

UNIVERZITA KARLOVA V PRAZE

3. LÉKAŘSKÁ FAKULTA

Monika Němcová

**O kočovací kalendáři – historie, současná a
budoucnost**

Vaccination Schedule ± The Past, Present, and Future

BVN SIFH

Pardubice NY 2014 Q

\$ X W R U ~~Šolika N~~ mcová
6 W X G L M Q t ~~Společně s~~ ~~Ústavem pro~~ ~~veřejné~~ ~~zdravotnictví~~
% D N D O W X G ě M Q ~~tejně s~~ ~~veřejným~~ ~~zdravotnictvím - kombinované~~

9 H G R X F t ~~ŠU~~ U F H - D Q D ' i R Y i ' 3 K '
3 U D F R Y L ě W Y H ~~Ústav pro~~ ~~veřejnou~~ ~~biologii~~ i F H

Datum a rok obhajoby: 18.6.2010

Prohlášení

3URKODãXINPL SãHGMOIGDQRX SUIFL JSUDERãYDOD VDPRV
XYHGHQp SUDPHQ\ D OLWHUDRãXHOX, NãRãp DVQ GiYiP
EDNDOSUMããSRXãtYiQD NH VWXGLMQtP ~pHO\$P

V 3DUGXãã: FãFK

« « « « « « «

0RQLND 1 PFRYi

Pod kování

1 D WRPWR\FK VUGD ISFC Dr. Jan 'i RYp 3KFH]Q Qp
UDG\ SRGQ W\ D S LSRPSONDFBYRCFKR W XHSNDCH Vnp SUIF
G NXML VY]p URUGLQ LYaHPWOLGHP NWB ty\SHO SRGQOHOL
GRWD]QtN\$

6.4.2 9\KRGQRFFHQDt]QW « « « « « « « « « « 52

9\KRGQRFFHQDt SUDFRYQtFK K\SRWp] « « « « « « « « «

'LVNXjH « ...66

=iY J«68

6RXKUQ « ...69

6XPPDU\ «71

6H]QDP \$ROLWUDXU\« « « « « « « « « « « « « « « « « « « «

6H]QDP REUIjN\$ JU«|\$««WDE XOHN« « «

6H]QDP S tORK « ...76«

3 tORK\ « .77

1 Imunitní systém, imunita

~~PMQVVP~~ MH VRXKUQ PHFKDQLVP\$]DnEhu]SHpXMtFt RF
S HG FL]RURGêP D LQIHNpQt D LPDWLGD EILo H E]tDF W Q R XYâO D tV
SRWHQFLRQIQQ ãN3RUGOLHYËK M HW W H XN EW X D Q \ V F K R S Q R V W t
QD GUXKRX VWUDQX L DXWRWROHUDQFt

Imunita MH GiQD VFKRSQRVWt R V V D X S L V E X R U R G & R K D O W V Q H
3UYQt NRQWDN FL]RURJGRLX/POiWNR]X MSHU V SiRUMH QL PXQLWQ
RGSRY Gt NGWGR E E i]S NRWLOWWR S U R G W S M O O W N \]
SR XUβLWp GR E N \ Y L P X Q t R O R J L F N p SDP WL UHDXMH RU
opaNRyDQpP F W R N U R G V R X O i W N R X X U \ F K O H Q R X W Y R U E R X
,PXQLWX G OtPH ± Q D H S S I H F R] H Q N R R X D i c k t o v . I n d r o a R X
S LUR]HQi QHQ t SRGPtQ QD S H G F K R Q t R J V F M A P H F D J H Q G L Q M
GiQD VRXKUQHP K R R F W L Q L V O P \$ N ê M K R X W R I D J R F \ W y] D
NRPSOHPHQWRYê V \ V W p P O \ V R] \ P D] i Q W O L Y p S R F K F
SRGPtQ QD S H G F K R] H F V L N R O R W D F N V M P V D R I H Q R X Y L V O R V W L V
XSODW XMH SDP "RYi VORåND LPXQLWQ t O K P H H Q D Q L V P \$
KXPRUi Q S U R W L O i W N R Y R X W D W R L P X Q L W D M H S R G
LPXQRJOREXOtQ\$R W J D Q S U R X V L O W W G O N Y K t D Y R U J i Q H F K D Q
FHOXTOEUXQNDPL]SURVW HGNRYDQRX LPXQLWX WD MH
DNWLYRYDQêFK 7 W I O U P I R F D W \$ V N K R S Q R V W m u R G V W U D R Y D
FL]RURGp OiWN\ ,PXQLWD]tVNDQi VH GiOH G Ot SRGO
SDVLYQt D⁶⁾DNWLYQt

1.1 Aktivní a pasivní imunita

~~NDMLPQW~~ MH QDYR]HQD S LUR]HQêP βL XP OêP]S\$VR
DQWLJHQLCPKQXV ' Ot VH QD DNWLYQt LPXQLWX]tVNDQRX
SRVWLQIHNpQt D DNWLYQt LPXQLW ± S R X V V V D D Q R Q D X P Q t O ê P] S

\$NWLYQt LPXQLWD]tVNDQi S LUR]HQêP]S\$VREHP VH
SURåLWt NOLQLFN\]MHNFLp β P E X I Q Q D V S D U H D Q W Q t Y] Q I H N O i P

GpONX WUYiQt X LQIHNFt NWHUp SRVWLKXMt SRYUF
NUIWNRGREi QDSURWL WRPX X QiND] NWHUp SRVWLKX
GORXKRGREi Dâ FHORâLYRWQt

\$NWLYQt LPXQLWDêPVSEHP Y]QLNi SR SRGiQt RþNRY
OiWHN 'pOND WUYiQt XYHGHQp LPXQLW\ MH U\$]Q GOF
YDNFtQ\ &tOHP YDNFLQDFH MH QDYRGLW GORXKRGRERX

3DVLYQLPXQW MH jtVNiQD S LUR]HQêP þL XP OêP]S\$VREH
vpUDYHQt KRWRyêFK SURWLOiWHN GR RUJDQLVPX /LGVN
QHPXVt Y\WYi HW D LPXQLWD QDVWXSXMH LKQHG W\WF
NUIWNp VGRêD Y\ORXþHQ\ 2FKUDQD MH NUIWNRGREi

3DVLYQt LPXQLWD jtVNDQi SDWR]HLQ&QLMS\$VMEHFGiC
SURVWXSHp PDWH VNêFK SDWRMLQiDVHNRWVtGWG,H * V]H Y
souvislosti uplat XMt SURWLOiWN\ W tG\ ,J\$DWWHUNpMVPD\$FHEVD
D GRVWiYDMt VH GR RUJDQLVPX GtW WH S L NRMHQ t ,
cKUiQt NRMHQFH E KHP SUYQtFK P VtF\$ âLYRWD SUSP
pohybuje v UR]PH]t P VtF\$

3DVLYQt LPXQLWD jtVNDQi XP OêP]S\$VREHP WDWR
SRGiQt KRWRyêFK SURWLOiWHN GR pRt]xDrb VPX S tMHPF
ter DSSL U\$]QêFK LQIHNFt ÔþLQHN jiYRGQD]S\$MREFK YþD
S tSUDY\ UR]G OXMHPH SUHSDUiW\ QD KHWHURORJQt
LPXQRJOREXOLQ\ .URPRESDVWQt KXPQLiWQt MH PRâQp
imunitu i v REODVWL FHHYRCHPQE X \$ N DEG O þ LN WHYDQ
krve. ^(3,4)

1.2 Typy o kovacích látek

2þNRYDiMND VH SRXâtYi SUR DNWLYQt LPXQLJDFL RVF
SUHSDUiW NWHUê REVDKXMH DQWLJHQ\ MHGQRKR þL Y
SR DSOLNDþL þYtRHWLXY\YROI SURWLOiWNRyRX RGH]YX
DNWLYQt LPXQLW\ 3RGOH]S\$VREX jtVNiQt DQWLJHQQtK
W\SS\$ YDNFtQ

LYpDWHQRYDQRVODEHRY REVDKX MWHULiOQt QHER YLURYp M
NWHUp RSDNRYDQCQD S XOMRYDQCtFK PHGLtFK JWUDWLO\
ale zachovaly si DQWLJHQLFLWX 0H]L W\WR YpMiFtQ\ SDW t M
VSDOQLpNiP JDUG QWMEHSNDXCFQ]HtFSURWL åOXWp JLPQLF
.QNWLYRYDQWPUFHQ M/Q jsou suspenze usmrce QêFK E,DNWHULT
S tNODGHP MH RpNRYDft OiWNX SURWL GiYLYpPX NDãOL
YLURYp KHSDWLWLG \$ YJWHNOLQ

6XEMHGQWNRYP D VSGWVHYp YDNftQtyto RpNRYDFtjsouOiWN\
S LSUDYHQp UR]ãW SHjQitP purifikacRY êEKWjyQMLcF
L]RORYDQ]H]pQtFK DJHQV Y\YROiYDMt QQãS LPXQRORJ
YDNftQ\ SURWL FK LSFH

Toxoidy (anatoxiny) jsou EDNWHULiOQt H[RWR[LQ\ MHMLFKå WR[
QHER SRWODpHQD DOH DQWLNãHQ LFRKMDX]\$RQOQDLVDFKYF
VSHFLIDQWãEW S]LRFWãQDVS HNRpNRYDft OiWND SURWL WHV

3ROVDFKDULGRYP YDNKIPRYDNftQsou RpNRYDft OiWN\ S LSUDYH
pLãW QtP MHGQRWOLYêFK DQWLJHQQtFK NRPSRQHQW P
imunogenicitu, QDSYDNftQ\ SURWL PHQXRRRRRRRãP D
KHPRILORYêP LQIHNFtP

5HNRPELQWQW/Q jsou S LSUDYHQp PHWRGDPL, JHQRYPKR L
REY\NOH UHNRPELQDRQW]QtEW êFK QRROR]QH VHQ NyG SUR V
antigenu a jejich klon produkuje V\QWHãWger, NaëS YDNftQD SURWL YLURY
KHSDWLWLG W\SX %

KHPLFNp WWHWLFN/Q jsou FKHPLFN\ S LSUDYHQp RpNRYDft
REVDKXMtFt V\QWHãWLFNtp YêQWGRHXQXYHGHQêFK YDNftQ
pLVWRWD D Qt]Np D]SURSEURVORMOS\GYDQFtQ SURWL PDOiU

.RMXJRYDQYDNftQREVDKXMt SRO\VDFKDULG\ Yi]DQp QD SU
QHMPDVW ML GLIWHULFNê QHER WHWDQLFNê WR[RLG
SQHXPRNRNRYêP QHER PHQLQJRNRNRYêP LQIHNFtP

§WRYDNftQMVRXUDYLSYiQDN]WHULT SR êK]i]HNR FDFKpKJR
ORåLVND NWHUp VH L]ROXMt NXOWLYXMt XVPUFXMt D
se k OppE FKURQLFNêFK LQIHNFt NH]YêãHQ t LPXQLW\
(318)

Imunopreparáty pro pasivní imunizaci

HMURORJQ *immunoglobuliny* ± MVRX JtVNiYiQ\ K\SHULPXQLJDFt SUR
JYt DW GQHV S SRYs átSDGRQRY JtK.R GRE\WND pL RYFt
+RPRORJQLPXQJOREXOLQ S HGVWDYXMt S tSUDYN\ NWHUp MV
z OLGVNp ⁽³⁾SODVP\

1.3 Zásady správného o kování

- 3UDYLGHOQp WpNRYiQ\ RbNRYiQ\HQF\$ SURWL
WXEHUNXOyJH D YLURYp KHSDWLWLG % X QRYRURJHQF\$
SURYiGt Qs tSODXN WLFNê DO pNRDUSWR BpWRYiQt QRYRURJH
WXEHUNXOyJH D YLURYp KHSDWLWLG% QXFQ RPYRWRNHQ
SURYiGtURGQLFtFK OpND L QRYRURJHQHFNêFK RGG OHQt
 - =YOiãWQt D PLPR iGQp RbNRYiQt SURYiG Mt S tVOXã
JiYRGQt SUHYHQWLYQt SpbH QHER OpND L JGUDYRWQtKR
 - 2pNRYiQt SURWL WHWDQX S L USDQIBQ QURKYiG QHKR
OpND L NWH t RãHW XMt SRUDQ Qt QUREWLQYJKRHNêLQHS
SRUDQYtQHWHWP SRQHNDHJQWJHNOLQRX SURYiG Mt OpND L
FHQWHU S L Y\EUDQêFK LQIHNPQtFK RGG OHQtFK QHPRF
 - 9ODVWQt RbNRYiQt SURYiG PHpQêFKjeS tSDGHFK R
VHVWUD RbNRYiQpGVWL OpND H =D S tSDGQp NRPSO
YãDN QHVH SUIYQt RGSRY GQRVW OpND 3R SURYHGH
SURYpVW R Q P JijQDP GR RbNRWQFKRRSSUSNDXGQWGWJG
 - V ýHVNp UHSXE pNRYiQ\ SRXátYDMt UHJLVWURYDQ
VFKYiOHQp 6WiWQtP ~VWDYHP SUR NRQWUROX OppLY
3UDYLGHOQp RbNRYiQt MH SURYDQp YSRGQãHXVWVQRPB
GRE Y\KGiãND YBQ Qt Y\KO p 6E
 - 6RXpDVQ OJH RbNRYDW QD U\$]Qi PtVWD W OD áLYp
3RNXG QHQt SURYHGHQR SRGiQt U\$]QêFK RbNRYDFtFK O
SRGiQt áLYêFK OiWHN LQWHUQDQMLêFGHQ pNRYiQDFtFSKRSR

þWUQiFW GQt SR RþNRYiQt SURWL WXEhUNXOy]H O]H F
DYãDN YâG\ SR]KRMHQ t SUYRWQt UHDFNH

- '\$OHåLWp MH VSUIYQp VNODGRYiQt nYmD.NFtQ D QiVOC
,QDNWLYRYDQp YDNFtQ te VQXVSLDVGMSORW f& Dâ f&
YDNFtQ\ MH QXWQp FKUIQLW S HG PUW]HPQXäBYlp YDNF
WHSORW f& Dâ f& SRS tSDG SRG f& SRGOH GR
YODVWQtP RþNRYiQtP MH QXWQp S HNRQWURORRYDW]GD
]P Q\ NWHUp E\ VY GpLO\ R SRNOHVX NYDOLW\]iURY
S HNRQWURORYDW H[SLUDþQt GREX YDNFtQ\

- 2þNRYiQ P\$âH EêW SRX]HR\$NRYiQpYRGS\$VREâQê N
SRVWYDNFLQDþQt UHDFNH PXVt NDâGê RþNRYDQê MHGL
v NOLGX SRG GRKOHGHP OpND H 'iOH MH W HED SRXþL
Y\YDURYDO\]YêãHQp QiPDK\ QiVOHGXMtFtFK KRGLQ

- 8 GtW WH L GRVS OpKRêVM\QXFKiãDâRþORRNWYDNFL
UHDFNH MH RþNXMtFt OpND pSRVãLQWHQD\$RVCOLHWFKSHUDN
UHDFNH QHXURORJLFNp LPXQRORJLFNp «

- V S tSDG RþNRYXQpLQWt]GUDYRWQMLQW]EPJDWL]DF
IDNWRUHP]QHPRâ XNUGPQpFNLSUDNWLFNpKR OpND H MI
NRQ]XOWDFL D S tSDG OpG]RRYDNFtQ(46)SODFRSHLWtFK

2 Jednotlivá o kování

Historie

-Lå SR WLvtFLOHWt MH]QiPR åH OLGp NWH t S Hå
YHOPL] tGND RQHPRFQt VWHMQRX QiND]RX 9H VW HGR
RVRE\ NWHDOå BHPQHPRFQHP QHIR QHPVWQUp ýtQ
H[LVWRYDO\ SRNXV\ MDN]DEUIQLW QHER S HGHMtW
SURMHYXMt Y]QLNHiSDSQRKéYURS 9]DYHGHQt YDULROL]D
]DVORå PDQåHOND EULWYurckRadyMaryWordep QFH Y
Monta JXRYi NWHDU\LRHLDf, VW]DQEXODX Y3R QiYUDWX GR
QHFKDOD YH HMQ VYRX GFHUX RþNRYDW REVDKHP QHã
E\O WHQWR]S\$VRE YSAPHQHGMHRSUFRVLD]D]FK QHPtFK
(YURS\ .RQFHP DOWORDHVOHFRFQ Qt SUDYêPL QHãWRY
z GHVHWL QDMDåBREFK/L9DQJOLFNe YHQNRYVNê OpND (G
åH GRMLþN\ NWHUp SURG ODO\ NUDYVNp QHãWRYLFH
QHãWRYLFHPL 7DWRGONDXQ BþDFAOWQWRXUSVHQþDYVNêFK
QHãWRYLF QD]GUDYþKR MHGLQFH D Y\WYR LW WDN X
QHãWRYLFtP

=iNODG\ QRYRGREp SUHEXEQVSRYORåPVRDfVQt
'DOãtP SU\$NRSEODVWLYLPXQRORJLH E\O /RXLV 3DVWHXU
S SUDYLW YDNftQX SURWL Y]WHNONQ HFDFKRDVHWHRXUB YL
VOH]LQQRX VQ Wt S HGVWDYRREODQWYLRþMFGHQRX HSI

'HYDWHQiFWp VWROHWt S LQHVR GDOãt W L RþNR
FKROH H D PRUX

1D SRþDWMXROHWt E\OR MLå] HMPp åH LQIHNPQtP C
VWDOHWt PDVRY RIKURþRYDQ\VHEþiSRþXRPNRYiQtP 'R
2.sY WRYp YiON\ VH SRGD LOR S LSUDYLW RþNRYDft OiW
NDãOL SURWL WNOVQXD SURWLsWVRSþNYiORFH GRãOR
k SRVXQX FKisiQt Yê]QDPX RþNRYiQt ,QIHNPQt QHPRFL
VQDGQR VH åt LW D Y\$þL NWHUêP H[LVWRYDO\ QHER E
OiWWH SRVWXSQ OLNyLGRYDOUHPDXORRYêPQFHQRþNRãQtP

(9)

Historie v ~~FIVNHSKDH~~

V ýHVNp UHŠKESULFYM HQFH LQIHNPQtFK RQHPRFQ Qt
 GORXKRX WUDGUREH9åG\QMLjãNYODG FtVD VNpKR GRNXPH
 JDpDOR RpnRYDW SURWLrocsUDYêP profylaktickýVpRt Y
 YJWHNDIRFH Y SURWURJFãHNUWXS DRWL3R W XEYHUNXOtyJH
 SUDYLGHOQpKR RpnRYiQt YêVN\W LQIHNFt SURWL NWH
 G WVNp REUQ\ VH YH YHOPL NUIWNp GRE G RVIKOR HOLP
 JiãNUW Y\PLJHO WHWDQXV X G Wt VSSDOQLpNQMFK VWDC
 OHWHFK VH XGUåXMH QtjNê YêVN\W JDUG QHN S tXãQLF
 JDYHGHQtP RpnRYiQt S tpLQRX⁽³⁾ ~PUWt VWRYYHN G Wt URpC

Tabulka 1. P ehled zahájeného o kování v eské republice

Onemocn ní	Rok zahájení o kování v R	Poznámka
3UDYp QH	1821	FtVD VNê GRNXPHQW
	1919	SRYLQpR QpHQR Y URFH
Vzteklina	1918	profylakticky
7XEHUNXC	1923	SUYQt SRXåLWt
	1953	3RYLQQp
=iãNUW	1946	
	1958	trojv DNfQtD 'L7H3H
Tetanus	1952	G WdeKívech
	1958	WURMYDNFtQD 'L7H3H
'iYLYê NDã	1951	
	1958	WURMYDNFtQD 'L7H3H
' WVNí RE	1960	YãHFKQ\YGNFLQD åLYi
6SDOQLpN	1969	YãHFKQ\ G WL
	1996	trojkombinace Trivivac
=DUG QN\	1982	12- WL OHWp GtYN
	1986	YãHFKQ\ OHWp G WL
	1996	trojkombinace Trivivac
3 tXãQLFH	1987	Mopavac
	1996	trojkombinace Trivivac
VHB	1982	OpnRYiQt ULJLNRYêFK VNX
Hib	2001	Engerix- % QRYRURJHQFL D G
	2001	Tetract - Hib (kombinace DiTePe + HiB)

(2, 4)

2.1 Právě neštovice

Historie

=D XSO\QXOp Y N\ SRGOHKO\ SUDYêP QHãWRYLFtP
YãHFK VY WDGtOHFK =D SUDYODVW VH SRYDãXMH ýtQD
VYp ERK\ 9H VW HGRYHN\$REYDãQYHQRD %Rát WUHVW JD
D SURWR E\OD NDãGi OppED EHJYêVOHGQi 'R VW HGQt (
YUDFHMtFt VH NDLaifVW\$RO(HWRSiGHSDGYPLWpQHãWRYLF
GRE SRVWLKRYDOD NDãGRORFpQã± S HVXPILOLRQ DDLGt
z S HãLYãtFK Dã RVOHSOR 8 G W8 %GRo OHW E\OD
SRVWXSQpP JDYiG Qt RpNRYiQt SURWL QHãWRYLFtP RC
V ýHFKiFK E\OD YHONSROBQHHLH YVWROHWt SRVOHGQt
Qibylo v roce 1924 a v URFH X LPSRUWR, QDQLPKR\$ \$ GRDGRNX

E\OR NDãGê URN POLIHRQ\$ QRYêFK RQHPRFQ Qt S
v MLKRYêFKRQã\$V\$PHVDFHJHPY\$IURLNH JDkiMLOD
6Y WRYi JGUDYRDFHLFNiDRGUNDQQt SURJUDP 3RVOHGQt JQ
QHPRFL SRK1977. BR XNRQpHQt WRKRWR HUDGLNDpQtKR
NG\ :+2 SURKOiVLOR SUDYp QHãWRYLFH JD JFHOD Y
JQLpLW YãHFKQ\ ODERUDWRUQtDW]PUN\ S\$XRI6FYH FGRRUR
ODERUDWISA a Fukku.

