact (pets, farm animals)
 - Travel history

Follow-up questionnaire for cases only: 4 months after illness onset to assess long-term manifestations after crypto episode

Preliminary Results

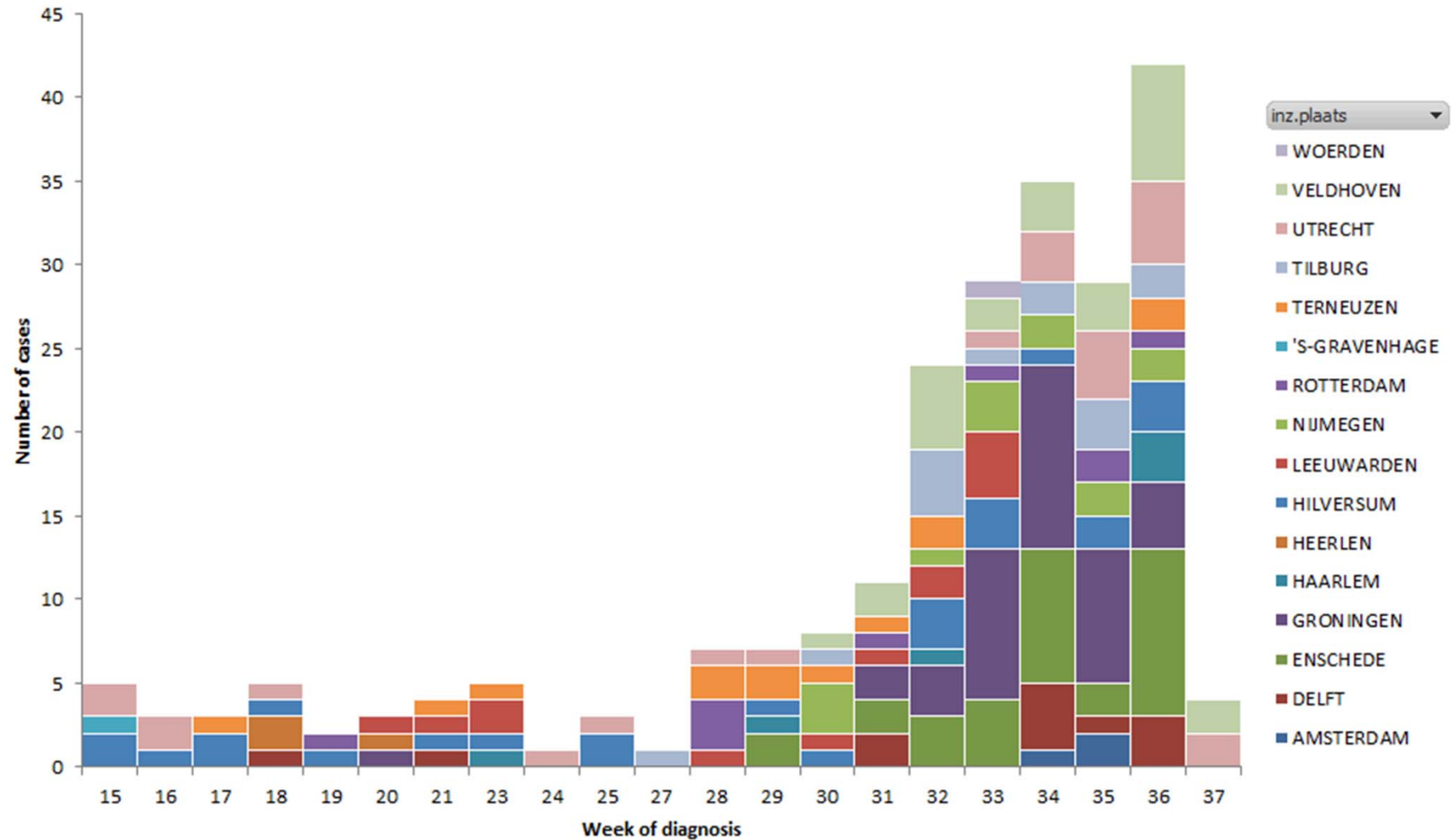
256 specimens received at IDS

Only feces (n=135), only DNA (n=76), feces and DNA (n=35)

In total, 16 participating laboratories submitting samples

Three laboratories did not submit samples until now: Maastricht, Nieuwegein, Gouda

Cryptosporidiosis cases by week of diagnostics and participating laboratory (n=231*, by Sep 18 2013)



