# SAVSNET

Research Surveillance Benchmarking

Winter 2018

## 2018: A summary of our year



This year has seen some wonderful work with a number of publications in our key interest areas of antimicrobial resistance and seasonality of disease such as flystrike which was featured in Rabbit Awareness Week. We have also achieved our aim of creating a virtual biobank, which allows us to now do work in genomics of pathogen samples. This allows us, for the first time, to link electronic health data with physical samples.

We have said farewell to some of SAVSNET's team as they have moved onto pastures new and have welcomed some new faces bringing with them a wealth of experience and skills.

A big cause for celebration for us this year was marking SAVSNET's 10th birthday in September. We think it is brilliant that what started as an idea to give the veterinary profession information built from their own records to provide relevant insight into pet health, has become a national surveillance project, respected by colleagues in practice, industry, academia and government.

We hope you enjoy this round up of our year and we look forward to an exciting 2019.

## What's Inside?

The virtual biobank

### Our tenth birthday

#### **Public engagement**

#### Research this year

## 'Tis the season to eat chocolate!

Last Christmas we published a paper in the Vet Record showing that there is an increased risk of dogs eating chocolate at Christmas.

Many owners know that chocolate is toxic to dogs but this research shows that we are in a high risk time of year.

This paper is open access so please feel free to share!



# The virtual biobank

SAVSNET is unique in that we collect data from diagnostic laboratories for disease surveillance as well as data from veterinary practices. It has always been one of our aims to be able to identify samples of interest from the laboratory electronic data we receive and then complete further testing at the laboratory here at University of Liverpool.

Achieving this required careful consideration on how to get the samples from the lab to us, preserving sample integrity but also to create a process that was practical for the laboratories. The virtual biobank simply would not have been possible without the enthusiasm of the laboratories who have taken part. We are extremely grateful to them for not only contributing data but for working with us to send samples for further testing.

If your laboratory is interested in getting involved in the virtual biobank, we'd love to hear from you and see how we could work together!



# Happy Birthday SAVSNET













Group plc



Health e-Research Centre

MSD

To mark our tenth birthday, we held a two day event at the University of Liverpool Leahurst Campus which was filled with a series of talks based on SAVSNET research, and a Big Data workshop using our bespoke system, Datalab.

The event was attended by delegates from charity, industry, research and clinical backgrounds and it was extremely interesting to hear their views on the future of veterinary health informatics. We especially enjoyed working with delegates in the Big Data workshop, hearing their research ideas and showing them how SAVSNET data could answer their questions.

We are extremely grateful to the sponsors who made the event possible and of course everyone who attended.



#### Our new team members

Introducing our new team members Dr Gina Pinchbeck, Dr Shirley Bonner, Dr Ivo Fins and Dr David Singleton.

Gina has joined as a SAVSNET

investigator providing epidemiological leadership, after we said farewell to Dr Phil Jones as he moved into a government position.

Shirley is working on an Animal Welfare Foundation funded project that aims to use the virtual biobank and whole genome sequencing to discover new pathogens that may play a role in respiratory and gastrointestinal disease in cats. The project will also use this technology to increase sequence data of known pathogens in these diseases which could contribute to their improved diagnosis and treatment.

Ivo is funded by a PetSavers/BSAVA 60th anniversary grant to research antibiotic prescription in feline and canine gastroenteritis using electronic health data.

You may recognise David as he has completed his PhD on antimicrobial resistance with us. He is now in the final stages of writing up and has moved to be our post-doctoral epidemiologist, after Dr Elena Arsevska moved to Cirad in France.

We'd like to thank Phil and Elena for their contribution to SAVSNET, and we are so pleased to continue our work with them in their new roles.

## Public Engagement

Public engagement is an important part of the work we do, helping to teach others about the value of Big Data and how it can help animals.

This year we have held our annual SAVSNET Summer School which saw four school students come and work with SAVSNET data to answer research questions and to learn about how to handle Big Data.

We held a session at a 'Meet The Scientists' day at the Liverpool World Museum showing around 500 families how we can use data to look at tick activity.

And to get into the festive spirit, we gave a lecture on why Rudolph's nose is so red - turns out it's a virus (hence all the tissue!). Good news is, we understand he will make a full recovery for the big day!







# **Research from SAVSNET in 2018**

# Thank you to all veterinary practices and laboratories for making this work possible

New approaches to pharmacosurveillance for monitoring prescription frequency, diversity and co-prescription.

Published: Preventive Veterinary Medicine

Risk factors for cutaneous myiasis in pet rabbits. Published: **Preventive Veterinary Medicine** 

Use of vaccines and factors associated with their uptake variability in dogs, cats and rabbits Published: **Epidemiology and Infection** 

Small animal disease surveillance: GI disease and salmonellosis Published: Veterinary Record

Small animal disease surveillance: respiratory disease 2017 Published: Veterinary Record

Small animal disease surveillance: pruritus and Pseudomonas skin infections Published: Veterinary Record

For links to the papers above, visit our website



As we come to the end of a busy 2018, we would like to thank everyone for their involvement and support of SAVSNET.

We wish you all a Merry Christmas and Happy New Year

We have sent you our newsletter because you opted in to the mailing list. If you would prefer to not receive our quarterly newsletter anymore, please contact us at savsnet@liverpool.ac.uk