.OLQFNREUD]

2QHPRFQ Qt VH NOLQLFN\ Y\VN\WRYDOR YH GYRX jIM
PDMRU D YDULROD PLQRU .URP WRKR VH X YDULRO\
YjifQp IRKUPRRUDJLFNi DPRDDJLWQNi +RUPD VH REMHYRYDO
SDFLHQW\$ D E\OD WpP VPUWHOQi ±QNXEDpQt GRE
GQ\$ SR WpWR GRE VH REMHYRYDO\ S t]QDN\ SRGREQp
GQHFK VH REMHYRYDO\ W\SLFNp QHãWRYLFtP Q\ QD
pW\ HFK Dã VHGPL GQHFK WQWQX SXUKãRUHGKRFK]t DGD
QHPRFQêFKG\$FOHGNX RE KRYpKR VHOKiQt QHER NRPSOI
QD N\$ãL]\$VWiYDMt GROtpNRYLWp MLJY^(2,11)S HGHYãtP QD V
2NRYiQ v\$ - 2pNRYiQt XNRQpHQR Y

2.2 Tuberkulóza

Historie

7XEHUNXOy]D SURYi]t OLGVNRX SRSXODFL RG SUDG
WXEHUNXOy]Qt VSRQG\OLV^(6,10) HJ\SWVNêFMDFN^(6,10) PÁL L JX
LQGLi^(6,10) SH^(6,10) NROXPERYVN^(6,10) SR^(6,10) HVE^(6,10) RQ^(6,10) HPRFQ Qt VH SUXGFH
Y]QLNHP SUS^(6,10) P\VORY^(6,10) RISHY^(6,10) DRIO^(6,10) SFY VWROHWt 7pP NDáGê
GUXKê^(6,10) a^(6,10) Q^(6,10) N^(6,10) D^(6,10) PORY N YH Y NXUR^(6,10) N^(6,10) HP X^(6,10) D^(6,10) a^(6,10) DO QD WXEHUN
NWHUi WDN JDYLQLOD DVL MHG^(6,10) R^(6,10) X^(6,10) HVHGH^(6,10) F^(6,10) E^(6,10) O^(6,10) R^(6,10) YâHFK ~
EDNWHULRORJ 5REHUW .RFK R^(6,10) E^(6,10) M^(6,10) F^(6,10) H^(6,10) LO S\$Y^(6,10) L^(6,10) S^(6,10) G^(6,10) D^(6,10) H^(6,10) WOX^(6,10) E^(6,10) R^(6,10) U^(6,10) S^(6,10)
WHVW NH JML^(6,10) a^(6,10) W Qt S tWR^(6,10) E^(6,10) W^(6,10) XEHUNXOy]D^(6,10) R^(6,10) V^(6,10) O^(6,10) D^(6,10) E^(6,10) H^(6,10) Q^(6,10) ê EDFLO NV
JD^(6,10) Ki^(6,10) M^(6,10) L^(6,10) O^(6,10) L VSROH^(6,10) p^(6,10) Q \$OEHUW &DOPHWWH D &DPPLOOH *)
OiWNMD^(6,10) R^(6,10) E^(6,10) X^(6,10) M^(6,10) t^(6,10) F^(6,10) t âLYê WXEHUNXOy]Qt R^(6,10) V^(6,10) O^(6,10) D^(6,10) E^(6,10) H^(6,10) Q^(6,10) ê EDFLO NV
NXOWLYD^(6,10) F^(6,10) t EDNWHULH O^(6,10) F^(6,10) R^(6,10) E^(6,10) DNW^(6,10) W^(6,10) X^(6,10) W^(6,10) R^(6,10) F^(6,10) E^(6,10) R^(6,10) V^(6,10) D^(6,10) F^(6,10) t OiWNX
SRX^(6,10) a^(6,10) LOL SUR SHURUi^(6,10) OQt R^(6,10) p^(6,10) NRYiQt QRYRUR]HQFH MHKR
2pNRYiQt E\OR^(6,9) ~VS ãQp

.OLQFNREUD]

.OLQLFNê REUD] MH UR]PDQ^(6,10) L^(6,10) W^(6,10) ê^(6,10) S^(6,10) p^(6,10) r^(6,10) o^(6,10) DN\ Y\FKi]HM
1HM^(6,10) p^(6,10) DVW M^(6,10) a^(6,10) t MH RQHPRFQ Qt SOLF DOH PRKRX EêW SR
SOHQ\ N\$^(6,10) a^(6,10) H WUiYL^(6,10) Ft ~\SWUR^(6,10) M^(6,10) t^(6,10) Q^(6,10) t^(6,10) O^(6,10) L^(6,10) H^(6,10) G^(6,10) I^(6,10) N^(6,10) C^(6,10) L &R^(6,10) R^(6,10) Ki]t REY
vd WVVYt NG\ VH SULPiUQt OR^(6,10) a^(6,10) LVNR Y\KRMt D]YiSHQDW
Y]SODQXW^(6,10) t^(6,10) O^(6,10) a^(6,10) N^(6,10) D^(6,10) J^(6,10) N^(6,10) XY V^(6,10) X^(6,10) H^(6,10) S^(6,10) I^(6,10) S^(6,10) J^(6,10) R^(6,10) G^(6,10) F^(6,10) L i^(6,10) R^(6,10) \$^(6,10) a^(6,10) R^(6,10) J^(6,10) M^(6,10) a^(6,10) D^(6,10) N GRMtW
RSDNRYDQp O^(6,10) Q^(6,10) H^(6,10) M^(6,10) O^(6,10) F^(6,10) E^(6,10) H^(6,10)]SH^(6,10) p^(6,10) Q M^(6,10) a^(6,10) tP IRUPiP WXEHUNXOy]
PR]NRYêFK EO^(6,10) Q^(6,10) Q^(6,10) Y^(6,10) D^(6,10) F^(6,10) S^(6,10) R^(6,10) W^(6,10) L^(6,10) i^(6,10) a^(6,10) W^(6,10) R^(6,10) K^(6,10) p^(6,10) D^(6,10) R^(6,10) V^(6,10) S^(6,10) tSDGHFK MH ~VS
QHMLVWê D QHPRFQê MH RKUR^(6,10) a^(6,10) HQ VPUWt QHER W a^(6,10) Nê
QiVOHGN\ /ppED WXEHUNXOy]^(6,10) WUYi Q NROLN P VtF\$

2pNRYiQ]

2pNRYiQt SURWL WXEHUNXOy]G^(6,10) H^(6,10) V^(6,10) O^(6,10) H^(6,10) D^(6,10) S^(6,10) Q^(6,10) R^(6,10) Y^(6,10) M^(6,10) S^(6,10) C^(6,10) H^(6,10) G^(6,10) Q^(6,10) M^(6,10) I^(6,10) M^(6,10) G^(6,10) R
NRQFH ãHVWpKR WêGQH SR QDUR]HQt GtW WH 3RNX
v XYHGHQêFK WHUPtQHFK SURYHGH VH D^(6,10) a^(6,10) SR VNRQp
SURY^(6,10) Q^(6,10) C^(6,10) K^(6,10) E^(6,10) i^(6,10) F^(6,10) FL SUDYLGHOQpKR R^(6,10) p^(6,10) NRYiQt G^(6,10) W^(6,10) t WR QHSO
SDW tFt Q^(6,10) R^(6,10) i^(6,10) U^(6,10) Q^(6,10) L^(6,10) V^(6,10) S^(6,10) N^(6,10) X^(6,10) S^(6,10) L^(6,10) Q^(6,10) D^(6,10) M^(6,10) R^(6,10) Q^(6,10) W^(6,10) Q^(6,10) D^(6,10) N^(6,10) W^(6,10) \$^(6,10) E^(6,10) V^(6,10) H^(6,10) U^(6,10) N^(6,10) X^(6,10) O^(6,10) y]RX NWH t

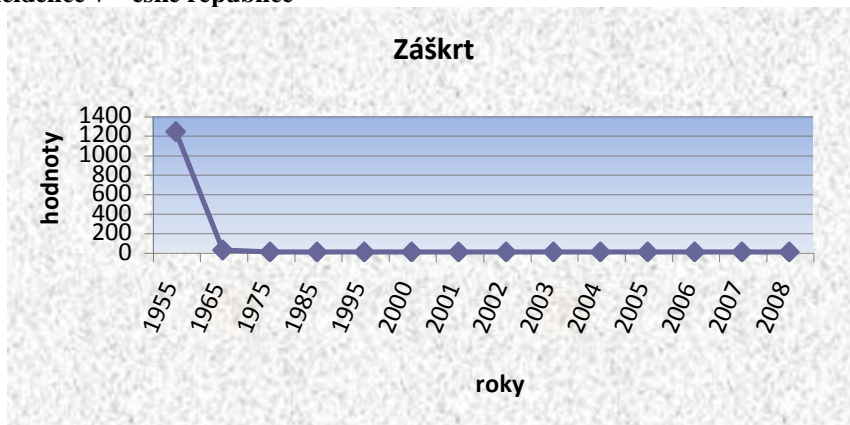
WXEHUNXOy]H R pNXMt S HGQRVWQ S HG RVWDWQtP R s QHJDWLYQtP WXEHUNXOtQRYêP WHVWHP 3 HRpNRYiQt V

2.3 Záškrť

Historie

=iãNUW MH RQHPRFQ QH S]RXPp BGSVDp GiYQD 3UYQt SRFKi]HMT RG +LSVSRNUHDMDS] .U D KRYR t R QHEH]SHpt FKRURËYURS MH SUHFRFSRSL VãSQ Q OVNpKp OpND H) / Villalobos z 15. ± VWROHQLFN\ JiãNUWenSRSMD 082D SRMP 3LHUUH)LGHOH %UHWRRQQHDX 7pP R SDGHViW OHW (GZLQ .OHEV REMHYLQ S\$YRGFhãNãWæ. .RQFHSFL R pNRYiQt SURWL JiãNUW 100% (28)

Graf 1: Incidence v eské republice



~~DD~~

-H DNXWQt RQHPRFQ Qt Y\YRODQp EDNWHULt &RU\ NWHUi MH Y\VRFH RGROQi Y\$pL]HYQpachyOY\$P D SURW]DVFKOpP KOHQX L Q NROWNOVéYQp QDQHãS]pQWUD DV 3RVWLKXMtFt SULPiUQ WRQ]LO]iQKVMTRQ DRKUSVDEO iQ GH VHNXQGiUQ P\$ãNGRHMQWPNQRKD RUJiQ\$ YpHWQ P\RNDU QHUYYRpKR V\VWpPX D OHGYLQ ýDVQpedoREUQ\ SRVWL k SRUXFKiP S LSSRRONiQRUP\ REUQ VH PRKRX ãt LW QD VYDOVWYR WUXSX 3 HG]DYHGHQtP Oppe\ DQWLELRWLN forem s SRVWLãHQtP KãWDQX Dã

2NRYiQ §

.RPELQRYDQi YDNFtQ W DSURWG Li Y LãNpUXNDVãL LQYD]
 RQHPRFQ Qt Y\YRODQpPX S\$YRGFHP +DHPRSKLOXV LQIC
 REUQ D YLURYp KHSDWLWLG %

ZiNODGQt RþNRYiQ GREH SGR]DSEpHDWpKR W LQiFWpKR WêG
 GtW WH YãG\ YãDN DãSRþKRUHONFSRSURVONFWXEHUNXO
 GiYND\$U\$E KX SUYQtKR URNX åLYQWBUQDOWHFK SRMDDQ
 MHGQRKR P VtFH PHJL GiYNDPL D þWYUWRX GiYNRX SR
 SRGiQt W HWt GiYN\ 3 HRþNRYiQp PSURDãLOJiãWHU SãRWHGH
 v GRE RG GRYUãHQt SiWpKR GR GRYUãHQt ãHVWpKR UF
 SURWL JiãNUWX WHWDQXHXGivUQpSMUNDãGRYRX VORãM
 s DSOLNDFt SiWp GiYN\ LQDNWLYRYDQp RþNRYDFt OiWN\
 provede RG GRYUãHQt GHViWpKR GR GRYUãHQt MHGHQiFWpK
 RþNRYDK KH[DYDOHQWQHRSþHRYDNRtYQW SãRWL WHWDQX
 GRYUãHQt GYDFHWLS WL OHW GR GRYUãHQt GYDFHWLã
 SURYHGH SR NDãGãPWHFK

2.4 Tetanus

Historie

-Lå HJ\SWãWt D SR]G ML HpWt D tPãWtznQmND L]QDOL Y
 N Hþ\$YRGFH RQHPRFQ Qt EDNWHULL &ORVWULGLXP WHV
 URFH 2 Q NROLN OHW SR]G ML Y URFH Q PHF
 %HKULQJ D MDSRQVNê EDNWHULRORJ âLEDVDEXUR .LV
 produkuje WR[LQ NWHUê]S\$VREXMH9WUXVRI LQIHNEþKH PFKRUF
 SUYQt VY WRYp YiON\ E\O SURYHGHQ SRNXV NDãGpPX
 SRGiQR SURWLWHWDQRYp VpUXP S LSUDYHQp] NR V
 SR]RUXKRGQê X WDNWR RãWpV HQNêãKGQþMXN SãHPGFããã
 WHWDQHP =iNODG\ GQHãQt RþNRYDFt OiWN\ SRORãLOL
 NWH t S LSUDYLOL RþNRYDFt OiWNX þiVWHþQRX L]
 WR[LQX] S\$YR²QQt EDNWHULH

.OLQFNREUD]

2QHPRFQ Qt MWHUFLK BVDQp RFKUQXWtP NRVWHUQ
Y\YRODQpKR S\$VREHQtp WHWDQLFNpKR WR[LQX 6SD]P\
SRJG ML JiGRYp VYDO\ D SRWRP VHUVQpR WLMQADV QêOKI
Y\VRN(90%) JiYLVt QD LQIHNPQt GiYLFp YpDIXQRVQWRDWRVUS
9 URJYRMRYêFK JHPtFCRMRUSURWLOPNIWPHUê YJQLNi S L
NRQWDPLQDFL SXSHpQtKR SDKêOX GtW WH

2NRYiQ §

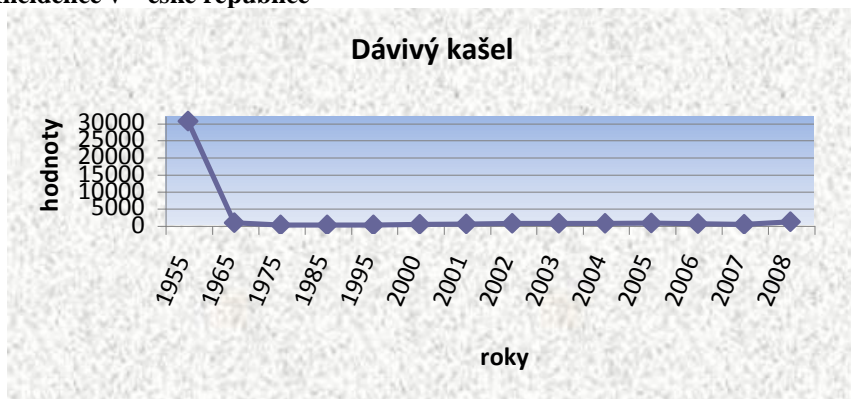
.RPELQRYDQi YDNFtQD SURWL JiãNUWX WHWDQX G
RQHPRFQ Qt Y\YRODQpDHPSSYKLOXV LQIOXHQJDH E S HG
REUQ D YLURYp KHSDWLWLG % 9,=

2.5 Dávivý kašel

Historie

2QHPRFQ Qi YLYêP NDãOH Pevňové srážky v roce 1911
roce 1578 v 3Ditě RãOR N YHONp HSLGHPLL S ü Qtá E\OD P
~PUWQRVW PHJL NRMHQFL D EDWRODW\ 3R FHOp VW
NDãOHãWêP SU\$EHKpP(YUS\$HULFYH 3\$YRGFh GiYLYpKR M
REMHYLOL PLNURELRORJRYp -XOHV %RUGHW D 2FWDYLD
SRGOH VYpIKR%REUNGHYLMWOOD 9 URFH E\O\ S LSUDYHQ
OiWN\ NWHUp E\O\ XUpHQ\ KODYQ N OppE D QH N SU
RpNRYiQt G Wt NWHUp YHGO\ NH VQtáHQt pHWQRVWL W
2G URNX E\ORSJDKãMhQpNFRHQQt⁽⁹⁾SR FHOpP VY W

Graf 2: Incidence v České republice



.OLQFNREUD]

OQHPRFQ Qt VH ät t NDSpQNDPL Y]GXãQRX FHVWRX
SUREtKi YH W HFK VWiGLtFK YH VWiGLX*êP DWDUiOQtP
GuiåGLYêP NDãOHP YH VWiGLX jIFKYDWRYLWpP SURMH
SURYi]HQê pDV\WRV\WXGDWFPYQQR NDãOH D9UVN\WQXMDtOHVfHQ
VH OHKNp IRUP\ GRNRQFH L LQDSDUHQWQt QiNDj\ 9
pDVWêP RQHjPMPQ QD PX G Wt S (46)HGãNROQtKR Y NX