Questionnaire response

90 questionnaires back from cases (response rate 41%) and 146 from controls (response rate 29%)

Online follow-up questionnaire 4 months after illness onset sent out to cases

Laboratory results

In the database of received samples we had on
wednesday september 18th

276 samples

DNA 85

Faeces 139

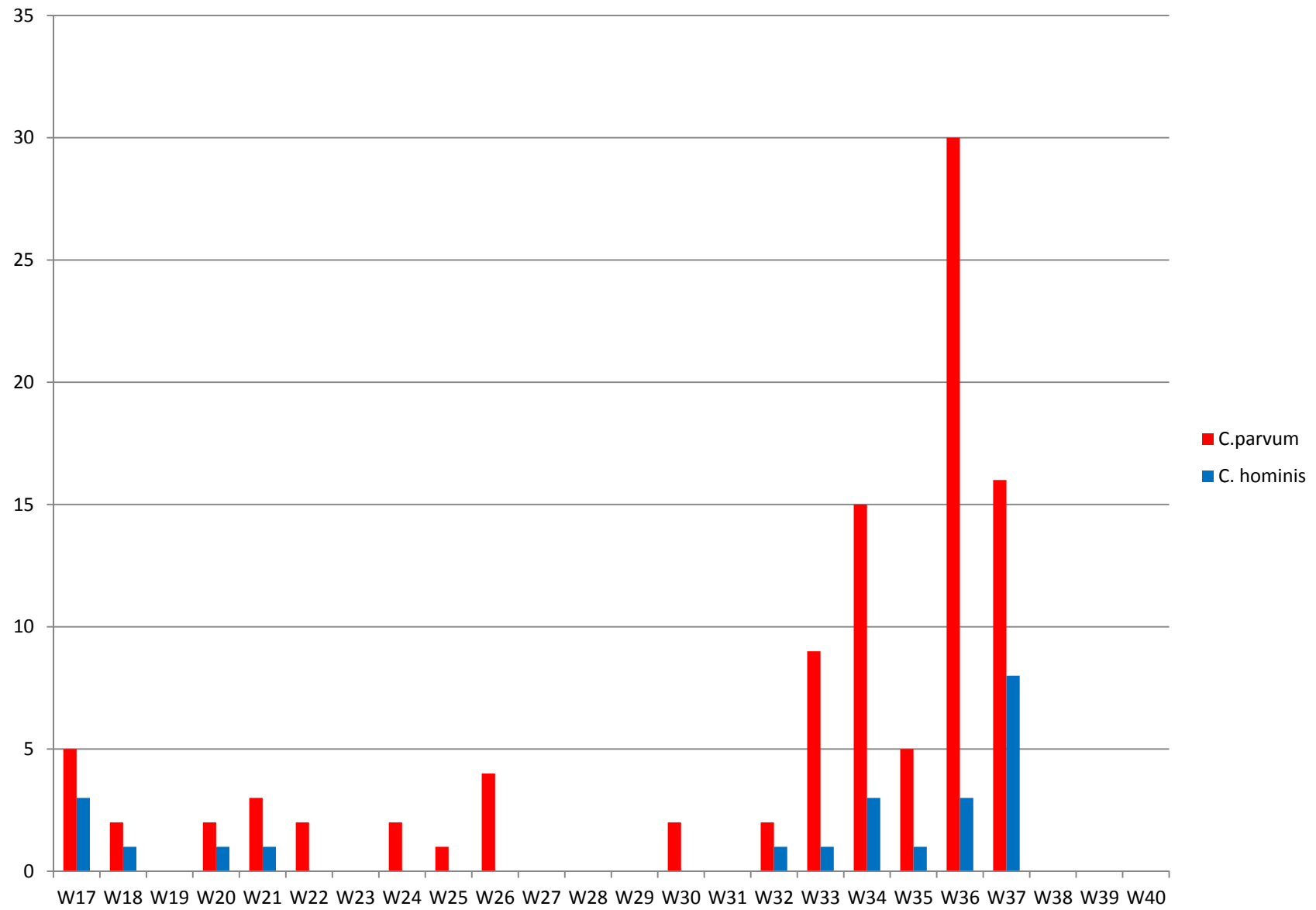
DNA & faeces 41

In total we specified:

100 *C. parvum*

23 *C. hominis*

20 undetermined



Interested in CRYPTO-study?

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