2NRYiQ 3

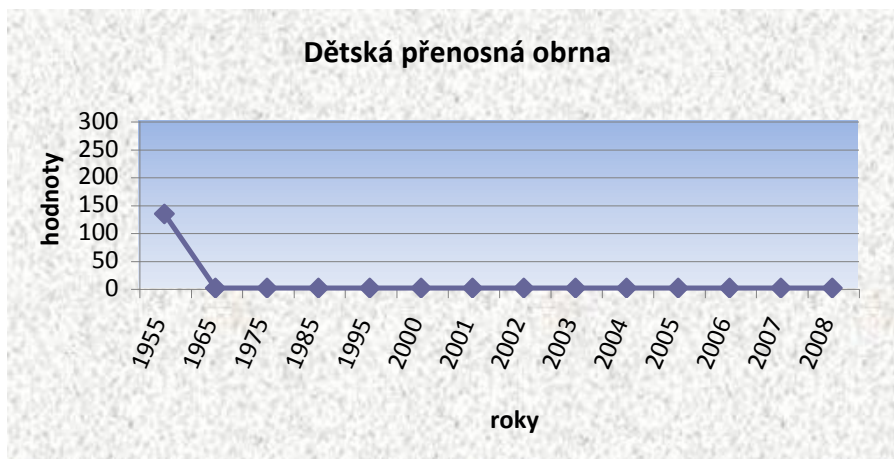
.RPELQRYDQi YDNftQD SURWL JiãNUWX WHWDQX G
RQHPRFQ Qt Y\YRODQpPX S\$YRGFHP +DHPRSKLOXV LQIC
REUQ D YLURYp KHSDWLWLG % 9,=

2.6 D tská p enosná obrna

Historie

6SRUDGLFNI RQHPRFQ Qt VH Y\VN\WRYDOD MLVW RO
GR VWROHWt E\O\ XYiG Q\QM BQH RQVHPGLQRCSL VS tS DGGD
JDpiWNX WpKRå VWROHWtjHPPG Op NISFLG7RPSLDY WQhãFK Y
v roce 1838 Q PHFNê OpND -DNRE YRQ +HLQH SRSVDO NOL
obrny. V URFH äYpGVNê G WVNê OpND .DUO 2VNDU 0I
RQHPRFQ Qt MH S HQRVQp D R WpP GYDFHW OHW S
/DQGVWHLQHURYL LGHQWtSLNGLYFDYLUXLVXVUG QV VNDNREQUX
REVDKRYDOD XVPUFHQp SROLRYLU roce 1914 Buzý
SRWp XYHGO \$OEHUW %UXFH 6D5LHQHRODQX WDNBiQX S
REVDKRYDOD åLYp (69)RVODEHQp SROLRYLU\

Graf 3: Incidence v České republice



.OLQFNREUD]

, QIHNFH]SUDYLGOD SUREtKi LQDSDUHQQWQ X Q NF
 OHKNI FK LSNRYi RQHPRFQ Qt D YêMLPHpQ VH SURMHY
 NWHUi P\$âH EêW SURY.YHGDNRUUSPFOYFIBOS
 GtN\ RpNBYHQpPX QD SRpiWNX ãHG^(5,6)ViWêFK OHW MLâ
 2NRYiQ\$

.RPELQRYDQi YDNftQD SURWL jiãNUWX WHWDQX G
 RQHPRFQ Qt Y\YRODQpPX S\$YRGFHS HDPRVQ\$KGOXVNPQIC
 REUQ D YLURYp KHSDWLWLG % 9,=

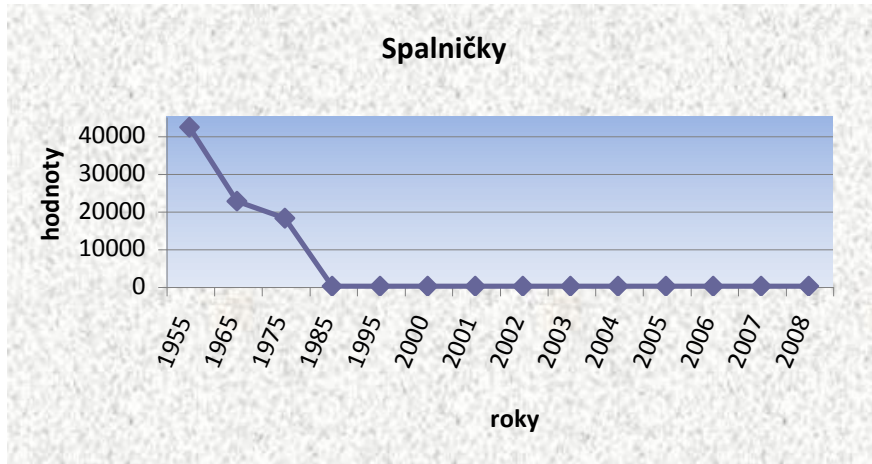
2.7 Spalni ky

Historie

3UYQt]SUiY\ R PRâQpP YêVN\WX VSDVQRPDHNWY (YURS
] GRE\ WDâHQt DVLMVNêFK D VHYHURDIULFNêFK QiURG\$
 5KD]HV QD SsRPOMMX RGOLãLO VSDOQLpN\ RG SUDYêFK
 MHMLFK S (tYQBS\ MVRX VSDOQLpN\ RSRQVpX YieURpQt
]SUiYURNX -DNR VDPRVWDWQp RQHPRFQ Qt MH SR
 DQJOLFNê OpND 7KRPDV 6\GHQ\$EIPLS Y MFCCêQ] YHGONê
 NRQFH W LFiWêFKQDãWOLHY YGEMM OXSSUSWLYVSDOQLp
 7HSUYH Y SDGHViWêFK OHWHFK VH SRGD LOR -RKQX
 NROHJ\$P S LSUDYLW âLYRX RVODEHQRX VSDOQLpN

PQRKRQivpbnEQEaPHQtP D RVODEHQtP S\$YRGQtKR GLYRNpF
 viru. (2,9)

Graf 4: Incidence v České republice



.OLQFNREUD]

,QIHNFH VH S HQiät NDSpQNR YRX LQIHNFt MH WR YV
 SURMHYXMtFt VH KRUHHPNDXGUPREQR V\SRMNLRX 'RVWL
 NRPSOLNDFHPL MH GSDKORSXLFKQ9EifQWXSRVSDANQft
 FHQWUioQtKR QHU YRYpKR V\ VWpPX 9 ýHV Np UHSXEOI
 RpnRYiQt YãHFK G Wt Y\VN\WXMt MHQ YJitFQ VSRUDG
 QHMpDVW ML^(2,5,6) LPSRUWRYDQp

2PNRYiQ §

.RPELQRYDQi YDNFtQD SURWL VSDOQLpNiP JDUG QN
 =iNODGQt RpnRYiQt VH SURYHGH åLYRX RpnRYDFt OiWN
 SDWQiFWpKR P VtFH QDURJHQt GtW WHP3HfPpR YiQt VH
 SURYHGHQpP JiNODGQtPYRPNRYiQK S tSDGFFKãH SRJG M
 KRUQt Y NRYi KUDQLFH SUR SRGiQt RpnRYDFt OiWN\ QHG⁽⁴³⁾

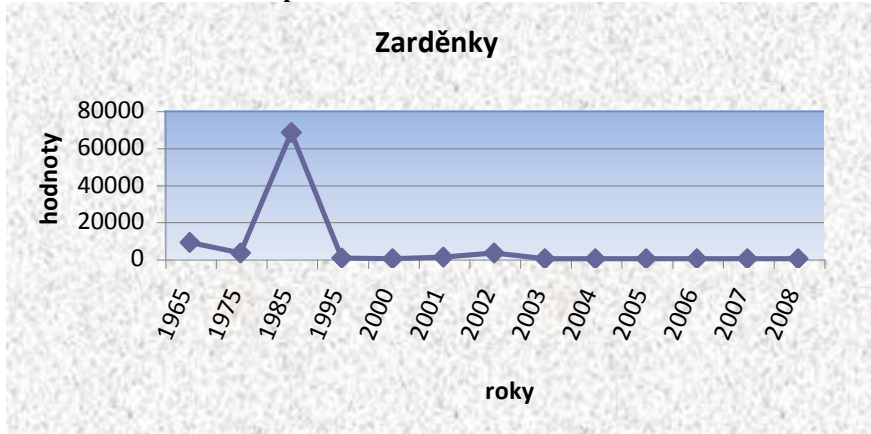
2.8 Zard nky

Historie

2QHPRFQ Qt VH MLVW Y\VN\WRYDOR RGHGiYQD DO
 VSDOQLpMH P HSLQiURGQRQNGEQRJMH Y YãDN XJQDO

JDUG QN\ MDNR V DPRVWURFCh RQHPLR RQ Ott OφND 1RUF
 OF\$OLVWHU *UHJJ YãLPO âH VH Yê]QDPQ]YêãLO YêVI
 PDWN\ SURG ODSUY]O tFK QNHFR VPHQ tVWFYt W9KUXV JDUG QH
 SRGD LOR L]RORYDW Bsdon h UR Ymanov D Búst Yev l Y
 Artensteinovi ve Washingtonu v roce 1962. V letech 1962 - GRãORmN
 v (YURS NWHUi VH SRVWXSQ UR]ãt LOD lh QD ~]HPt 6
 v letech 1964- 7HKG\ E\OR SRVWLâHQR WLvtFH QRYRUR]HQF
 3UYQt RþNRYDFt OiWN\ S-VS WFK JDPU tD QHGH E\CG
 1969. (2,9)

Graf 5: Incidence v České republice



.OLQFNREUD]

-HGQH R PtUQ SUREtKDMWfHs Q R W DREQ]GtXVHQ tP X]OL
 VNYUQLWRX Y\UiãNRX \$ã X MHGQp SRORYLQ\ LQILN
 LQDSDUHQWQ .RPSØLNDIEHLQVHXLYJWFSORWQp XãHQ\ QD
 W KRWHQVWYWBãH SDRMFHQW DU S PRGS MQRV XHQHUDOL]
 LQIHNF L D SRWUDWX 3 L XG SãR]WQR SORQXW Yt\$]QR
 JiYDãQRWRLt V R R YUR]HQp V\QDUG R XNRMPHUê VH SUR
 SRãNR]HQ tP PR]N^(5,6) RND VUGFH

2NRYiQ \$

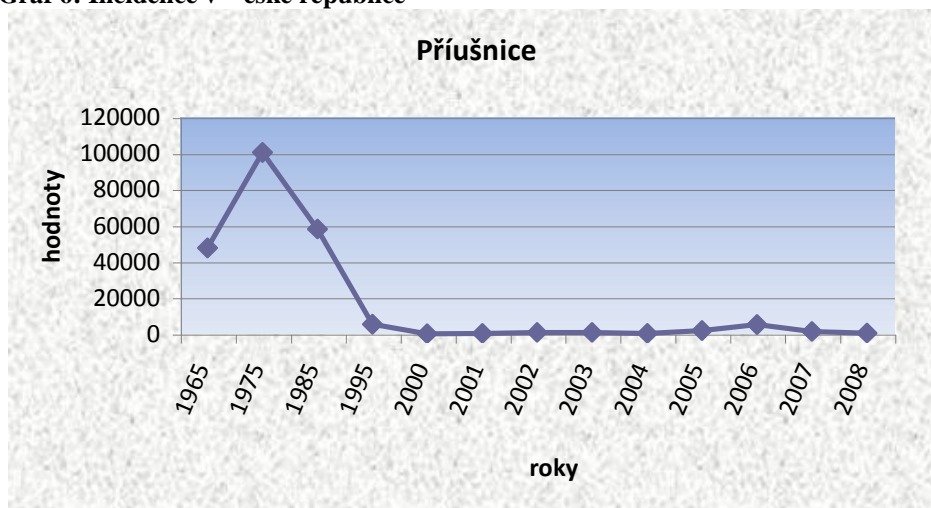
.RPELQRYDQi YDNFDD L SNI P WL]DWUG QNiP D S tXãQ
 /VIZ 2.7/

2.9 Příušnice

Historie

3UYQt]PtQND R S+LSäSQRNFUJDKV R M SN.QL]HS]L Qtå
 GRFKi]QQRQLVDYpPX]GX HQE RVOYH V W IDY X PFX j\$ WãHQ t D Ji
 varlat. \$PHULFNê YRLURQ)RIDQ-NOLQ (QGHUV YH VSROXSUIF
 6WRNHVHP Y\YLQXOL MLå Y URFH SUYQt SUHYHQV
 S tXãQLFtP NWHUi REVDKRYDOD XVPUFHQê YLUXV S t
 QHSRVN\WRYDOD GRVWDWHpQRX RFKUDQ X Y X YãHFK R p
 RVODEHQRX YLURYRX YDNFtQX SURWL S tXãQLFtP VH
 DPHULFNêP Y GF\$P 0DXULFHRYL 5DOSKRYL +LOOHPDQRY
 roce 1966. (2,9)

Graf 6: Incidence v České republice



.OLQFNREUD]

Onemo FQ Qt VH SURMHYXMH MDNR DNXWQt YLURYê
 .RPSOLNDFHPL EêYi SRVWLåHQ t SRKODYQtFK åOij X GRV
 SOHQ PR]NRYêFK VOLQLYN\ E LãQt ,QIHNFH SUREtKi pD
 SRVWLKXMH YãHFKQ\ RQt EDWp RVRE\ Y WãLQ

2NRYiQ\$

.RPELQRYDQi YDNFtQD SURWL VSDOQLpNiP]DUG
 /VIZ 2.7/

2.10 Virová hepatitida B

Historie

(SLGHPLL åORXWHQNS K.R+SLSDORMLLAWHV åOR YãDN M
U\$]Qi RQHPRFQ Qt MWUD SRSLVRYI\ RSDNRYDQ JDOiãW%JDOPIW HNW WROHWt E\OR
SRSLVRYI\ RSDNRYDQ SR]RURYiQR åH NH åORXWHQFH GRãOR JD
GRVWDO\ QHER GRVWiYDO\ LQMHNKFGHLEWMDSHQt]H NUY
YLUX KHSDWLWLG\ W\SX % MWRDOWã Y 3UHFQêRþWSYFt
NWHUi E\OD S LSUDYHQD]H VpUD QDNDãHQêFK RVRE
vURFH 'QHV VH MLã QHSRXâtYi 1RYp WHFKQRORJL
s JHQ\ S LQHVDNWL FNpSM\XåLWt 2G URNSRXâtYiVH FHOR
JHQHWLFN\ S LSUDYHQi RþNRYDft OIWNDSURWL YLURYp
.OLQFNREUD]

-HGQi VH R NOLQLFN\ JiSDãRipURPHBRVWLaHQtP MD
\$þNROL VH YpukXWIPURHãK P\$ãH QD SRGNODG LPXQROR
GRMtSRãNNR]HQt MLQêFK WNiQt 3U\$E K RQHPRFQ Qt MH]
YQtPDYRVWL H[SRQRYDQp RVRE\ 3R SURåLWt DNXC
kGORXKRGREp Q RãQQtL SFHUQIRãWHDQVHEãLUFK
3HU]LVWHQFH VH P\$ãH SURMHYLW YtFH þL PpQ JiYDãQ
QHER SRXKêP QRVLþVWYtP YLUX EH] NOLQLFNêFK S t]QD
2NRYiQ\$

.RPELQRYDQi YDNftQD SURWL JiãNOYD]LWQHWDQX G
RQHPRFQ Qt Y\YRODQpPX S\$YRGFHP +DHPRSKLOXV LQIC
REUQ D YLURYp KHSDWLWLG % 9,=
=iNODGQt RþNRYiQt QRYRUR]HQF\$ +%V\$J SR]LWLYQtFK
GiYNRX RþNRYDft OiWN\ SURWL UYLOtRþYKNSVDHWIDSDGN%M
MHãW S HãRþNRGiDfP OiWN\ SURWL WXEHUNXOy]H D WR
SR QDUR]HQRPãRWiQH W9FKWR G Wt VH GiOH SRNUDþXMH
QDUR]HQt GtW WH KH[DYDOHQWQt RþNRYDft OiWN\

V S tSDG G W tL N W H U P S K I R S D W L W L G K H % D Q E D W Q W R Q t N R Y i
R p N R Y D F t V O i V S U R X H G H W R W R E R P O R G R Q U a H Q t G Y D Q i F W p
G R Y U a H Q t W L Q i F W p K R U R N X Y N X G t W W H
' i O H V H R p N R Y i Q t S U R Y H G H D S O L N D F t W t G i Y H N R p N R Y
U L] L N R S P] L H F L E L R O R J L F N p P X P D W H U L i O X N W H U p P D
S U D Y L G H O Q e F K G L D O \] D p Q t F K S U R J U D P \$ Q H E R Q R Y S L I
J G U D Y R W Q t P S R V W L a H Q t P Q H E R G R (63) G R P R Y \$ V H] Y O i a W Q t

2.11 Haemophilus influenzae b

Historie

3 U Y Q t N G R i N H G Q B O L E D N W H U L L + D H P R S K L O X V L Q I O X
5 L F K D U G 3 I H L I I H U Y U R F H ' H O a t G R E X E \ O S R Y D a R
7 H S U Y H] D F K L S N R Y e p 1 9 1 8 Q G H P E L I O R Y R Y H Q R a H Q H Q t
S \$ Y R G F H P F K L S N \ \$ a Y V H G P G H V i W e H F K Y G F W P F K G Y D
S R G D L O R Y \ Y L Q R X W D S L S U D Y L W S U Y Q t R p N R Y D F t
Q i N D .] t P

. O L Q F N R E U D]

. O L Q L F N p S U R M H Y \ W p W R L Q I H N F H S R V W L K X M t F t Q
a L U R N p V S H N W U X P , Q I H N F H P \$ a H] \$ W S D W D O R N K I R O L] R Y
W U D N W X D N R P X Q L N X M t F t F K G X W L P O D V H S R J O a F W L O R E G H i] t V M
E D N W H U L p P L L D S R V W L a H Q t P R] N R Y e F K E O D Q V U G F H N
, Q I H N F H p D V W R W D N p L P L W (66) X M H R E U D] G i Y L Y p K R N D a O H

2 N R Y i Q \$

K o m b i n R Y D Q i Y D N F t Q D S U R W L] i a N U W X W H W D Q X G i Y L
R Q H P R F Q Q t Y \ Y R O D Q p P X S \$ Y R G F H P + D H P R S K L O X V L Q I O
R E U Q D Y L U R Y p K H S D W L W L G % 9 , =

2.12 Pneumokokové nákazy

Historie

, Q I H N F H] S \$ V R E H Q p S Q H X P R M a N E M N W K U S L D W O t Q Q i Q H M Y
2 Y a H P G R W p G R E \ Q H a E \ O \ S Q H X P R N R N \ R E M H Y H Q \ V

Y WãLQX RWLWLG VLQXVLWLG FKURQLFNêFK EURQFKLV
Teprve v URFH P L G U O R V N R S X M D N R S U Y Q t i S \$ Y R G F H W F
3 D V W H X U N W H U ê K R Q D J Y D O 0 L F U R E H V H S W L F H P L T X H
mikrob je S \$ Y R G F H P S Q H X P R Q L H G R V W D o 1 M P p l Q R 3 Q H X P R F R
SRWYU]HQD MHKR S tEX]QRVW VH VWUHSWRNRN\ D GRV
pneumoniae.⁽²⁾

Klinická

9HOPL SHVWUp S t]QDN\ RG OHKNêFK UHVSLUDpQtFK
3QHXP RNRNRYi QiND]D]Dp t Q i V R N W X L O R H S O R I W O X V] L P Q L
Y\NDãOiYiQtP PDOpKR⁹ PQRãVWYt VSXWD

2NRYiQ5

2G MH QD]iNODG QRYH6E\] S O R Q Q K U D] H Q R
z YH HMQpKR]GUDYRWQtKR SRMLãW Qt R pNRYiQt SURWL
G WHP SRGPtQNRX MH]DKiMHQt R pNRYiQt PH]L W HWtP
R pNRYDft OiWN\ MVRX DSOLNRYiQ± R p N R Y H O t P p K H R P V t
GREURYROQp

Prav LGHOQp R pNRYiQt VH SURYHGH X G Wt GR S WL
]GUDYRWQ± S L O L P i N Q F G H I H N W \ L P X Q L W \] i Y D á Q p V H N X Q G
DVWHQLH IXQNpQt L DQDWRPLFNp X G Wt S HG GRYU
WUDQVSODQWDS E L F G K U R Q Q P R i U H F u G l y , Y p a d e n t
s NRFKOHiUQtPL LPSODQWiW\ SDFLHQWL SR SURG ODQêP
VHSWLNpPLtS R U R G O W L K P R W Q R V W R p S R G i Q t V H S U R Y H G H
NRQMXJRYDQRX SQHXPRNRNRYRX YDNftQRuX 2G GRYUã
GtW WHDOYWHUQDWLYQtFK S tSDGHFK SRGDW SRO\VDFH
YDNftQX

'iOH MH SRO\VDFK DULGRYi SQHXPRNRNRYi YDNftQD
RVREiP NWHUp M O P X E X P i t F K W S U R Y G O R X K R G R E Q H P R F Q p
pro seniory, v domovech pro RVRE\ VH]GUDYRWQtP S R V W L á H Q t P Q H F
VH]YOiãWQtP UHãLPHP SRNXG W\WR I\]LFNp RVRE\ WU
RQHPRFQ QtP GêFKDftFK FHVW FKURQLFNêP RQHPRFQ
QHER GLDEHWLpP h H e n o (13) p p H Q ê P L Q]

2.13 Ch ipka

Historie

&K LSNRYp HSLGHPLH SDW LO\ YåG\ PH}L YHOPL JiYD
lik SDQGHPLL NWHUI VHNPRKLDXNRVON\ WQ B Q WGREX P OD
s PQRKD ~PUWtPL 1DSURWL WRPX JSRQVFKDWQtFtDKW Mä
JSSVRERYDO\ VVWH DQPRFSQHSRY QHQRHMLY EN ØD GREU
SDQGHPLL FK LSN\ YH VVceHICQ tv WpU B S E G R Q D Q P R Y Q OR
WpP GYDFHW SURFHQW RE\YDWHO VWYD VirusGYDFHW PLO
FK LSN\ \$ REMHYLOL L ydlaw a Anders, v LUXV FK LSN\ % Y
)UDQFLV D YLUXV rck1958Nylo&⁽²⁾ REMHYLO Y
.OLQFNREUD]

3UR OLGVNRX SRSXODFL MVRX SDWRJHQQt YLU\ FK
JSSVREXMH MHQ OHKNp LQIHNFH KRUSQDQGHPLRDFtFK FH
opakovan êP HSLGHPLtP W\ S % JSSVRØXMMNêPKV D Q tVM SHGQPL
JiYDâQêP SU\$E KHP 3 t]QDN\ RQHPRFQ Qt QDVWXSXMt
PQRKG\ XUpt]DpiWHN FKRURE\ WpP QD PLQXWX 5\FKC
EROHVW YH VYDOHFK X P D O I N D Q R V O W ý S R V R M I N R P S O L N D F t
RWLWLGD X GRVS OêFK VLQXVLWLGD .RPSOLNDFH S
NWHUêNROLY RUJiQ QHMQHEH]SHpQ Mäit WåG\SULPiUQt
]QDPHQi RKUR^{2,6)}HQt åLYRWD

2NRYiQ §

3UDYLGHOQ\$URPWLRYIKLSFH VH SURYHGH NDâGê URN
XPtVW OêPKHEQIFK SUR GORXGRBREHOKHBRURQYHQYRU\ 'ic
VH SURYHGH X RVGEPXPYVFK CSFK RVRE\ VH]GUDYRWQtP
nebo v GRPRYHFK VH]YOiãWQtP UH]LENP R V S R E N X W U S i W R
FKURQLFNêP QHVSHFLILFNêP RQHPRFQ QtP GêFKDFtP
RQHPRFQ QtP VUGFH FpY QHER OHGYLQ QHER GLDEHWH

-DNR]YOiãWQt RpNRYiQt VH SURYHGH X I]LFNêFK
SUDFRYLYåWåFK UL]LNHPLS]NQ L M D N F K MVRX OppHEQ\ GOR

QHPRFQêFKSICPPDWHOVNRX VOXåERX GRPRY\ SUR VH
RVRE\ VH JGUDYRWQtP SRVWLåHQtp⁽¹³⁾D GRPRY\ VH JYOiãW

3 Odlišnosti v o kování d tí ve sv t

=S\$VRE R pN RRYiQ R YG F Mt NDOHQGi MHGQRWOLYp YDNFt
VRXERU SRYLQQêFK L GRSRLHQpQRWOK YêFKR YHtFKHSRQ
OLãt

2NRYiQ SURWLWXEHUNXOyH

V ýHVNp UHSXEOLFHDVpRêRê R pNRYiQ\ YãHFKQ\
v QRYRURJHQHFNp PH YGRXORpKRGQDPtQND

V Q NWHUêFK VWiWHFK (YURSVNp XQLH VH R pNRYiQ
ULJLNRYp VNXSLQ\ G Wt QDS tNODG YH)UDQFLL MH R p
NWHUêFK VH S HGSRNOiGi EUJNê QjWVWMLêGR G WVNpKR
v 1 PHF YH 9HONp %ULWiQLL YHMãVpXVNXDYHCH SGRYHLQ
G WL YH Y\VRNpRWLVNêFK 9HYURSVNêFK JHPtFK MVRX
S HYiãQ LKQHG SR QD HIRNêQ tDQDNXtN3ROGVNX 3RUWXJD
QHMSR]G ML- tDeteRjs R X R pNRYiQ\ G WL QDeteDOW D YH
v 1RUVNX 3 HR pNRYiQt VH SURFKiGtRYMNRWãQQVWêFêFK
QDS5XVNX .D]DFKVVWiQX %XOKDUVNX QD 6ORYHQVNX

V Asii, V Africe, v -LãQt \$PHULFH VH S HYiãQ R pNXMH LKQH
nejpozd ML MH R pNRYiQJapanRaYtoG QR VtFL Y Nã GtW D
RVWURY %DUEFH3VHR pNRYiQt VH QHSHURiGt Y\MPD
v 6-ti letech. V .DQDG USQVHYG WL QHR pNXMt

2NRYiQ SURWL jãNUWX WHWDê GiLYpPX NDãOLMêX RêPRFQ
YYRODQPXSYRGFHP+DHPRSKLOXVLQXHDHESHQVpGWVNpREUQYLURYp
KHSDWLWLG%

V ýHVNp UHSXEOLFH SUREtKi R pNRYiQt SURWL W PWF
SRGiQtP GiYHN YGãYMDVHVRêK D WR tãRãJH SURWL ji
D GiLYpPX NDãOLMêXVHFY VH SURYHGH S HR pNRYiQt SURW
GiLYpPX NDãOL D YLURYp KHSDWLWLG %

9H Y WãLQ JHPt VY WD VH R pNXMH SURWL jiãNUWX
SRGREQ MDNR X QiV /Lãt VH SRêPiYYQN XSRVQêWMTFt
v QDS tNODêGFNX 3ROVNX âSDQOVNXVWUêLL YH DSOLN

YDNFtQ\ SURWL JiãNUWX W%RMDQZDQ GiYLYpPX QNDãOE
Francii, na Slovensku, v ,QGLL VH DSOLNXMt YDNFtQ\ SRX]H SURW
=iVGGQ Mât UR]GtO MH YH VORåFH YDNFtQ\ SURWL GiYLY
S HYiãQ HYURSVNp]HP QDS tNODG 5DNRXVNR 1 PHFN
DFHOXOiUQt YDNFtQX SURWL GiYLYpPX NDãOL SUR YãH
MLKRDPHULFNpt]ERQ \$RQXat YDNFtQX XW XWR YDNFtQX SRXã
v kombinaci s RþNRYiQtP SURWL WHWDQXp, jãNiUWX L +LE
v \$UJHQWLQ 3%QD]NRPLELQDFL SURWL JiãNUWX WHWDQX
KHSDWLWLGL % 6WHMQRX KH[DPYDNFtQX RMDWRt XHQitV Y
Y WãLQRX VH MHGQi R HYURSVNp]HP 5DNRXVNR .\S
\$XVWUiOLH D %DKUDLQ

3RNxG QHMVRX RþNRYiQDFtQ\ QHNSRiG]iQYDNFtQiFK MH
v PQRKD]HPtFK DSOLNRYiQD VRXþDVQHSLD WpMLRYGDF% OiWN
KDHPRSKLOXV LQIOXHQ]DH BRDGHWHVSLpGSHLQFVRQpL FNEUQL
EêYi SUYQt GiYND SURWL YLURYp KHSDWLWLGL % SRGiC
v *DPELL 1LJHULL \$UJHQWLQ 'RPLQLNiQVNP UHSXEOLF
Fiji, tHSUYH SRWp MVRX DSOLNRYiQDFtQ\ DOSuRvN RYDHRRSiKW
LQIOXHQ]DH W\SX E MH SRVWXSQ GR RþNRYDFtFK VFK
v \$UJHQWLQ %UD]tCBahrainuQSDu v VPRXpDHVQY GRE RþNRYiQ\
SRX]H UL]LNRYp2]NRYSDQ\SGRWL G WVNp S HQRVQp REUQ
]DWtPFRURS86\$YL .DQDG VH SRXãtYi S HYiãQ QHãLYi R
SRGDNRPELQDFtQ\KpV RþNRYDFtP,lv -QãVN\ \$PHULFH D
v \$VLL VH SRXãtYi åLYi RþNRYDFtQ\ULFNê\$RQVWVQHQHND
SUYQt GiYND SRGiYiQD LRKQVHGWSRFQDWRi]MqFK YRG P Vt
GtW QHNWHUêFK VWiW5XFKXQDS3tNODNGX YMVRX SRGiYiQ\
YDNFtQ QHMSUYH MH SRGiYiQDFtQ\HãL VILQpNLRYDFt Oi
vak FtQDPL NRYR60ch v Polsku a ve 14 letech v Rusku i åLYi RþNRYDFt
OiWND SRGiYiQD RUiOQ

VQ NWHUêFK VWiWHFK MVRX SRGiYiQ\
RþNRYDFtFK OiWHN QDS tNOpGWQD\$XRWpFOpLOMGDXSDLY
NRPELQDMVND SURWL KDHPRSKLOXV LQIOXHQ]DH W\SX %

2NRYiQ SURWLVSDOQNiPStXDFtPDDUGNiP

2pNRYiQ HVNp UHSXEOLFH SUREtKi RGNiYouNX P VtF\$
OHw VH G WHP SRGiYi RpnRYDft GiWNpM.HãW MHGQRX
9H Y WãLQ JHPt (YURS\ -LãQt \$PHULN\ D \$VLH VH F
QiV NRPELQRYDQRX OiWNRX SURWL VSDOQLpNiP S tXãQ
12 ± P VtFHP Y NX3RGiMOXWtFt GiYND RpnRYDft OiWN\
v SR]G MãtF, KmezD #WH URN\ QDS ItNo DaGMaYriciu,
%DKDPiFK .DQDGDLYX QHMGpOHBemHveGi letch
v Bulharsku ve 12 letech. V Q NWHUêFK JHPtFK SUREtKi QDYtF X GtYI
Y NX S HRpnRYiQt SURWH PDUStNO DPG M.H.QZDLW 7XQ
6SRMHQp \$UDEVNp (PLUiW\ %RVQX D +HUFHJRYLQX
V DIULFNêFK JHPtFK SUREtKi Y WãLQRX,jeSRX]H RpnRY
DSOLNRYiQD MHGQD RpnRYDftY NiXNDtWYWH 3 HRpnRY
SURYiG QRQS RWHUêFKKQDHP tNgodG Y
v P VtFtFK

V -DSRQVNX MVRX G]HVISURPWRBYM QD SRXpNiP D JDUG QM
YH GYRX GiYNiFKOHWHFK Y NX GtW WH
Pouze v 1 PHFNX Dje, SURGHVYLDGYRX GiRYNEEK RYDQi
RpnRYDiWNDOSQLPWLpVSDtXãQLFSpDjDdPGQNiM RLYLftP

2NRYiQ SURISODEPHEMftP

V ýHVNp UHSXEOLFH JD DJHQR GR RpnRYiQt QD YOD
PRãQR DSOLNRYDW RG Y NX P VtF\$
9 WãLQD JHPt WRWR RpnRYiQLGHQPpJORDRHPQR YGt S
SRX]H Q NWHUp]HP RpnXMt XUPLWp ULJLNRYp VNXSLC
.DQDGD 86\$ 9HONi %ULWiQLH ,WiOLH %DKUDLQ 6SRM
6ORYLQVNR D âSDQ OVN R

2NRYiQ SURWLSQXPRNRNRYiQNDjP

V ýHVNp UHSXEOLFH GR SUDYLGHOQpKR RpnRYiQt X L
RE\YDWHOVWYD D RG MH RpnRYiQt ISM QpKãHFkQ\
]GUDYRWQtK RpnRYiQW MCH GREURYROQp

7RWR R pNRYiQt dMzH v J D NR J Q ER DFKR SUDYLGHOQpKR
R pNRY MH WR QDS tNODG .DQDGD 0H[LNR %DKUDMQ 'i
7XUHFNR \$XVWUiolH 9H Y WãLQ]HPt MVRX R pNRYiQ
RE\YDWHO SRO\VDFK DULGRYRX YDNftQRX MVRX R pNRYi
v &KLOH ,UVNXVNW iOHLom s D%U iOWiQLL

v DIULFNêFK]HPtFK VH R WRPWR, Q p S Rt Wi Q D GSUR]D W
v Keni a %XUXQGL E\ VH P OR]DptW roce 2012 v Angole.
v roce 2012 v Angole.

2NRYiQ SURWLmH ~~HP~~ ~~HP~~

V ýHV Np UHSX ~~EQRL ER~~ J D p D R H iQt Q D is y o d j s o W Qt á iGRVW
YDNftQX ~~MEFD~~ KHLVVHULL PHQLQJLWLGLV \$ & & QHER \$
v Q NWHUêFK]HPtFK \$ (D U. R S) D GY MH SUDYLGHOQ SU
R pNRYiQt SURWL PHQLQJRNRNRYp Qi S D] H N R W i S X & R p N F
MHGQp Dã W H M K G G Y N G F Y K F H Y % C H S J t N O D R Q Y D N X 1 L] R] H P t Y
GYRX GiY ~~ni~~ \$ K Q D , V O D Q G X Y H 9 H I O G p Y % F U W J M O L L L Y H W H
. D Q D G s k u a , W i O L L

. R P E L Q D F H \$ & Q H E R \$ & < : M H S R G i Y i
V S H F L i O Q t F K D U L] L N R Y ê F K i Q V N X S L Q N R R E I S Q t D F C D W \ S X \$
D S O L N R Y i Q D N R F R I M Q D F H \$ & < : M H S R G i Y i Q D S
F H V W X G R t F t D X G V N p \$ U i E L H

2NRYiQ SURWL ~~KHSW~~ *typu A*

V ýHV Np UHSXEOLF H Jiã W D Q H Q R R p N P M L Q t j Y X] D P V W Q D Q I
S t V O X ä Q t N \$] i N O D G Q t F K V O R å H N L Q W H J U R Y D Q p K R] i F K
R p N R Y i Q t Q D Y O D V W Q t á i G R V W S R G i Y D M t V H Y å G \ G Y G
3 U D Y L G H O Q M H R p N R Y i Q t S W R V i G F I Q R X P S R K X] Q D S t N O
v \$ U J H Q W L Q Q D G D P Q o y H I E N X O R R V D W D W Q t F K] H P t F K M V R
R p N R Y i Q \ M H Q U L] L N R Y p Q H E R V S H F J t O L Q t V N \$ S L] O \ D E D S
Kazach V W i Q X D i i G Q F N i Q K P H P W R W R R p N R Y i Q t M D N R S U D Y L G

2NRYiQURWLOLGVNpPXSDSLORPDYLUX

V ýHVNp UHSXEOLFH YDNFtQD QD DJHQDWGR RPNRYW
YDNFtQD MH SRGiYiQD YH W HFK GiYNiFK

7DWR YDNFtQD MH SRVWXSQ JDYiG QD GR RPNRYDF
JHPtV RXPdVQp GRE MH MLãHYDRHSVNIQDKSJHFiãQ QDS tN
v Rakousk X %HOJLL 'iQVNX)UDQFLL 1 PHFNX 1RUVNX
SRGiYiQD V WUiOQDGY 3DQDP MH BQpDDYULFNp JHPL SURJD
v piVWL 8JDQG\ 9H YDNFKQJHPtSOLMRYQD X GtYHN D åH
PHJL Y N\ OHW Dã GRWYNDXN FtQX DQDQGLNã MGRY OHW
v \$XVWUiOLL

2NRYiQURWLELQXWIX

V ýHVNp UHSXEOLFH YDNFtQD JD DJHQD GR RPNRYiQt
9H VY W MH WRWR RPNRYiQt GR SUDYLGHOQpKR R
.XE D WR YH GiYN3FKãN RVNWDWQtFK JHPtFK MVRX RPN
VSHFLiOQt VNXSLQ\ FHVWRYDWHOp QHER SRXWQtFL FHV
v 2PiQX .DWDUX YH 6SRMHQêFKiSODIHLNFãFK K PJHUPitWHFK
WRWR RPNRYiQt QHPi JD DJHQR GR RPNRYDFtKR VFKpPDW

2NRYiQURWLDXWpLPQFL

V ýHVNp UHSXEOLFH YDNFtQD JD DJHQD GR RPNRYiQt
-DNR SUDYLGHOQp RPNRYiQt MH WRWR RPNRYiQt JD
JHPQDS tNãDROH %RWVZDQ .DPHUXQX *KDQ .HQL
W FKWR JHPYDNFtQD SRGQYiGDFVHfYFKP tFK -LãQt
\$PHULN\ QDSãRutãPaãX CDY .ROXPELL MVRpãIGãWL RPNRYiQL
åLYRãRWãDWQtFK JHPtFK MH WRWR RPNRYiQt SRYLQQp S
s YêVN\WHP åOXWp JLPQLFH

3RGiYiQYLWDPtQ\$

V DIULFNêFK DJVILPMFKiêEKQD \$PHULN\ MH G WHP SRGiY
\$ 9LWDPtQ\$ãNWHUYãFK JHPtFK SRGiYiQ MFiãGãX NUiW MDN
Beninu, Ghan 1HSiOX DOH YMHY SVãGãQãQHPIQDS tNODG

v %R WVZDQ agnHQt, MOLDG Galawi 6HQHJDOX 8JDQG +DLWL
9LHWQDPX YãHFKQ\ VXE VWLSUXHQFK MWRKtFSRGiLYQWD
Y WãLQRX MH SUYQt BivIND SRSRVIOHDGQt YH OHWHFK

4 Souhrnné o kováčích kalendářích v evropských zemích a ve

SVĚT – zdroj: www.who.int/immunization_monitoring/en/globalsummary/ScheduleSelect.cfm

Evropa



Česká republika

	4 dny ± WêG	12-13 WêGH	17 WêGH	21 WêG	15 P Vt	18 P Vt	21 P Vt	5 let	10 let	12 let	25 let
7XE HUNXOy]D	X										
+H[DYDNFtQD		X	X	X		X					
=iãNUW WHWD NDãHO								X	X		X ⁽³⁾
Hepatitida B										X ⁽²⁾	
,QDNWLYRYDQ SURWL S HQRV REUQ									X		
6SDOQLpN\]D S tXãQLFH					X		X				
3QHXP RNRNRY		X ⁽⁴⁾									

- 1 ± NRPELQRYDQp tY D N U W D Q X G i Y L Q p D X L M Q Æ P X R Q H P R F Q Q t Y \ Y R O D Q p F
S \$ Y R G F H P + D H P R S K L O L X U R Y Q I O K S H Q W D W W G Y R Y D Q i H Q C R M F Q Æ E U S U R N V P L
- 2 ± SRX]H X RVRE NWHU p QHE \ O \ R p NRYiQ \ KH[DYDOHQWQt R p NRYDft OiW M
- 3 ± pouze tetanus - S HR p NRYiQt X RVRE R p NRYDQêFK KH[DYDOHQWQt YDNFtQRX G
- 4 ± W L GiYN\ DSOLNRYDQp G R V N R Y P i Q R M P H G t E U R N R O Q p



Slovenská republika

	3 dny po QDUR]	P Vt	P Vt	P Vt	P Vt	5 let	10 let	12 let
7XE HUNXOy]D	X						X ⁽¹⁾	
+H[DYDNFtQD		X	X	X				
=iãNUW WHWD NDãHO						X		X ⁽²⁾
,QDNWLYRYDQ SURWL S HQRV obUQ								X
6SDOQLpN\]D S tXãQLFH					X		X	

- 1 ± S HR p NRYiQ]H X 7XE HUNXOLQ QHJDWLYQtFK
- 2 ± S HR p NRYiQ]H]iãNUW D WHWDQXV



N mecko

	P V	P Vt	P Vt	11 ±14 P VtF	11 ±23 P VtF	15 ±23 P VtF	5 ±6 let	9 ±17 let	12 ±17 let - GtYN\	60 let
+H[DYDNFtQD	X	X	X	X						
=iãNUW D WHW							X	X		
Haemophilus influenzae b, F PHQLQJRNR YDNFtQD					X					
Inak WLYRYDQi YD S HQRVQp G WV								X		
3QHXP RNRNRYi NRQM XJRYDQi	X	X	X	X						
6SDOQLpN\]DU S tXãQLFH				X		X				
3ODQp QHãWRY				X		X				
9DNFtQD SURW papilomaviru									X	
3QHXP RNRNRYi polysach DULGRYi										X
&K LSND										X



Francie

	SR QDUR	P Vt	P Vt	P Vt	12 P VtF	16 ±18 P VtF	13 - 24 P Vt	6 let	11 ±13 let	14 let - GtYN\	16 ±18 let
7XE HUNXOyJD	X ⁽²⁾										
3HQWDY ⁽¹⁾ DNFtQ		X	X	X		X					
=iãNUW D GiYL NDãHO									X		
Hepatitida B		X	X			X					
,QDNWLYRYDQ SURWL S HQRV REUQ								X			
3QHXP RNRNRY NRQM XJRYDQi		X	X	X	X						
6SDOQLpN\]DU S tXãQLFH					X		X				
=iãNUW D WHW								X			X ⁽³⁾
9DNFtQD SURW papilomaviru										X	

1 ± NRPELQRYDQ\$UFVWfQDNUWX WHWDQX GiYLYpPX NDãOL LQYDJLYQtPX
 S\$YRGFHP HúDíHÉPz&KE LQDNWLYRYDQ\$IHQRVfQ&EUSURWL
 2 ±SRX]H X UL]LNRYêFK G Wt
 3 ±S HRpN&YiQh ±8, 38,48, 58 a 68 letech



Velká Británie

	SR QDU	2	3	4	12	13	3 ±5	13 ±18	>= 65
		P VtF	P VtF	P VtF	P VtF	P VtF	let	let	let
7XE HUNXOy]D	X ⁽¹⁾								
3HQWDYDNFtQ		X	X	X					
=iãNUW WHWD NDãHO							X		
,QDNWLYRYDQ SURWL S HQRV REUQ							X	X	
3QHXP RNRNRY NRQMXJRYDQi		X	X			X			
6SDOQLpN\]D S tXãQLFH						X	X		
=iãNUW D WHW								X	
9DNFtQD SURW papilomaviru								X	
Haemophilus influenzae E F PHQLQJF YDNFtQD					X				
0HQLQJRNBWR proti C			X	X					
&K LSND									X
3QHXP RNRNRY SRO\VDfKDULC									X

1 ±SRX]H UL]LNRYp G WL



Rusko

	3 dny po	3	4 - 5	6	12	18	20	6 ±7 let	14 let
	QDUR]H	P VtF	P VtF	P VtF	P VtF	P VtF	P VtF		
7XE HUNXOy]D	X							X	X
=iãNUW WHWD NDãHO		X	X	X		X			
Hepatitida B		X		X					

,QDNWLYRYDQ SURWL S HQRV REUQ		X	X	X					
3HURUioQQt YD G WVEUpQR						X	X		X
6SDOQLpN\]D S tXãQLFH					X			X	
=iãNUW D WHW								X	X ⁽¹⁾

I ±SRWp S HRpNRYiQt NDãGêFK OHW

6HYHUQ6WHGQHULND



USA

	po QDUR]	P V	4 P Vt	6 P Vt	6 ±18 P VtF	12 ±18 P VtF	12 ±23 P VtF	4 ±6 let	11-12 let
=iãNUW WHWD NDãHO		X	X	X		X		X	
Hepatitida B	X	X			X				
Hepatitida A							X		
,QDNWLYRYDQ SURWL S HQRV oEUQ		X	X		X		X		
Haemophilus influenzae typ b		X	X	X		X			
3QHXPpRRNRY NRQMXJRYDQi		X	X	X		X			
6SDOQLpN\]D S tXãQLFH						X		X	
3ODQp QHãWR						X		X	
=iãNUW WHW NDãHO									X
Rotaviry		X	X	X					
Meningokok RYi YDN typu C									X
9DNFtQD SURW papilomaviru									X



Kanada

	P Vt	4 P Vt	6 P Vt	P V	12 ±15 P VtF	P V	4 ±6 let	9 ±26 let	14 ±16 URN\$	>= 65 let
3HQWDYDNFtQD	X	X	X			X				
=iāNUW WHWD NDāHO							X			
,QDNWLYRYDQi S HQRVQp G WV							X			
3QHXPNNRNYi NRQMXJRYDQi	X	X	X		X					
3QHXPNNRNYi SRO\VDKFDULG										X
0HQLQJRNNRY typu C	X	X	X							
6SDOQLpN\ JDU S tXāQLFH				X			X			
3ODQp QHāWRY				X						
=iāNUW WHWD NDāHO									X ⁽¹⁾	
9DNFtQD SURWL papilomaviru								X		

1 ±SRWp NDāGēFK QOBWRSVH RPHNRDQX D JiāNUWX



Mexiko

	po QDUR]	P V	4 P Vt	6 P Vt	12 P VtF	12 ±15 P VtF	18 P VtF	2 roky	4 - 6 let	12 let	65 let
7XEhUNXOyJD	X										
3HQWDYDNFtQD		X	X	X			X				
=iāNUW WHWD NDāHO								X	X		
Hepatitida B	X	X		X							
3HURUiOQt YDN S HQRVQp G WV				X					X		
3QHXPNNRNYi NRQMXJRYDQi		X	X		X						
3QHXPNNRNYi SRO\VDKFDULG											X
Rotaviry		X	X								
6SDOQLpN\ JDU S tXāQLFH					X				X		

=iãNUW WHWD										X	
9DNFtQD SURWL papilomaviru - ðiVW]H										X	
Vitamin A									X		
&K LSND				X							X

~~PHD~~



Brazílie

	po QDUR]	1-2 P VtF	4 P VtF	6 P VtF	9 P Vt	12 P VtF	15 - 18 P VtF	2 roky	7 let	10 let	> = 65 let
7XEhUNXOy]D	X										
3HQWDY ⁽¹⁾ DNFtQ		X	X	X							
=iãNUW WHWD NDãHO		X	X	X							
Hepatitida B	X	X		X							
Hepatitida A ±ðiVW]						X	X				
2UiOQt YDNFtQ S HQRVQp G W		X	X	X			X				
Hib ±ðiVW]HP		X	X	X							
3QHXPNNRNR NRQMXP ⁽¹⁾ YDQi]		X	X	X							
6SDOQLpN\]D S tXãQLFH						X ⁽²⁾					
3ODQp QH ⁽¹⁾ W W]HP						X					
=iãNUW WHW									X		
Rotaviry			X								
0HQLQJRNRNR typu C ±ðiVW]HP		X	X	X							
% LãQt W\IXV								X			
9DNFtQD \$URW					X					X	
zinnici											
&K LSND											X

1 ±NRPELQRYDQi YDNFtQD SURWL]iãNUWX SWRWDQXSDiW LwLpX M DãOL +LE D

2 ±RpNRYiQt±P⁽¹⁾h⁽¹⁾em



Argentina

	po QDUR]H	P V	4 P Vt	6 m Vt	12 P VtF	18 P VtF	6 let	16 let
7XEHUNXOy]D	X							
3HQWDYDNFtG		X	X	X		X		
=iãNUW WHW NDãHO							X	
=iãNUW D WH								X ⁽¹⁾
Hepatitida B	X	X		X				
Hepatitida A					X			
3HURUiOQt Y S HQRVQp G V		X	X	X		X	X	
6SDOQLpN\]D S tXãQLFH					X		X	
9DNFtQD SURV zimmici					X			

l ±S HRpNRYiQt SRWp NDãGêFK OHW



Chile

	po QDUR]	P V	4 P Vt	6 P Vt	12 P VtF	18 P VtF	4 roky	6 let	7 let	> 60 let
7XEHUNXOy]D	X									
3HQWDYDNFtQ		X	X	X						
=iãNUW WHWD NDãHO						X	X			
=iãNUW D WHW									X	
2UiOQt YDNFtG S HQRVQp G W		X	X	X		X				
3QHXPNNRNRNY NRQMXJRYDQi		X	X	X						
6SDOQLpN\]D S tXãQLFH					X			X		
3QHXPNNRNRNY SRO\VDfKDULC										X
&K LSND										X

Asie



ína

	po QDUR]	1 P Vt	P V	P V	4 P Vt	P V	6 P Vt	P V	18 ±24 P VtF	3-4 roky	6 let
7XEhUNXOy]D	X										
=iãNUW WHWD NĎã				X	X	X			X		
=iãNUW D WHW											X
2UiOQt YDNFtG S HQRVQp G W			X	X	X					X	
Hepatitida A									X		
Hepatitida B	X	X					X				
0HQLQJRNRNR							X			X	X
6SDOQLpN\]D S tXãQLFH								X ⁽¹⁾	X		
Japon VNi HQFHID								X	X		

I ±RpNRyTQt SURWL VSDOQLpNIP D JDUG QNIP



Indie

	po QDUR]	6 WêG	10 WêGQ	14 WêGQ	P V	9 ±12 P VtF	16 ±24 P VtF	5 let	10 let	16 let
7XEhUNXOy]D	X									
=iãNUW WHWD NDãHO		X	X	X			X			
=iãNUW D WHW								X		
Tetanus									X	X
2UiOQt YDNFtG S HQRVQp G W	X	X	X	X			X			
Hepatitida B ±pivW]	X	X	X	X						
-DSRQVNiitida QF pivW]HP							X			
6SDOQLpN\						X				
Vitamin A					X ⁽¹⁾					

I ±SRWp Y P VtFtFK



Sáudská Arábie

	po naro	P V	4 P VtF	6 m VtF	9 P VtF	12 P VtF	18 P VtF	2 roky	4 ±6 let	7 let
7XE HUNXOyJD	X									
3HQWDYDNFt		X	X	X						
=iãNUW WHW GiYLYê aNDãH							X			
=iãNUW WHW GiYLYê NDãH									X	
=iãNUW D WH										X
,QDNWLYRYD SURWL S HQR REUQ		X								
2UiOQt YDNFt S HQRVQp G			X	X		X	X		X	
Hepatitida A							X	X		
Hepatitida B	X									
6SDOQLpN\ S J DUG QN\						X			X	
6SDOQLpN\					X					

I ±NRPELQRDNDQD SURWL WHWDQX JiãNUWX GiYLYpPX NDãOL +LE D YDNFtQ\ SURW

±VWUiOLHD2FHiQH



Nový Zéland

	WêC	P Vt	P Vt	P VtF	4 roky	11 let	45 let	>= 64 let
=iãNUW WHWDQX LQDNWLYRYDQi Y S HQRVQp G WVNp	X	X	X		X	X		
Haemophilus influenzae typ b a hepatitida B	X	X						
Hepatitida B			X					
Haemophilus influenzae typ b				X				
6SDOQDpNG QN\ D				X	X			
7HWDQXV D JiãNU							X	X
&K LSND								X



Austrálie

	2			4			6			12			12 ±24			18 ±24			4	10 ±13	15 ±17	> 15	> = 65
	P	V	F	P	V	F	P	V	F	P	V	F	P	V	F	P	V	F	roky	let	let	let	let
Hexa YDNFtQDW]	X			X			X												X		X		
Hepatitida A ±piVW]													X	X									
0HQLQJRNRNR									X														
3QHXP RRNRRY NRQMXJRYDQi	X			X			X																
3QHXP RRNRRY SRO\VDFKpiVW]HP														X							X		
6SDOQLpN\]D S tXáQLFH									X						X								
3ODQp QHpiVW]HP														X			X						
Rotaviry ±piVW]HP	X			X			X																
9DNFtQD SURW papilomaviru ±pouze áHQ\																					X		
&K L&piVW]HP																							X



Papua – Nová Guinea

	po	1		2		3		6		9		1 rok	7 let	13 let
	QDUR	P	VtF	P	VtF	P	VtF	P	VtF	P	VtF			
7XE HUNXOy]D	X													
=iãNUW WHWDQX] Hib		X		X		X								
Hepatitida B	X			X		X								
2UiOQt YDNFtQD S G WVNp REUQ		X		X		X								
6SDOQLpN\								X	X					
Tetanus													X	X
Vitamin A								X		X				

Afrika



Egypt

	po	2	4	6	9	12	18	3 roky	6 let	9 let
	QDUR	P Vt	P VtF	P VtF	P VtF	P VtF	P VtF			
7XE HUNXOy]D	X									
=iãNUW WHWDQX hepatitida B		X	X	X						
=iãNUW WHWDQX							X			
2UiOQt YDNFt G WVNp REUQ		X	X	X	X	X	X			
6SDOQLpN\ S tXä							X			
7HWDQXV D jiaNU									X	X
Meningo NRYi YDNFtQ C								X	X ⁽¹⁾	
Vitamin A					X		X			

I ±GTOH YH D OHWHFK



Jihoafrická republika

	po	Wêc	10	14	9	18	5 let	6 let	12 let
	QDUR	WêG	WêG	WêG	P VtF	P VtF			
7XE HUNXOy]D	X								
3HQWDYDNFt		X	X	X					
=iãNUW WHWD NDãHO						X			
Haemophilus influenzae typ b		X	X	X		X			
3QHXP RNRNRY NRQM X ±pYDQij		X		X	X				
2UiOQt YDNFtQ S HQRVQp G W	X	X	X	X		X			
6SDOQLpN\					X	X			
Rotaviry ±piVW]HF		X		X					
7HWDQXV D jia								X	X
Vitamin A ± GiYN\							X		

I ±NRPELQRYDQI YDNFtQD SURWL jiaNUWX WHWDQX GiYLYpPX NDãOL KHSDWLWLG REUQ



Alžírsko

	po QDUR	1 P VtF	3 P Vt	P V	P Vt	9m P Vt	18 P VtF	6 let	11 ±13 let	16 ±18 let
7XE HUNXOy]l	X									
=iãNUW WHWD NDãHãOphilus influenzae typ b			X	X	X		X			
Hepatitis B	X	X			X					
2UiOQt YDNftC p HQRVQp G W	X		X	X	X		X	X	X	X
6SDOQLpN\						X		X		
7HWDQXV D jia								X	X	X

(12)

4 Budoucnost o kování a o kovací látek

~~RIP~~ ho ~~BOH~~ v §

ýHVNi UHSXEOLND SDWmit roZPHQXJWEP R pNRYDFtP
NDOHQGi HP R pNRYiQt JGH Pi YHONRX WUDGLFL SUR
S HGSRNOiGDW URJãL RYiQt VSHNWUD R pNRYiQt

-DNR QHMYtFHE SpDYGMSRYGRURJãt HQt i\$rotdYLGHOQpKR
YLURYp KHSDWLWLG W\SX \$ R pNRYiQtRNSUNRW è POQGNDj p
papilomaviru.

9YRMRYEKR pNRYDFtFKOiWHN

V souvislosti s Y êYRMHP R pNRYDFtFK BEMHN LO QRYê OpND V
RERU JYDQê YDNFLQRORJLH 1RYp YDNftQ\ E\ P O\ QD
S LSUDYRYDQp YDNftQ\Y\ \$ àHGESHS pQRVW ~pLQQRVW D
9êYRM QRYêFK YDNftQ àHQH GRS HGX L REMHYHQt QR
YJU\$VWDMtFt QHEHJSHpt ELRWHURULVPX

- '1\$ YDNftQ\

-HGQi VH R EDNFWGULGRQtWODjèFK EXGH JDEXGRYiQ
S tVOXãQRXWYRUEX D

3 tSUDYD EXGH VQDGQi D OHYQi YDNftQ\ EXGRX VWD
WHSORW D URJGtOQêP SRGPtQNiP S L WUDQVSRUWX D
PRãQp SRGDW L RSDNRYDQ D QHMY Wãt YêKRGD PRãQ
Q NROLND QHPRFHP

- 6\QWHWLFNp YDNftQ\

-GH R SHSWLGRYp YDNftQ\ S LSUDYHQp RUJDQLFNRX V
3 HGSRNOiGi VH àH W\WR YDNftQ\ EXGRX EHJSHpQp
YDNftQ\ Q NWHUêFK MLQêFK W\\$\$

• 9DNFtQ\ QD Ei]L åLYêFK UHNRPELQDQWQtFK YLU\$ D E
3ULQFLSHPQMHHYQXHQGXMtFtKR SURWHNpQt DQWLJHQ
QHSDWRJHQQtKR PLNURRUJDQLVPX 7tPWR YHNWRUHP
KRVWLWHOHH[~~SUPVGRJHGH~~ND Y\YROiQt LPXQLWQt UHDNFh
3 HGSRNOiGi VH QDYR]HQt SURWHNpQtLPXQLW\ Qt]
Y\YRODW PXWDJHQHJL D WUDQVIRUPDFL EXQ N

• 9DNFtQ\iGRURYêFK EXQ N
7\WR YDNFtQ\ EXGpXEXUQiGRUS\$ MHGQi VH SURWR
WHUDSHXVHPNMH Y\YRODW QHER JYêãLW LPXQLWQt U
QiGRURYêP DQWLJHQ\$P

• 9DNFtQ\HQGULWLFNêFK EXQ N
-HGQi VH R YKRGQp RYOLYQ Qt YDULDELOQtFK YODV
JYêãWVPLPXODFL 7 O\PIRF\W\$
3 HGSRNOYGiãVMtP S L LPXQRWHUDSLL QiGRUS\$ 7\WR
EH]SHpQp D QHP O\ E\ PtW JiYDãQp YHGOHMãt ~pLQN\

• RoVWOLQQp YDNFtQ\ W]Y MHGOp YDNFtQ\
7\WR YDNFtQ\ S LSUDYHQp QD URVWOLQiFK E\ P O\
YDNFtQ\ SHQãRQiNODG\ QHE\O E\ QXWQê FKODGRYê HV
QD WUDQVSRUW D VNODGRYiQt U\FKOHMãt QDYR]HQt VO
PrR]DWtP QHQt Y\ HãHQD RWijND UHSURGXNRYDWH
GiYNRYiQt VWDEGpOLVDDWUDYiQtY\BYR HQp LPXQLW\
E

6 Orienta ní dotazníkové šet ení

&tOHP RULHQWDpQtKR GRWD]QtNRYpKR äHW HQt MH
ýHVNpHSXEOLN\ R RþNRYiQt RþNRYDFtFK OiWNI FK D R L
NWHUêP SUDRYtKHYSXEOLFHSUDYLGHOQp RþNRYiQt
9ê]NXPQi þiVW VH EXGH JDP RYDW QD NSWHDUFþRYiQt D
EXGRX JtVNIq\ YODVWQtP GRWD]QtNRYêP äHW HQtP
9HãNHUþyYuãv GDOãt þiVWL SUiFtFtS HGVWDYHQ\

6.1 Cíl šet ení a pracovní hypotézy

6.1.1 Cíl šet ení

3URYHGHQp GRWD]QtNRYp]GþWSRKOOPYMþNYFGOOJMLVWL
þL S tWRPQRVW Gi WtMGRUYJNKSRGX MþFãtãvanost o
RþNRYiQt]GþE]iOHãt QD NDãGYþþiMHGtLQFER3SRWYU]HQt P
SUDFRYQtFK K\SRWþ] EXGH SRXãLW GRtWþ]QtN NWHUê
RWi]N\ MVRX JMLã"XMtFt

6.1.2 Pracovní hypotézy

%\O\ VWDQRYHQKþSRWþ]SUDFRYQt

- 1) äHQ\ EXGRX PtW PpQ äSDWQêFK RGSRY Gt QHã Pþ
RþNRYiQt EXGRX Y\ããt
- 2) 3 HGSRNOiGiP åHþRWRþ]RGRþ] QDG OHW EXGRX Pþ
]QDORVWL R NþMþþFKGþDWD]QtFtFK EXGH QHMYêãH Fþ
- 3) 9êãH Y]G OiQt YþHEX GþþQþDORVWL R RþNRYiQt
- 4) 2VRE\ åLVRþ]FtFþþVWþLVþRL OHW EXGRX PtW OHSãt JQþ
RþNRYiQt QHã RGRþ]FþþRþWþþLþþþLãLMt V

6.2 Výzkumný vzorek

'RWD]QtNRYp äHW HQt MH]DQGiHQRVQp BpSRE DENW
proto budou GRWDYQSD RYDW SRX]H RVRE\ QpHURN]pQp QHER
republice.

'RWD]QtNRYp äHW HQt MH XUpHQREtiRVREiP VWDUätP
9êE U RVRE MH QiKRGQê WDN DE\ E\OR SRNU\W
RE\YDWHO U\$]QpKR Y NX SRKQpKR SR]GWDiQHQt VSRQp
]DMLãW QR URYQRP UQp SRNU\Wt YãHFK VNXSLQ UHVSRQ

6.3 Průběh dotazníkového šetření

'RWD]QtNRYp äHW HQtF\$USURKVDQRIednturkX
2010 SRPRft DQRQ\pQtFK GRWD]QtN\$RGDãHQpHGpMQR]QtN Pi
VH WêMiD]pNPX ~pHOXOIE&SR\$RYeãLW\ Y\SWDX]QtN\PE\O\
RVREiP S HGiYiQ\ RVREQ QHER S HV SRY HQp RVRE\
LQVWUXNFH SUR Y\SOQ Qt

JeGQRWOLYp Y\SOQ Qp YGQWDiQQtNGRE\S\LSUDYHQêF
QHSU\$KOGHGQENFKWDN DE\ E\OD]DMLãW QD DQRQ\PLWD
kRSLVRYiQt QHER S HSLVRYiQt MHGQRWOLYêFK ~GDM\$

3 HG]DpGVRMDF]QtNRYpKRããHW HQtistopadurã KO
]DpiWNX SURVLQFH V]WXGLHORSKLRQWOU SQHQQRQHWt
]OHSãHQt VUR]PLGRHSOQROWLQ NDRHUBFOtiK-OGDM\$
REVDKRYDO ~GDMIGRQWRPSLããHQp]pVWkRLQijRU
kS HGORãHQpPX GRWD]QtNX

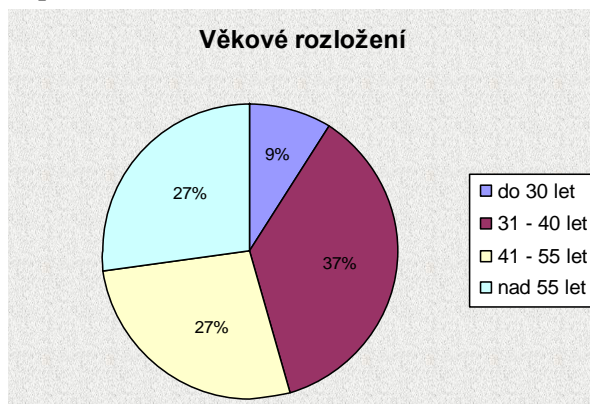
6.4 Vyhodnocení výsledků

6.4.1 Vyhodnocení pilotní studie

PiORWQ tbyãWURGãHQti RVREiP QiYUDWQRVW E\OD GR
WM QD GRWD]QtNDRGPRYãLGDOR ä

9 NRY p URJ ORV R QD GR OHW31 ±4R1,3 Esoby Y H Y NX
 Y H Y N ±5 let a 3 osoby nad 55 let.

Graf 7: V kové rozložení – pilotní dotazník



1i]RUGR WDJQtNX Y\MiG LOR FHONHP RVRE WM
 UHVSRRQGHQW\$ MVRX RWi]NQHMDRQ QRSRKORSYHOt DWi]
 z G\$YRGX GYRMVP\VOQRVWt

1HMDVQRVWL VH REMHYLO\ SRRXQHGX R508RY p -DN
]DYHGHQt SUDYLGHOQpKR R pNRYiQt HOLPLQRYiQR" NGH
 ÄHOLPLQRYiQR³ 'i QW iXFRGp R M GEL
 b, bylo URYQ i Q Y\VY WOHQt WRKRWR RQHPRFQ Qt

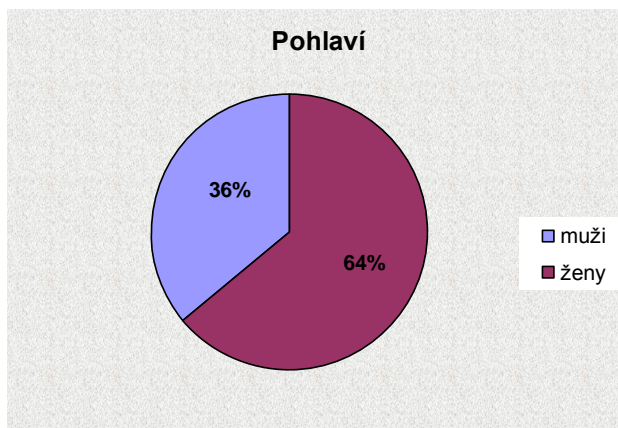
9H ILQiOQt YHUEJLOG RWD]RQ SRXQiPN\]DSUDFRYiQ\ D C
 p H V N p alenty.

6.4.2 Vyhodnocení finálního dotazníku

'RWD]QtN E\O URV]B EQPã G\ VH MHGQDOR R RE\YDWH
 UHSXEOLN\ QHER R REpDio\DWNYDGH UãHLWSRQGHQW E\O
 18 -WL OHW 1iYUDWQRVWFGRWD]QtN\$ NEXOCDOQLOR RVI
 'RWD]QtN\ NWHUp QHE\O\ YKSGQRQFHQSOQ DJEVO\]RED
 Y\SOQ Qt VH SRK\ERYDOD RG PLQXW GR PLQXW

6WHMQ MDNR SLORWQt GRWD]QtNtFlH iãLQOQHãGRWD]
 PXã\$ FHONHP GRWD]QtN Y\SOQLOR åHQ D PXã\$

Graf 8: Pohlaví – finální dotazník



9 NRYp UR]ORãHQ t UHVSRRQGHQW\$ VH SRK\ERYDOR F
 OHSãt RULHQWDFL MVHP RVRE\UR]GOLVDNR VNXSLQ
 31 ±40 let, v H Y N 55 let a respondenty nad 55 let.

5HVSRRQGHQW\$ do 57 osob, YH Y NX OHW RGSRYtGDOR
 RVRE YH Y NX OHW RVRE D YH Y NX QDG OHW R
]DVWRXSHQ t

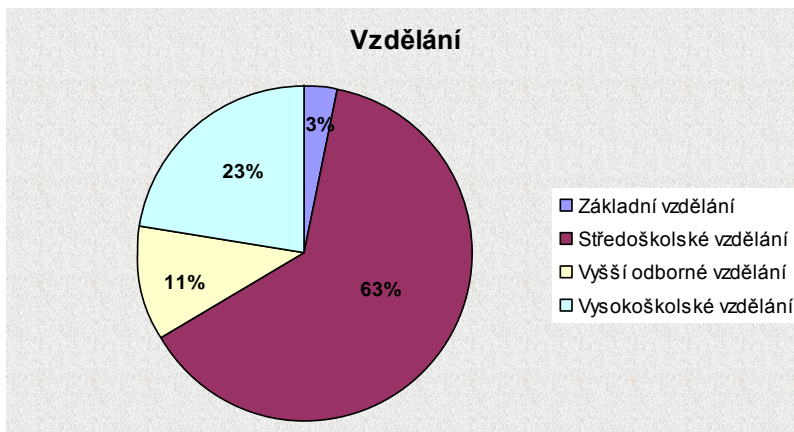
Graf 9: V ěkové rozložení – finální dotazník



9]G OiQt D SRYROIQt UHVSRRQGHQW\$ E\OR]QDpQ
 Y\KRGQRFHQt E\OR Y]G OiQt UR]G OHQR GR PRãQRV
 VW HGRãNROVNp Y]G OiQt WXWR PRãQRVW Y\SO RYDOI
 ãNRORXE\L RWR]Up QHD YRãE\RO\QpP XpLOLãWL GioH QD Y
 Y]G OiQt YDG QDQt Y\VRNRãNE\OLNãS\WRXDE
 v VRXpDVQp GER VOãM Qpããt]G OiQt

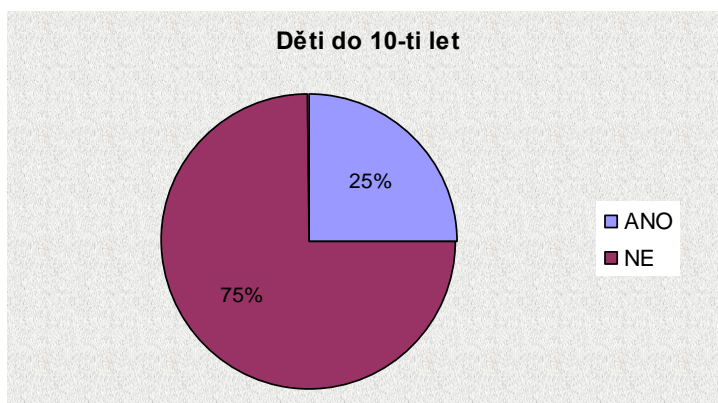
1HMY\ããt GRVDåHQP jINODGQt YJG OiQt XYHGOR
 XYHGOR RVRE Y\ããt RGERUQp YJG OiQt RVRE D Y
 osob.

Graf 10: Vzdelání – finální dotazník



V jiiY UHþQp jMLã"XMtFt RWi]FH E\OL UHVSQRQGHQWL
 v jejich do PiFQRVWL åLMWLGOMWGR N OHW E\O jDGiQ jIP UC
 WRKRWR Y NX G WL DEVROGRXMDjRYVQéQK RYRREYSQK]H
 v GRPiFQ B VWRLLVG R. QHMPODGãt Y N GãFVW WãH E\O
 QHåLORHP MF Q B VWRLLVG R.

Graf 11: Děti do 10- ti let – finální dotazník



9KRGRFHQMHGRWOLYFKRWi]N

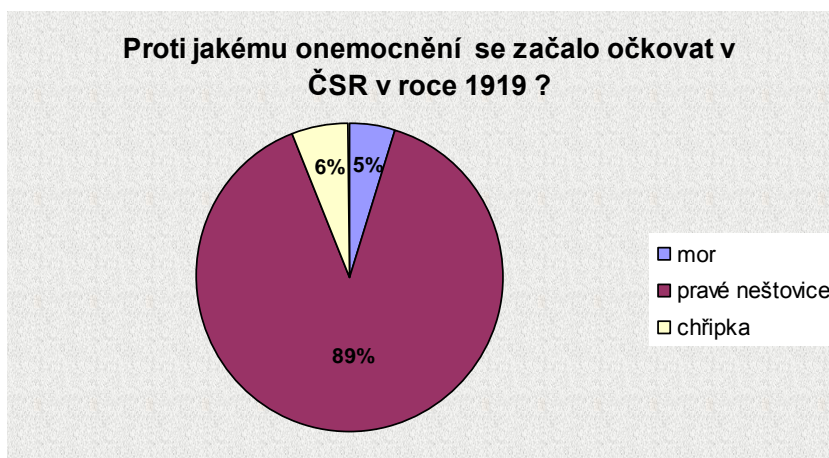
2 Wi j N **Proti jakému onemocnění se začalo o kovat v SR v roce 1919?**

- a) mor
- b) **pravé neštovice**
- c) FK LSND

3 HGSRNOiGiP åH Y WãLQD\UM\$SR\YQGHWLSSQHQ R Q SIE Y
 QD WXWR RWi]NX X RGSRY GL D EXGRX UHVSRRQGHQWL
 Y\VN\WRYDOR SRX]H YH VW HGRURR D XãRGSRY\FN\W
 E\ PRKOD Q NRKR JPUVWYQHIE R" Y SUREtKDOD YHONI
 HSLGHPLH FK LSN\

9VOHGN\NXPX Z GRWi]DQêFK WM XUPLOR VSUIYQRX R
 WM GRWi]DQêFK]DãNUWOR RGSRY D D WM G

Graf 12: Otázka .1



2 Wi]N2DV jaké kombinaci se o kuje proti zard nkám?

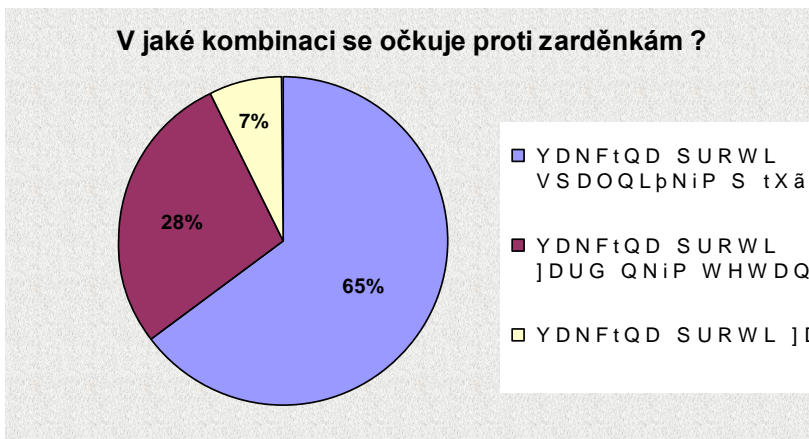
a) vakcína proti spalni kám/p íušnicím/zard nkám

E YDNFtQD SUR]DUG QNiP WHWDQX JiãNUWX
 F YDNFtQD SURWL]DUG QNiP 7% &

V WpWR NRPHLQDNFXMH RG URNX SURWR VL P
 UHVSRRQGHQWL PRKOL]QiW VSUIYQRX RGSRY StVPHQ
 GRWD]RYDQêFK]DãNUWQH L RGSRY E QHER" MHGQR
 QHUR]OLãXMt

9VOHGN\NXPX 6SUIYQRX RGSRY]DãNUWOR UHVSRRQ
 RGSRE]DãNUWOR UHVSRRQGHQW\$ WM D RGSRY
 UHVSRRQGHQW\$

Graf 13: Otázka . 2



2 Wi]ND Jaké onemocnění bylo v ČR po zavedení pravidelného očkování eliminováno (= vymýceno)?

D]DUG QN\

E S tXãQLFH

c) dětská obrna

Proti YãHP W HP QHPRFHP VH MLå GORXKRX GREX RþN) Q N WpWR RWi]FH FK\E RYODRYãSHLVQDR VL P\ UHVSRRGHQW\$]DãNUWQHDOV\$USYHGRSR RGSRY åFH UHVSRR]DãNUWQRX L RGSRY D QHER E

9VOHGN\RX 6SUIYQRX RGSRY F]DãNUWOR UHVSRR RGSRY]DãNUWOR RVRE WM D RGSRY E UHVSRR

Graf 14: Otázka . 3



2 Wi]ND. Jaké z níže uvedených onemocnění patří do pravidelného očkování?

a) mor

E NOtã"RYi HQFHIDOLWLGD

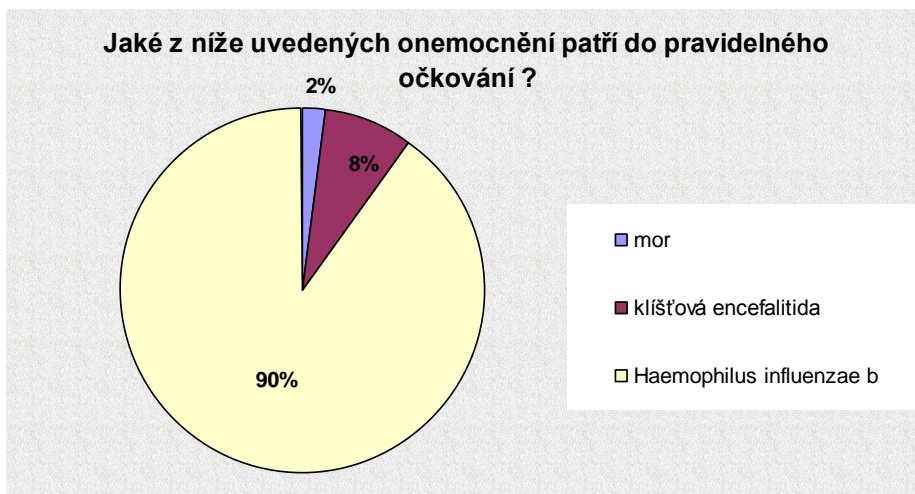
c) Haemophilus influenzae b – u d t í vyvolává akutní zán t hrtanové

p íklopky

8 WpWR RWi]N\ S HGSRNOiGiP åH Y WãLQD UHVSRO
VStãH WLSQH 2GSRY D P\VOtP Y WãLQD OLGt Y\ãNUV
ro]KRGRYDW PH]L RçGSRY Gt]D E D

9VOHGN\Y\XPX 6SUIiYQRX çRçGSRYUWçR UHVSROGHQW\$
RGSRY D]DãNUWOL RVRE\ WM D RGSRY E X
UHVSROGHQW\$

Graf 15: Otázka .4



2 Wi]ND. Jak se v současné době aplikuje očkování proti d tské obrn ?

a) kombinovanou vakcínou společně s očkováním proti tetanu, záškrtu, dáivému kašli, hemofilovým nákazám typu b a virové hepatitid typu B

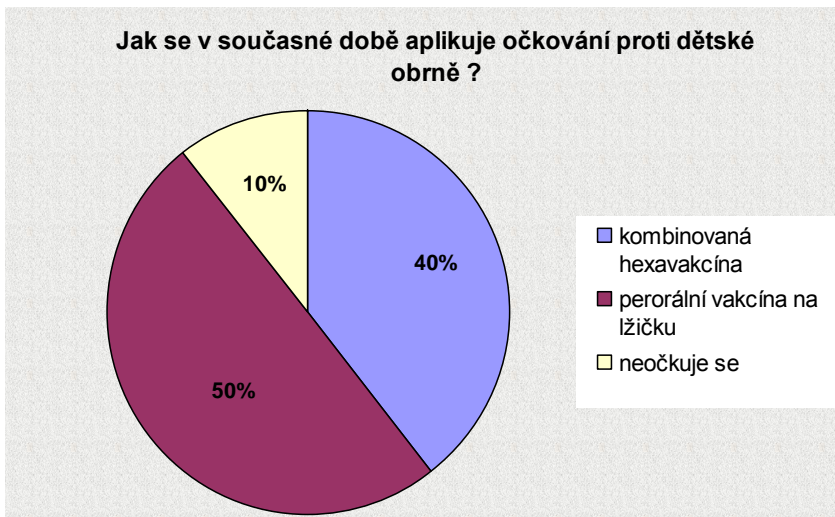
E QD OãLpNX YH Y\pçEHç]QãNFçWQWtFtFK Y

c) v VRXpDVQp GRE VH MLã QHRpNXMH

8 WpWR RWi]N\ VL P\VOtP åH GRWD]RYDQIYQRX Q
RGSRY D]DãNUWQRX RGSRY D QHER" VL Y]S
S HGSRNOiGiP åH]DãNUWQRX RGSRY E QHER" VL Y]S
QHER RpNRYiQtQHER"KSGHWRUiOQt YDNFtQD VH SRXåtYDO
3HGSRNOiGiP åH Q NWH t GRWD]RYDQt]DãNUWQRX RGS
åH SRNXG VyHQRPRFV\WXMH WDN VH SURWL Qt QHRpNX

9VOHGN\YXPX 6SUIYQRX RGSRY D]DãNUWQR UHVSQR
RGSRE]DãNUWQRSGHQWRSR] osob tj. 10 %.

Graf 16: Otázka .5



2Wi]N]. Proti kterému onemocnění se již neokuje nikde na světě, onemocnění bylo eradikováno (= celosvětově vymýceno)?

D åOXWi]LPQLFH

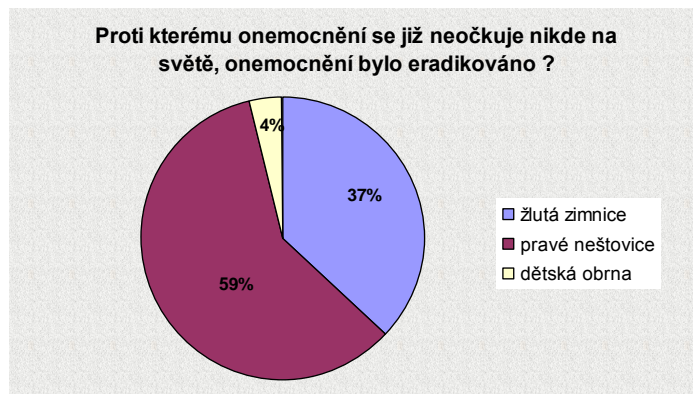
b) pravé neštovice

F G WVNi REUQD

=GH S HSRNãHIGUHVSRQGHQWL XUpt VSUIYQRX RGS
HUDGLNDFH SUDYêFKQHãWVãLFKM+VSHFKQtP+2 GR SURJU
PXVHO]DSRMLW FHOê VY W DOH RG WRKRWR ~VS FKX I
Q NWH t UHVSRRQGHQWL EXQRX SRMWRMIONGDW L åMILQ
QHPRFL D]DãNUWQRX RGSRY D QHER F

98VOHGN\NXPX Z GRWijDQêFK XUWIMOR VSUIYQQRX7 RGSRY]D
 tj. 37 GRWijDQêFK]DãNUWQH GRWR]DQRYF ããW MIVSRY
 c).

Graf 17: Otázka . 6



2 Wi]N7DProti kterému onemocn ní se o kuje od 4 dne po narození?

D G WVNi REUQD

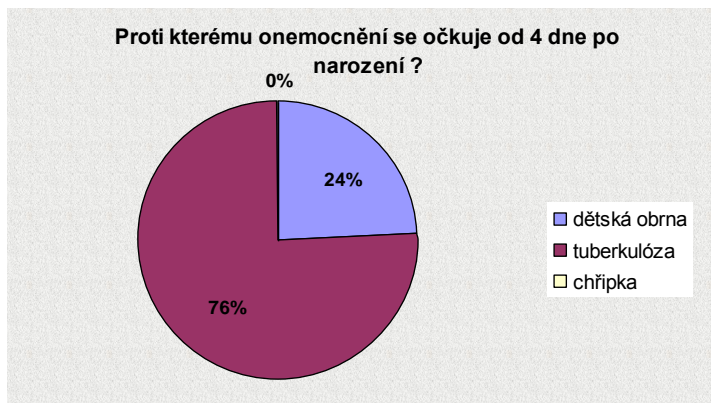
b) tuberkulóza

F FK LSND

0\VOtP áH Y WãLQD UHVSRRGHQW\$]Qi VSUIYQQRX R
 Y WãLQ\ RVRE R SãLQRRWRpNRYãQpK R piGRY NãH 3 HGSRN
 RGSRY F QH]DãNUWQH QLNGR 2GSRY D]DãNUWQ
 UHVSRRGHQW NWHUê MHGQRWOLYi RQHPRFQ Qt RG VHE

98VOHGN\NXPX 6SUIYQQRX RGSRY E]DãNUWOR UHVSRRQ
 odpRY D]DãN S WQ R W Q M \$ H V D RGSRY F QH]DãNUWO QL

Graf 18: Otázka . 7



2 Wi]N8DO ěkování adíme mezi?

a) aktivní imunitu získanou um lým zp sobem

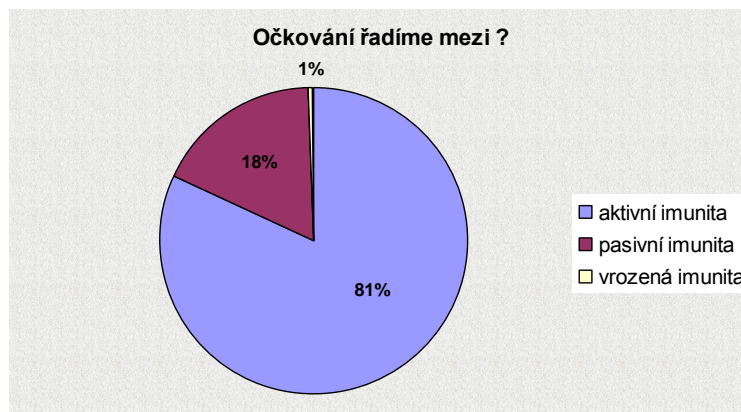
E SDVLYQt LPXQLWX]tVNDQRX S LUR]HQêP]S\$VREH

c) vrozenou imunitu

8 WpWR RWi]N\ SãHIGSLR N0MSIR QGHQWLR YivE tDYt åH Q
GRFKijE pNDNL D E\OD M0M HNSOHLNSURQWR P\VOtP åH Y WãL
VSUIYQRX RGSRY D S HGSRNOiGiP åH piVW OLGt]Dã
nebo " RWi]FH QHUR]XPt D SRX]H WLSXMt

98OHGN\YNumu: 6SUIYQRX RGSRY D]DãNUWOR GRWi]D
RGSRY E]DãNUWOR RVRE WM D RGSRY F]DãN

Graf 19: Otázka . 8



2 Wi]N9DO ěkování proti ch ipce adíme mezi?

D RpNRYiQt S L ~UD]H0Ki0KQ HKRMtFtFK VH

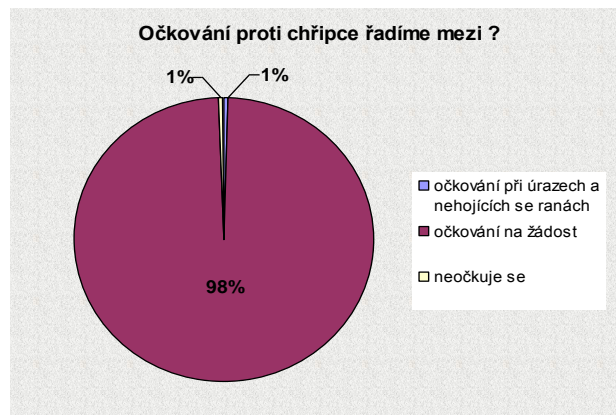
b) o kování na žádost

F QHRpNXMH VH

=GH S HGSRNOiGiP åH RGSRY F QH]DãNUWQH QLN
FK LSFMRM]HDWQp GRE PHGLiOQ KRGQ]QiPp WDNåH U
PRåQp VH QHFKDW RpNRYDW 8 G0W0YRYDQêEVEKNWH t
S HGSRNOiGDOD QHSGR0Q0PSRS]H]pM]HQ t RWi]N\

98% z G R W i j D Q ě F K X U p L O R V S U i Y Q R X R G S R Y J D
 tj. 1 % z G R W i j D Q ě F K S R O Y 1 D R W i j D Q ě D ě N R U G S R Y F

Graf 20: Otázka . 9



2 W i j N D. Pravidelné o kování uvedené v o kovacím kalendá i R je pro
 ob any?

a) povinné a bezplatné

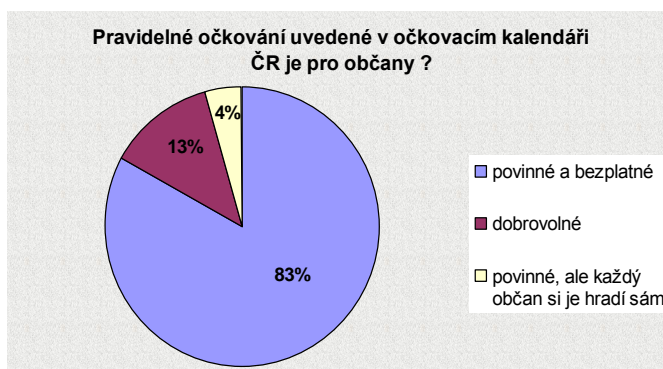
E G R E U R Y R O Q Q p

F S R Y L Q Q p D O H N D ě G ě R E p D Q V L M H K U D G t V i P

8 W p W R R W i j N \ P \ V O t P ě H U H V S R Q G H Q W L J R G S R Y
 R G S R Y a j z c E E \ F K S H G S R N O i G D O D V S t ě H X U H V S R Q G H Q
 Q H S H p W R X j D G i Q t R W i j N \

98% z G R W i j D Q ě F K S U i Y Q R X R G S R Y D j D ě N U W O R U H V S R Q
 R G S R Y E j D ě N U W O R R V R E W M D R G S R Y F
 tj. 4 %.

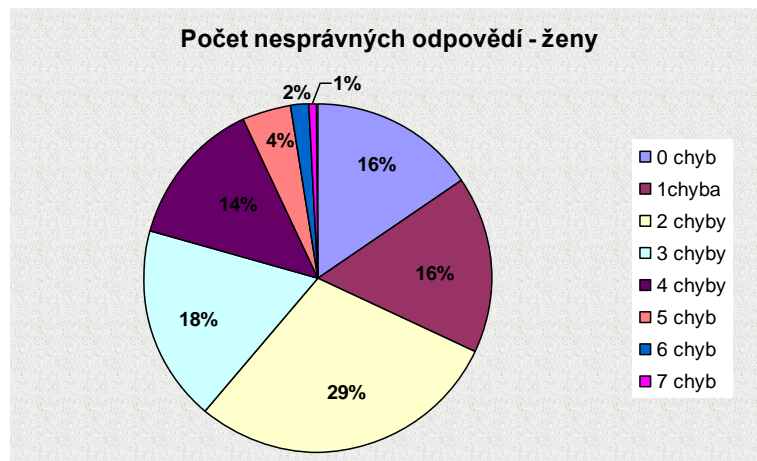
Graf 21: Otázka . 10



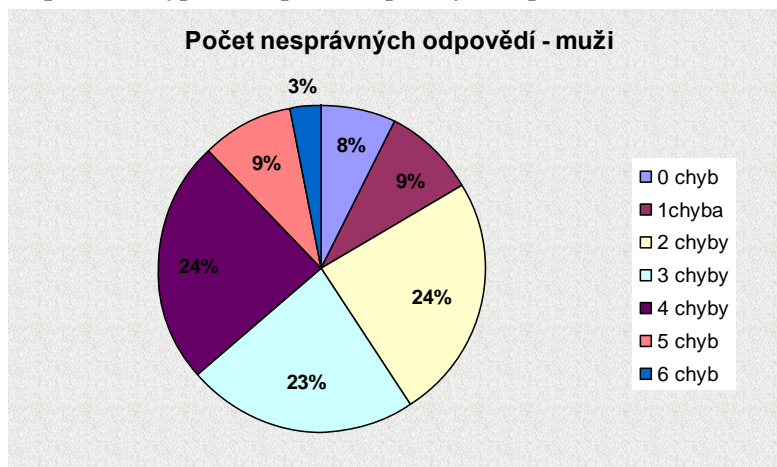
6.4.3 Vyhodnocení pracovních hypotéz

3UYQt SUDFRYQt K\SRWp]D åH åHQ\ EXGRX PtW PpQ
 PXåL D åH MHMLFK]QDOR,WMLSRWYNBYLOD SR&FKpYVåHh p
 5R]PH]t FK\E VH X åHQ SRKFEONDD DRA&RO
 FK\E QHVSUIyQêFK RWijMNHGVRRESMSIMVROSRKHHWR
 5R]PH]t FK\E X PXå\$ MH RG FK\E X PXå\$ Dâ SR
 2YãHP]QDORVWURåHQWXRQYP UR]OLãHåat Y\ããt QHå
 2 QHVSUIyQp RGSRY åHQEPXå\$ VH GY FK\E%REMHYRYDOV
 UHVSROGFHQVQ\$å FK\E WM Yt\$UIyQåFISROPSYLYQ D tQEHOD
 VKRQXPXå\$ L3%, åWQKR Y\SOêYi åH]QDORVWL åHQ L PX
 MVRX YHONp

Graf 22: První pracovní hypotéza – počet nesprávných odpovědí - ženy



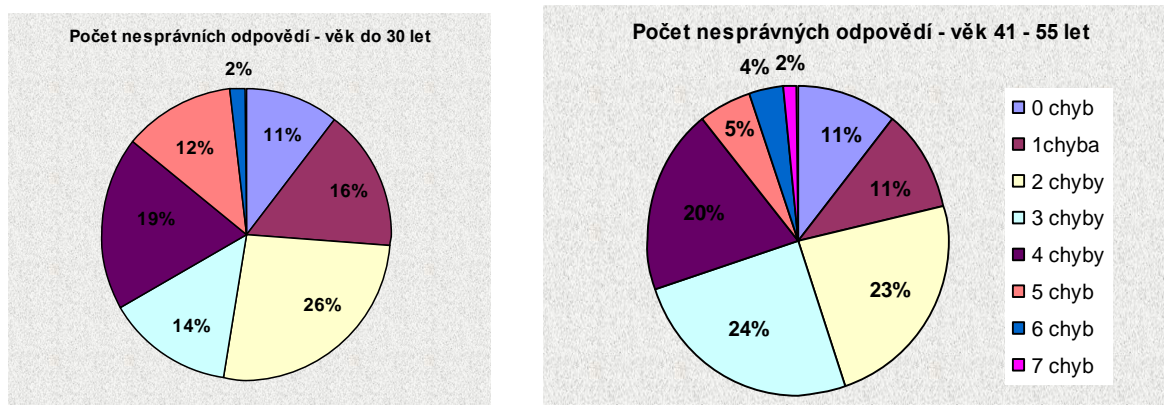
Graf 23: První pracovní hypotéza – počet nesprávných odpovědí - muži



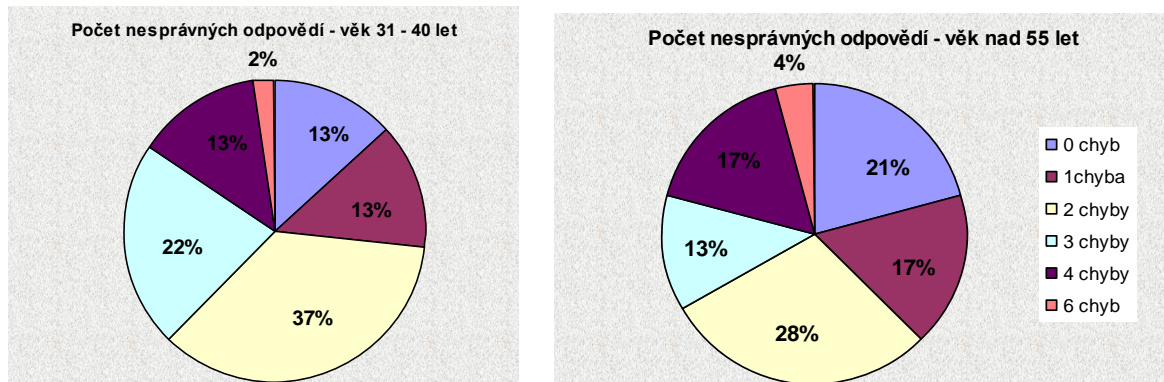
'UXKi SUDFRYQt K\SRWp]D åH RVRE\ GR OHW D RV
 QHMPHQât]QDORVWMLHMLFKNFKRIVD]CH FQH,My êãH FK\E
 nepotvrdila.

5R]PH]t F6REW]QtFtFK UHVSRRQGHQW\$ GR OHW E\O
 RGSRY Gt X Dã GR FK\E X UHVSRRQGHQW\$ UR
 VNXLQ OHW E\O RG EH] FK\E X Dã SR FK\E X
 Y NRYp VNXLQ OHW E\OR UR]PH]t RG FK\E X Dã SR
 RGSRY Gt X RVRE\ D YH Y NRYp VNXLQ QDG OHW V
 RG EH] FK\E X Dã SR FK\E X UHVSRRQGHQW\$
 9tFH QHå SRORYLQD QHVSU LYQDè FK RG/SREY GH WHNRKEM
 OHW X RVRE\ OHW X X RVRE D YH osby X QDG OHW
 Y NRYp UR]PH]t QHW YãLFKQL UHVSRRQGHQWL P OL QHMPpQ

Graf 24, 26: Druhá pracovní hypotéza – počet nesprávných odpovědí – v kové rozložení



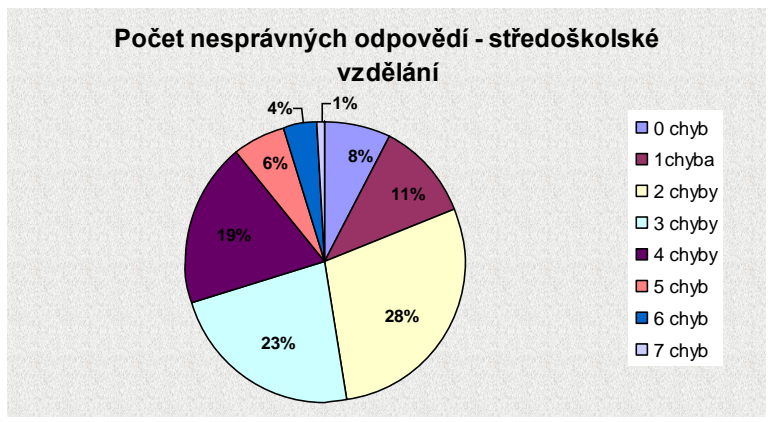
Graf 25, 27: Druhá pracovní hypotéza – počet nesprávných odpovědí – v kové rozložení



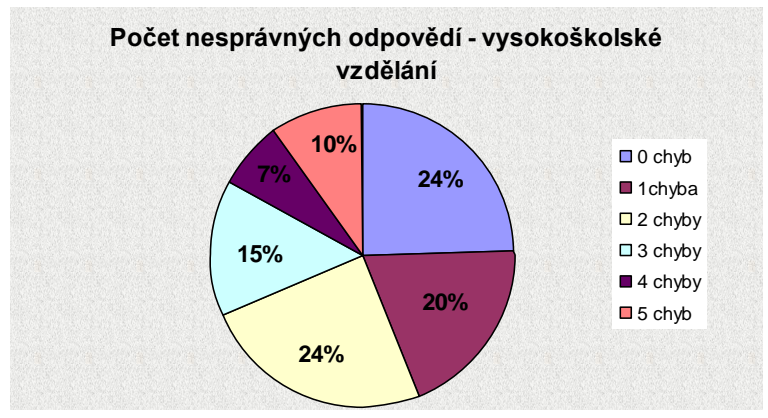
7 HWt SUDFRYQt K\SRWp]D åH YêãHlostj]G OiQt QHEXC
 R pNR YeiQp tvrdila DQL QHAY\QURLO UHVS RQ]Gã QW\$OWM
 VW HGRãNROVNp Y]G OiQt Y\ããt RGERUQp Y]G OiQt]D
 Y\VRNRãNROVNp Y]G OiQt RVRE WM D QHMY\ããt C
 uvedlo pouze 6 osob tj. 3 %, z WRKR G\$YRGX QH]Q]D S]J]G VQ]X Y]iVW
 vliv na]QDORVWL R R pNRYSR]p WQ]H R]Y R] R] P]D] QHMGH
]tVNDQp YêVOHGN\ SRURYQDW

Z WRKR G\$YRGX SRX]H]NRQVWDWXML GRVDåHQp Y
 XYiG MtFtFK]iNODGQt Y]G OiQt SEUOY S R]K]R G]R]Y GtDåX
 RVRE N]W]H]p]RãNROV]n]G R]V]D]Q]N\ EH] FK\E X RVRE
 YtFH QHå FK\E VH REMHYLOR X RVRE FRå MVRX
]DãNUWOR RVRE UR]PH]t QHVSUIYQêFK RGSRY Gt EH]
 WDNp X 9\VRNRãNROVNp R]G]R]D]R]N\ EH] FK\E\ X
 RVRE WM D QH]R]R]H]W]M]K]X]E X YUMR]SR]Q]R]Q]W]S]E]F
 Y]G Q.iQt

Graf 28: T etí pracovní hypotéza – počet nesprávných odpovědí – vzdělání



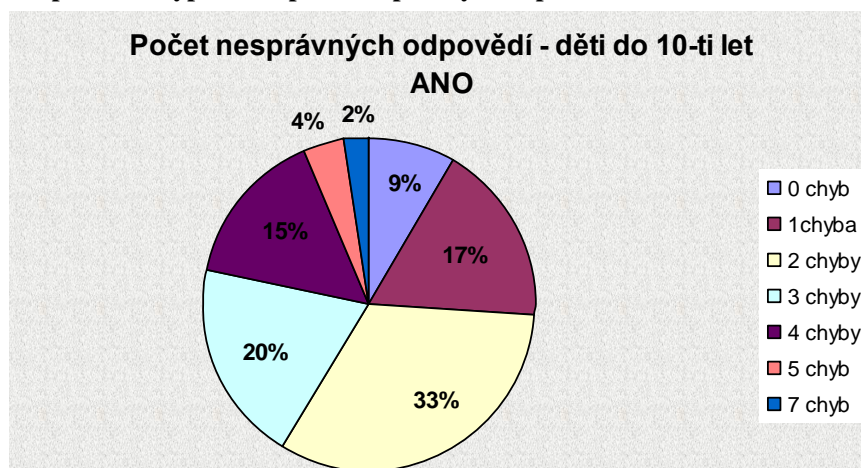
Graf 29: T etí pracovní hypotéza – počet nesprávných odpovědí – vzdělání



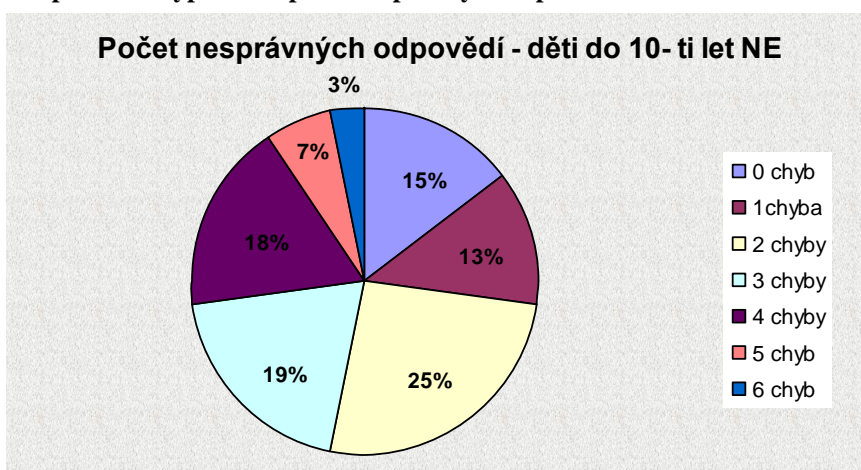
ýWYUWi SUDFRYQt K\SRVpP DFGaB V W L R Z G P a LMtFt Y
 OHW EXGRX PtW OHSät JQDORVWLG RR P F P Q R R V W Q t Q H ä L MRtV F
 s G W s P e p o t v r d i l a .

5R]PH]t QHVSUIYQêFK RGSRYGtLXGRYreD åLMtFtF
 chyb u 17 % D å FK\ E X 5R]R W J Q U ä B V R P F F Q B V W R L V
 do 10 -ti let se pohybuje od 0 chyb X D å SR QHVSUIYQêFK RGSRY G
 UHVSQRQG H t Q W \$ M D 8 N Y Y ä H F K V H U H V R S J R G t H Q W \$ S U I Y Q ê
 RGSRY G t SRK\EXMH RG FK\ E v D G R P F F Q B V W R L V R G R E å L M t F t
 10 -ti let M H W R D X R V G R E P Q F Q ä B V W R L V R G R Y je 53 % .

Graf 30: tvrtá pracovní hypotéza – počet nesprávných odpovědí – děti do 10- ti let



Graf 31: tvrtá pracovní hypotéza – počet nesprávných odpovědí – děti do 10- ti let



6.4.4 Diskuze

OULHQWDpQt GRWD]QtNRYp äHW HQt P OR]D FtO]ML
ýHVNp UHSXEOLN\ R RþNRYiQt RþNRYDFtFK OiWNI FK D
NWHUêP SUREtKUHHSXEOLFH RþNRYiQt SUR SRWYU]HQt
SRXåLW\ þW\ L SUDFRYQt K\SRWp]\

ýiVWHþQ VH SRWYUGLOD SRX]H K\SRWp]D SUYQt åH
RþNRYiQt QHSRWYUGLOD VH K\SRWp]DzhGduje]GD R YV
Y N D DQL K\SRWp]D þWYUWi]GD OHSåE]DORVWL PDMt
10 ±ti let. 3UDFRYQt K\SRWp]D W HWt]GD UR]KRGXMH R
QHPRKOD EêW SRXåLWDSRQHFLRYKREQQ NGDMH

3RNxG VH WêNQtYMKRQRVFOHLYêFK RWi]HN X RWi]N\
S HGSRNOiGDOD åH Y WãLQD UHVSRRQGHQW\$XUMH VSU
MDVQp åH MVHP VH QHPêOLOD VSUIYQRX RGSRY]DãN

UHVSRRQGHQW\$]DãNUWOR QHVSUIYQRX RGSRY

8 RWi]NMOR MVHP VH WDN\ QHPêOLOD Y WãLQD
VSUIYQRX RGSRY DOH PQRKR UHVSRRQGHQW\$]DãNUW
]QDþt åH UHVSRRQGHQWL PDMt SUREOpP]D DGLW QH
NRPELQRYDQp WURMYDNFtQ\

2GSRY QD RWi]NIXREÞDOR REÞEYFKH SURWR P
S HNYDSLOR åH W HWLQD UHVSRRQGHQW\$]DãNUWOD QH
åH RGSRY Gt E\OR VSUIYQp

8 RWi]þtVOR MVHP S HGSRNOiGDOD åH VSUIYQi
GtOHP QiKRG\ D WLSXHVSRQGHQW\$XUþLOR WXWR RWi]N
S HNYDSLOR RþHNIYDOD E\FK YtFH FK\E D URYQRP
RGSRY Gt

8 RWi]N\ þVHOREOH PpKR S HGSRNODGX P OR REMH
FK\EQêFK RGSRY Gt D VNXWHþQ VH WêNKRWDOR X V
GRWD]QtNX QHVSUIYQp RGSRY GL S HYiåLO\ W\ VSUIYQp
SRX]H UHVSRRQGHQW\$

8 RWi]N\ ptVOR VLFH VSUiYQp RGSRY GL S HYiåLOV
QH R WROLN NROLN E\ VL HUDGLNDêVHOBN\$êWKI QHãW
Y\SOêYi åH SRNXG VH R QHP R FL MLå] QSRK R t Q DM t D QHSF
za hrozbu.

8 RWi]N\ ptVOR MVHP VSUiYQp leR26 %RY GL S HGS
QHVSUiYQêFK RGSRYêGOMGN\$QR\KRRKOR Y\SOêYDW åH
RG VHEH MGRFRWQOQYiRSUDYGX QHXPt UR]OLãLW

8 RWi]N\ ptVOR VH RSUDYGX YH YêVOHGNX REMHY
RWi]FH VNXWHpQ QHUR]XP OD D QHGRNi]DOD XUPLW
SRW ãXMtFt åH RGSRY Gt E\OR VSUiYQ

2GSRY GL QD RWi]N\ ptVOR Y\SOêYi åH SRNXG VH R QHP R FL KRY
z YêVOHGN\$ WHG\ Y\SOêYi åH SRNXG VH R QHP R FL KRY
GDOHNR Y\ããt

\$ X SRVOHGQt RWi]N\ ptVOR MVHP S HGSRNOiGDO
XUpt VSUiYQRX RGSRY WR MVHP RGHROH Bê OEL\OR VNX
VSUiYQp 3 HNYDSLOR P åH VL RE\YDWHO P\VOt
v QDãt UHSXEOLFH GREURYROQp

Záv r

V EDNDOi VNp SUIFL QD WpPDLZVWRRYLDfVNRXQBIQQRVV
EXGRXFQRVW MVHDPWKFUQXHODPWGRWLPXLWMIHQWQWKLVIWV
RþNRYiQt jGRD\$HDDiYLGHOQpKR RþNRYiQt 8 NDåGpKR RQH
FKDUDNWHULVWLNDýHwvNpUHSXEOLFVW BLWWRULH RQHP
RþNRYDFt OiWN\ D V RþNRYiQtUHSXEOLFVW RYX SRSViQ\ D SR
JUDILFN\ XYHGHGþRGRYQANQFOLMD Y\EUDQêFK HYURSVNêF
D YH VYjiW UHPpQp NDSLWROH REHFQp piVWL MVRX XYHG
QRYêFK RþNRYDFtFK OiWHN

9êjNXPQi piVW EDNDOi VNQDSRIFLHOMWd]DQp GRWD]QtM
ãHW HQRKRWR ãHW HQt Y\SO\QXOR åH UR]GtO\ PH]L SRK
Y\SO\QXOR åH QHLMVRMPERDQpVWL R RþNRYiQt X RVI
v GRPiFQRVWVPLVGR Ret av GRPiFQRVWHFK NGURWVROXMå G W
nebo v URGLQ åiGQp G WL QHMVRX 5R]GtO\ Y\$pL Y NX E\O
v GRWD]QtNX Y\ND]RYDOA RORHM YDOM QDRSDN QHMPHQât
QHP O\ RVRE\ PODGât OHW DQL RVREYronem DUât OHW
PoNXG VH WêNi MHGQRWOLYêFK RWijHN SRX]H X MHGQp
RGSRY Gt QHå VSUIYQêFK D WRYXLGRVijN\ QHVSNGYHQêFK
RGSRY Gt QDRSDN X RjHVSROSGHYQVRLX]DQNSURWOLY

=iY UHP O]HtOtELDNDHOFVNp SUIFH E\O VSOQ Q 'tN\ G
ãHW HQt Y\SO\QXOR åH jioHât VNXWHþQ QD NDåGpP MH
þL Y]G OiQt jGD MH GRVWDWHþQ LQIRUPRYiQ R PRåQR
v ýHVNp UHSXEOLFH

Souhrn

OpNRYiQt denMzHPRåQêFK SURJUDWUHCNS N]QLNX D ãt HQ
PQRKD LQIHNPQtFK RQHPRFQ Qt D S HVWRåH QiP WR GC
k QHMYê]QDPQ MäKEVEMUHL\$PHGLftQ\ 'tN\ RþNRYiQt E\O
Y\PêFHQ\ SUDYp QGãWHRPtlLFGJWONi S HQRVQi REUQD 3
GQHV XPtUDMt YH VY W PLOLyQ\ OLGt NWHUp E\ E\OR P
1DãW VWýHSVNþ UHSXEOLFH PDMt RþNRYDFt SURJUDP
SUYQt RþNRYiQt UDSFRþDORQDLþiNODG Ft, VaDo VNpKR GRNX
RþNRYiQt SURWL SUDYceiP60QshãWRY JedtP z SUYQtFK
JHPVY WD NGHOGRIãORFN G WVNp S HQRVQp REUQ\

3URWR MDNR EDNDzãdlevNiWSþPDRYED\Ot NDOHQGi
KLVWRULH S tWRPQBEMUIMJE XGRQDFGRVW NROLND NDSLW
WêNDMtFt VH LPXQLW\ LPXQLWQtKR V\VWpPX W\SS Rþ
RþNRYiQt NWHUi MVRX]D DJHQD GRiSRONIEBFHOQtKR Rþ
QHMVRRxpodDjãEHG\ DOH SRGOH GãDVRD RþNRYED\OtdRjD DJI
NDOHQGi H 8 NDãGp QHPRFL MH VWUXþQ SRSViQD FK
YêVN\W KLVWRULH RQHPRFQ QtsouDv BããFLRXWHGRiþNRYiQt
RGOLLãGRVWVWDWQtFK DHYHR\$VNVãFID]HPtUHþQp NDSLWRC
þiVVRXMXVHGhQ\ SR]QDWN\ R YêYRML QRYêFK RþNRYDFtF

6SHFLiOQt þiVW E\OD]DP HQD QD RULHQWdpQt GRW
]D FtO]MLVWLW]GD SRKODYt Y]G OiqQt URNLQHER S tW
UHVSRQGHQWD MH URþRSGãX MLãQIRSUPR YDããtVW R RþNRY
GRWD]iQtãHRWpHQt VH]DSRMLOR RVRE åHQ D P
RGSRYtGDOL QD FHVONKR SURVQi]HNE\GRVND]iQtãXNMFt =
ãHW HQt Y\SO\QXLOQRãFRUYD]GROWL RKRþNRYiQt RHPL S
Y]G OiqQt þL WtP]GDGURHPVSRQGMILWE Rã lãysou Y
YêUD]Qp YãããQi X YHGHQêFK VNXSLQ QHY\ND]RYDOD YêU
QHER SRGSUS\$P UQp YêVOHGN\ 3RNxG Vãk WêNi MHGQRW
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z QtãH XYHGHQêFK RQHPRFQ Qt SDW t GR SUDYLGHOQp

RGSRY GL REMHYLOR SRQGHQW \$ÄD pNRWiqN\SpRWL FK LSF
DGtPH PHJL"³ Dâ X 1D B S D S R Q I E M I Q p Q S VSUIYQêFK RGSR
VH REMHYLOR Ä- DNWVJINXpD VQp GHR ER p N S O L Q t X S IURWL
G WVNp R&EUCN R³Y G V H G D J Q t N R Y p K R ã H W H Q t Y \ S O \ Q X O F
UHVSRQGHQW\ MH QHURYQRP UQRVW L O S I B G Q P F t R U \$ J G
RpNRYiQt SURWL W PWR FKRUREiP
ZWRKR Y\SOêYi åH SRNXG V P p B L O H K P R S H S D G K R Y R t
v WLVNX MVRX OLGp YtFH LQIRUPRYiQL D S tSDGQ VL L
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Summary

Vaccination is one possible means to prevent the emergence and spread of many infectious diseases, and even though we now consider it obvious, it has been one of the most significant discoveries in the history of medicine. Thanks to vaccination, smallpox has been eradicated worldwide and polio has disappeared in many countries. Yet even today, millions of people are dying around the world, who could have been saved by vaccination.

Fortunately, the Czech Republic has had a long history of vaccination programs, with the first vaccination dated back to 1821 when an Imperial decree ordered a vaccination against smallpox. In 1960 the Czech Republic became one of the first countries in the world which had eliminated the polio virus.

Therefore, I have chosen as the theme of my BA diploma work, the topic 'Vaccination Schedule ±The Past, Present and Future'. The thesis is divided into several chapters, with one being a summary relating to immunity and the immune system, with types of vaccines and individual vaccinations being included in routine vaccinations. Individual diseases are not sorted alphabetically, but by the time they were included in the vaccination calendar. Each disease is briefly described by its characteristics, clinical features, incidence, disease history and vaccination options. The work also mentions the differences from other European countries and countries world-wide and the final chapter of the General section provides insight into the development of new vaccines.

A special section focuses on the questionnaire survey, whose purpose was to determine whether gender, education, age or the presence of children under 10 years of age in the respondent's family is crucial for more and better information about vaccination. The survey involved 182 people - 116 women and 66 men. The respondents answered 14 questions in total. The survey showed that differences in awareness of vaccination among gender, age, education, and/or whether respondents live in households with children under 10 years of age are not significant. None of the above groups showed significantly above-average or below average results.

As far as the individual questions are concerned, 5 questions got over 80% correct answers, with question number 4 ± 'Which of the following diseases belongs to those regularly vaccinated against?' - being answered correctly in 90% of cases and question number 9 ± 'The influenza vaccination belongs among...' - getting the correct answer from 98% of respondents. On the other hand, the lowest percentage of correct answers ±40% - appeared with question number 5 ± 'How is the polio vaccine currently administered?'. Overall, the questionnaire survey showed the imbalance between the information the respondents had about various diseases and the possible vaccination against them.

All the above mentioned results show that if any diseases are talked about in the media, or the press, people are better informed and sometimes even actively start to search for more information about possible vaccination.

Seznam použité literatury

1. Beran, J. *Imunologie*. 1.vyd., Praha: * D O p Q V
ISBN 80-7262-380-X
2. *Imunologie a výživa*. 1. vyd., Praha: * D O p Q ISBN 80-7262-361-3
3. *Imunologie v praxi*. 2. vyd., Praha: Triton, 1999. 89 s. ISBN 80-7254-053-X
4. *Imunologie*. 1. vyd., Praha: Triton, 2008. 102 s. ISBN 978-80-7387-122-2
5. *Mikrobiologie, epidemiologie, hygiena*. 3. vyd., Praha: Triton, 2002. 142 s. ISBN 80-7254-223-0
6. *Imunologie*. 1. vyd., Praha: Univerzita Karlova, 2002. 230 s. ISBN 80-246-0452-3
7. Gregora, M. *Imunologie*. 1. vyd., Praha: Grada, 2005. 125 s. ISBN 80-247-1126-5
8. Hirte, M. *Imunologie*. vyd. Olomouc:) R Q W i Q D V
ISBN 80-7336-021-7
9. *Imunologie a výživa*. Praha: Tango, 1999. 142 s. ISBN 80-238-4533-0
10. <http://www.vakciny.net>
11. <http://cs.wikipedia.org>
12. http://www.who.int/immunization_monitoring/en/globalsummary/ScheduleSelect.cfm
13. *Imunologie*. 6 E R R p N R Y i Q t S U R W H L J Q Q Q H N p Q t P Q H
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Seznam obrázk , graf a tabulek

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Seznam p íloh

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